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2022 - 2025

XIX TICCIH CONGRESS
Kiruna, Sweden

50TH ANNIVERSARY
TICCIH
The International Committee for the Conservation of the Industrial Heritage
SINCE 1973

Edited by Bart Vanacker

NATIONAL & TRANSNATIONAL REPORTS ON INDUSTRIAL HERITAGE

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Heritage In Action: Legacies of Industry in Future Making

25 - 31 August 2025

The 19th TICCIH Congress in Kiruna is organized by Luleå University of Technology in collaboration with the TICCIH sections in Sweden and Norway, the Swedish National Heritage Board, the municipality of Kiruna and a range of leading actors within industry and civil society in the Scandinavian north.

Edited by Bart Vanacker

THE INTERNATIONAL COMMITTEE FOR THE CONSERVATION OF THE INDUSTRIAL HERITAGE

The International Committee for the Conservation of the Industrial Heritage (TICCIH) is the world organization for industrial heritage. Its goals are to promote global and transnational cooperation in preserving, conserving, investigating, documenting, researching, interpreting, and advancing education of the industrial heritage.

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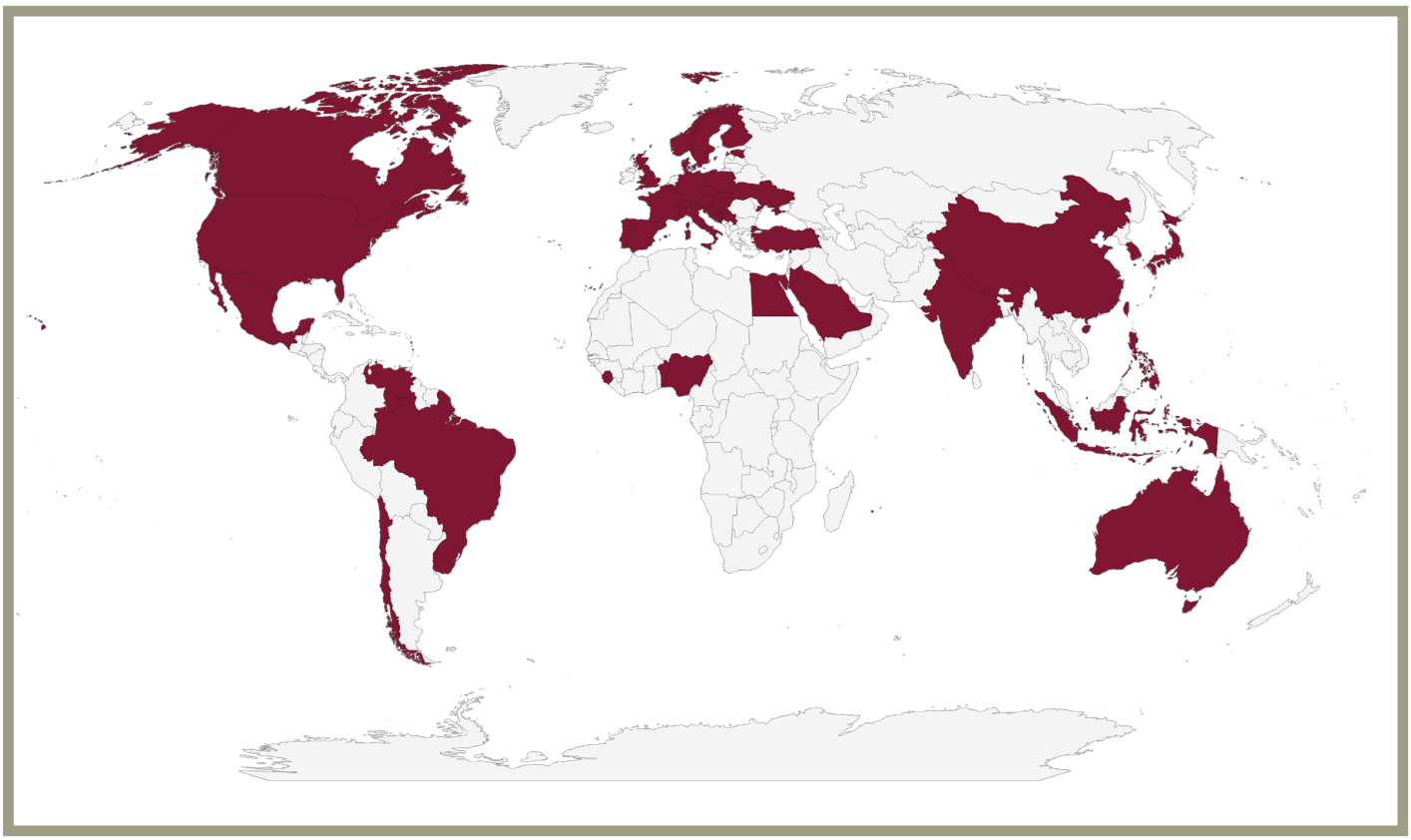


FOREWORD

Moulshri Joshi, SpaceMatters, New Delhi, India & Mirhan Damir, Alexandria University, Egypt

National reports have long been a vital instrument in TICCIH's history of shaping and consolidating the field of industrial heritage conservation. Produced every three years through a network of correspondents and representatives, they document not only the state of industrial heritage and archaeology in individual countries and regions, but also the evolution of the field itself as a multidisciplinary endeavour. The earliest reports, dating back to 1973 and available on TICCIH's website, form a unique archive of how industrial heritage has developed globally as a professional, academic, and advocacy domain.

This compilation of national reports covers the period 2022–25. It is noteworthy that within a decade, TICCIH has doubled its reporting network from 24 countries in 2013–15 to 50 countries in 2025, with several first-time contributions. Equally significant is the marked increase in transnational reports, rising from just one in the 2022 TICCIH Congress to seven in this edition. This edition's (trans)national reports comprise 54% from Europe, 18% from the Americas, 16% from the Asia-Pacific region, and 12% from the African & Arab region. Taken together, the 2022–2025 cycle of TICCIH National Reports presents a sweeping yet intricate panorama of global industrial heritage, not as a singular narrative, but as a mosaic of shared challenges, emerging priorities, increasingly interconnected strategies, and new perspectives.

A notable trend across continents is the recalibration of heritage values, with industrial heritage increasingly recognised not merely as a response to obsolete sites or technologies, but as an evolving social, environmental, and spatial practice. Geographically, Europe remains the strongest contributor, though its representation is now more regionally balanced. North and Latin America together form a growing and diverse cohort, with an increasing emphasis on postcolonial and extractive legacies. The Asia–Pacific region is rapidly emerging as a critical arena, blending techno-legal, vernacular, and postcolonial perspectives. The African and Arab regions, long underrepresented, are developing a stronger collective voice, often framed through postcolonial critique and resilience narratives.

Meanwhile, transnational groups are fostering greater horizontal connectivity, linking diverse languages, technologies, and shared industrial legacies into a more interconnected global discourse. This broadening of perspectives allows for some initial observations regarding emerging continental themes. The increased diversity of contributions has brought with it new conceptual and methodological approaches.

One of the most prominent themes across this cycle is the **reuse of industrial sites**. In the context of the climate crisis, rapid urbanisation, and neoliberal development pressures, adaptive reuse is increasingly framed as both an ethical obligation and an urban necessity. In this edition, adaptive reuse is understood not merely as an exercise in architectural ingenuity but as a political and economic act, shaped by legislative frameworks, land ownership, investment flows, and civic engagement. This reframing highlights the need to navigate legal ambiguities, speculative pressures, and questions of authenticity and displacement. Former industrial facilities—particularly power plants in prominent urban locations—are being repurposed. At the same time, past experiences of reuse are examined more critically for their unintended consequences, such as tourism-driven gentrification and the erasure of working-class histories. In this light, adaptive reuse emerges as a contested terrain where preservation, innovation, and inclusivity must be carefully negotiated. In contexts where industrial heritage is underpinned by dedicated academic programmes, government funding, and legislative support, thematic concerns such as the "green industrial transition" and public consultation on reuse projects have also gained prominence.

South America, Africa, and the Asia–Pacific region increasingly recognise the responsibility to address the enduring impacts of **colonial legacies**. While industrial heritage conservation in many of these contexts remains in its formative stages, the intersection of colonial history with pressing global challenges—such as the climate crisis and demands for social justice—is moving to the centre of heritage discourse. These regions are not only identifying the physical remnants of industrialisation under colonial rule but are also interrogating the socio-political structures that shaped them. This convergence of themes is infusing the field with new energy, fostering critical perspectives, and expanding the conceptual boundaries of industrial heritage beyond preservation to encompass equity, resilience, and the reimagining of postcolonial futures.

Another central theme is the **redefinition of expertise and knowledge production**. Across new and emerging geographies, much of the work is informal, community-led, volunteer-driven, and often undertaken without direct government support. Many national reports underscore the urgency of building professional capacity and embedding industrial heritage into higher education, vocational training, and public history. Emerging actors—youth clubs, rural cooperatives, and indigenous knowledge holders—are increasingly recognised as co-creators of heritage meaning and memory rather than passive recipients of expert knowledge. This participatory turn reframes heritage as a relational, open-ended process rather than a static object of protection.

Other themes, such as the **neglect of labour history, the ongoing systemic loss of sites, and the pressing need for documentation**, remain recurring concerns. It is encouraging, however, that in many cases, advocacy and protection are being led by TICCIH members and (trans)national committees. Personal collaborations between TICCIH, ICOMOS, and local heritage organisations have expanded the acceptance of industrial heritage within broader heritage domains. Several countries report new or evolving legal instruments and public policies, signalling a convergence of heritage, planning, tourism, and educational agendas. Yet, substantial deficits remain in certain regions, where legal protection, institutional capacity, and state support are limited, leaving civil society, academia, and local communities as principal custodians of documentation and advocacy.

FOREWORD

In **the wake of the pandemic**, many reports emphasise the need to engage young professionals in heritage work and to attract younger audiences to museums and heritage sites. Strategies to reach younger generations often draw on their interest in creative arts and digital media, creating immersive experiences and embracing bold new themes. Equally prominent is the role of industrial heritage in contexts of crisis—from natural disasters to political upheaval, post-earthquake recovery, economic collapse, and urban transformation under authoritarian regimes - several reports illustrate how industrial heritage can be either marginalised or strategically leveraged. Across many reports, there is a palpable shift towards situating heritage within the urgent realities of the present—war, environmental degradation, displacement—and framing it as a practice that contributes to peace-building, equitable and sustainable development.

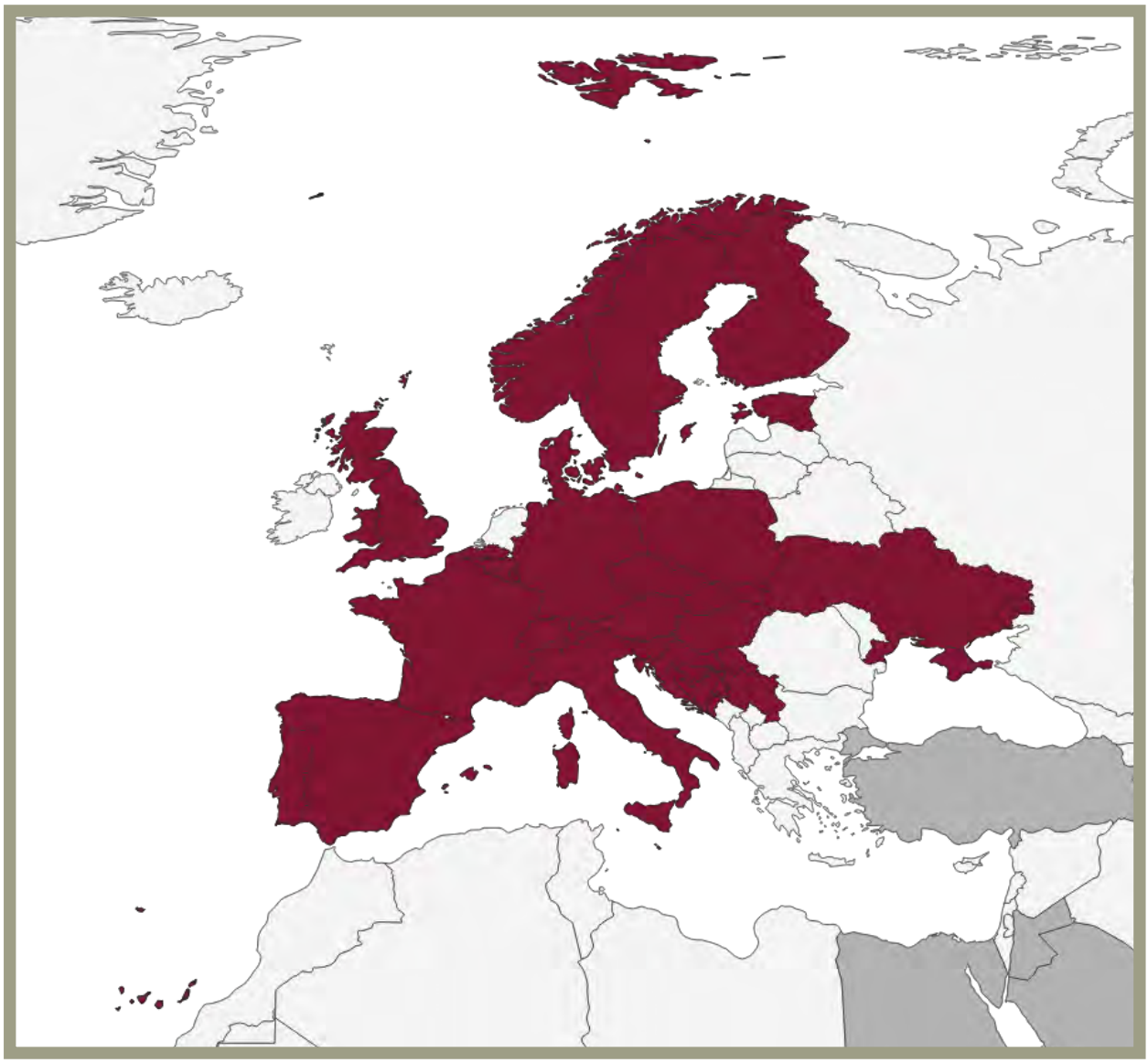
Alongside national perspectives, transnational reports reflect TICCIH's core mission of building and sustaining networks that transcend borders. They showcase collaborative efforts to strengthen interdisciplinary exchange, foster international dialogue, and deepen community engagement in industrial heritage. These reports illustrate how shared challenges—whether legal, technical, or cultural—are addressed through joint research, cross-border training, and the pooling of expertise. This ethos of "working together," also the theme of the last Big Stuff Conference, underscores the understanding that industrial heritage is inherently interconnected, shaped by global histories of technology, labour, and trade. By linking practitioners, scholars, and communities across continents, transnational networks ensure that conservation practices remain dynamic, inclusive, and discursively balanced.

The themes emerging from both national and transnational contributions encourage us to reconceive industrial heritage not simply as a modern or post-Enlightenment category, but as a long-term, trans-scalar process embedded in global histories of labour, empire, and environment. The reports of this edition underscore that industrial heritage is no longer shaped predominantly by a single region. Countries and communities long underrepresented in international discourse are now making vital contributions. The establishment of new TICCIH committees and representatives worldwide signals a broad decentralisation and pluralisation of heritage authority. With this, TICCIH is entering a new phase characterised by dialogue, co-production, and regional responsiveness.

As members of TICCIH's growing global network, we hope this volume will serve as a resource, a positive provocation, and a call to action. The TICCIH National Reports 2022–2025 offer not only a state-of-the-art snapshot of the field but also a laboratory for future heritage discourse—one that is locally grounded, globally connected, and responsive to the social, environmental, and ethical urgencies of our time.

Contact Mirhan Damir or Moulshri Joshi

EUROPE



NORWAY

The Industrial Promenade in Notodden, part of the Rjukan-Notodden World Heritage site (photo by Torgeir Hegna)

Knut Markhus

From 2022 to 2025, Norway's industrial heritage strategy has embraced a broad definition of industry, covering not only modern production but also historical industries, such as iron extraction dating back thousands of years. Over the past decades, industrial heritage has gained ground in Norway's cultural heritage landscape, though competition for resources remains a constant challenge. TICCIH Norway, experiencing growth and renewed engagement, continues to contribute actively to this important work.

ACTIVITIES

The most significant development from 2022 to 2025 has been TICCIH Norway's collaboration with TICCIH Sweden on the 2025 World Congress in Kiruna. In connection with this work, TICCIH Norway has entered a renewal process, successfully increasing membership and initiating new activities. As a result, TICCIH Norway is experiencing growth on several fronts.

Other organisations working with Norway's industrial heritage include SIKA (the Industrial, Communication, and Infrastructure Section of the Norwegian Museums Association), the two networks commissioned by Arts and Culture Norway – the Network for Technology and Industrial History (with The Norwegian Museum of Science and Technology as the responsible institution) and the Network for Labor History (with the Norwegian Industrial Workers Museum as the accountable institution) – the Norwegian Water Resources and Energy Directorate's (NVE) museum scheme, ICOMOS Norway's national scientific committee for industrial heritage, and Norsk Industriarv (Norwegian industrial heritage), an association representing the 15 sites included in the Directorate for Cultural Heritage's national preservation program for technical and industrial heritage.

PUBLIC POLICIES AND ORGANISATIONS

The Norwegian Government's White Paper *New Goals in the Cultural Environment Policy – Engagement, Sustainability, and Diversity (2019–2020)* provides an overarching framework for cultural heritage management, including industrial heritage, as does the government's museum White Paper *Museums in Society: Trust, Things, and Time (2021–2022)*. More specifically, the Directorate for Cultural Heritage initiated work on a new preservation strategy for industrial and business-related environments during this period. The goal is to preserve, while also finding smart, long-term solutions that give new life to cultural environments and create value for the future.

As part of the Preservation Program for Technical and Industrial Cultural Heritage, significant resources have been dedicated to 15 prioritised industrial sites since the early 2000s, selected for their historical and regional importance. However, the Directorate for Cultural Heritage's new strategy acknowledges that the program's limited geographical and sectoral scope has restricted the development of the field and led to a lack of diversity in what has been preserved. By shifting attention to a broader range of industries and environments, the new strategy aims to ensure greater sectoral and geographical representation in future preservation efforts, while still maintaining the prioritised sites as an essential resource.

From Longyearbyen, Svalbard. View over the Advent valley from the remains of Mine 6. At the foot of the mountain, the remains of the cable car line are visible (photo by Frode Sekse Hilleren/Svalbard Museum)

OUTSTANDING PROJECTS AND NOTABLE CASES

The Conservation Program for Technical and Industrial Heritage, which is currently being phased out and replaced by new strategies, has played a key role in restoring and securing heritage status for industrial sites across the country, with a focus on the 15 prioritised sites. Over the years, several other industrial sites have also been protected and preserved. Industry has been a prioritised theme in the conservation strategy, and a significant number of sites have been safeguarded. Recent heritage listings outside the 15 prioritised sites include Odals Værk, an ironworks listed in 2022, and Folkets Hus (People's House) in Sauda, a community hall from the industrial community, listed in 2023.

Following up on its important project Mapping Industrial Documentation (2019), SIKA (the Industrial, Communication, and Infrastructure Section of the Norwegian Museums Association) has focused on digital tools for documentation and, in 2025, held a seminar on the topic. The Directorate for Cultural Heritage has also recently published a handbook on the same theme: *3D and Modern Technologies in the Preservation and Management of Cultural Heritage.*

In 2023, Svalbard Museum established a centre for the protection of protected buildings on Svalbard, starting as a two-year project. Agreements with the Governor and the Ministry of Trade, Industry and Fisheries cover the safeguarding of state-owned heritage sites. The centre also assists other owners and aims to broaden its work through research and interdisciplinary collaboration.

The project *Hydropower Tourism: Experiences in the Western Norwegian Hydropower Landscape (2022–2025)* focused on developing tourism based on the region's hydropower industrial heritage. It joined the European Route of Industrial Heritage (ERIH). The effort will continue to be followed up on.

Noteworthy industrial reuse projects include Kunstsilo in Kristiansand, where a 1930s grain silo was converted into a contemporary art museum. The project, which opened in 2024, preserves the silo's industrial character while incorporating modern architectural elements.

Rjukan–Notodden Industrial Heritage Site is a vast industrial World Heritage Site located in Norway. The site is listed as an outstanding example of the Second Industrial Revolution, where electricity enabled the development of new technolo-

Situated by the Hardanger Fjord in Western Norway, Tyssedal Hydropower Station is part of Kraftmuseet (the Norwegian Museum of Hydropower and Industry). Kraftmuseet is one of the leading partners in the project Hydropower Tourism: Experiences in the Western Norwegian Hydropower Landscape (photo by Harald Hognerud/Kraftmuseet)

gies in industrial production, fertilisers in this particular case. The hydroelectric power plants on the site are still operational, and the industrial parks are still in use, now housing new types of industries.

Røros Mining Town and the Circumference are also part of Norway's industrial world heritage, tied to the 17th-century copper mines that operated for 333 years. The town's wooden buildings and centre were inscribed on UNESCO's World Heritage List in 1980. Additionally, Struve's Meridian Arc, a key part of Norway's industrial heritage, marks the world's first large-scale scientific survey. Conducted between 1816 and 1852 under Friedrich Georg Wilhelm Struve, the arc was inscribed on UNESCO's World Heritage List in 2005, recognising its significance in global scientific history.

MUSEUMS AND EXHIBITIONS

Despite financial challenges and uncertainty regarding future funding, Norwegian museums continue to enjoy strong public support, both financially and otherwise. In Norway's museum statistics for state-supported museums, 82 technical-industrial sites were registered in 2023. Notable examples include:

The Heavy Water Cellar Museum, part of the Norwegian Industrial Workers Museum, was built as a 'protection shell' to the ruin of the Hydro Hydrogen Factory, excavated in 2017 after the factory's implosion in 1977, and opened to the public in 2022.

The Norwegian Museum of Science and Technology's permanent I/O exhibition, which opened in 2022. Officially inaugurated by His Royal Highness Crown Prince Haakon, it is the museum's most extensive exhibition project in recent years, exploring the history, impact, and future of information and communication technology.

The *Pappa* exhibition at the Norwegian Petroleum Museum opened in 2025. The exhibition explores the father-child relationship in the oil industry, focusing on children affected by the 1980 Alexander L. Kielland disaster.

TRAINING AND EDUCATION INITIATIVES

Norway offers a broad range of educational programs relevant to industrial heritage, with several opportunities for higher education in the field of cultural heritage management and museum studies.

A noteworthy initiative is the University of Oslo's new Nordic Research School for Museums and Cultural Heritage, established in collaboration with the universities of Aarhus (Denmark) and Umeå (Sweden). This project aims to strengthen museum research through a Nordic network and a national research resource centre, bridging the gap between practice and academia.

Within museums, research focus has grown in recent years, and there is an increasing emphasis on enhancing staff competence through professional gatherings, courses, and further

education. A significant initiative, the Museum Development Program (2021–2023), supported 17 projects across Norway, focusing on digitalisation, research, and strengthening museums' roles as social actors and professional communities.

At the conservation of industrial heritage level, two formal education programs at Vestfold and Telemark professional school are noteworthy: Rehabilitation of protected structures in concrete, brick, and plaster, and Rehabilitation of protected mechanic constructions.

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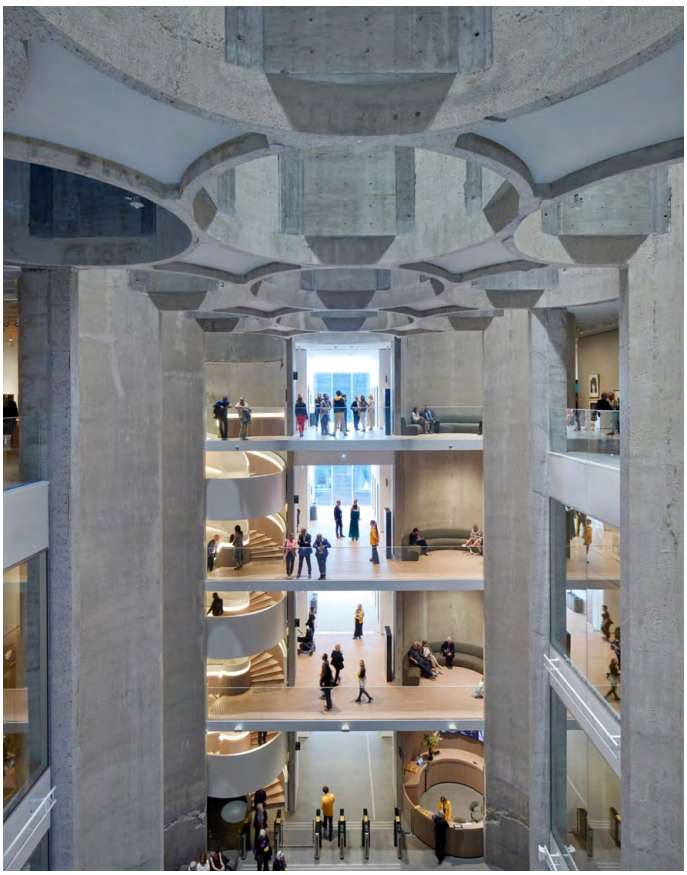

Interior of Kunstsilo in Kristiansand, a significant project opened in 2024, where a 1930s grain silo was converted into a contemporary art museum (photo by Alan Williams Photography)

AUTHOR

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FINLAND

Jouni Kärki

Finland was one of the last countries in Europe to experience the industrial revolution halfway through the 19th century, when sawmills, ironworks, and textile industries were established along major rivers in different parts of the country. After World War II, the forest and paper industry, the mining industry, and the energy industry experienced rapid booming growth. Later on, the modernisation of industrialisation in the 1970s led to technological development and the pressures to develop old buildings, which led to the desertification or demolition of numerous traditional Finnish factory environments. After a decade in the 1980s, attitudes changed significantly, and Finnish people became active in defending their industrial heritage. This movement gave rise to projects to reuse historical environments nationwide. The projects gave new life to factory buildings and carefully documented their workers' lives and past history while building a huge intangible and tangible archive of the centuries of Finnish development.

Nowadays, industrial heritage is increasingly recognised as a vital part of the nation's cultural and historical identity. Public interest in preserving industrial sites and artefacts has grown, focusing on integrating them into modern urban and rural landscapes. Industrial heritage is seen as a link to the past and a resource for sustainable development, cultural tourism, and community engagement.

ACTIVITIES

The Finnish TICCIH group, operating under the Finnish Industrial Heritage Association *(Suomen Teollisuusperintöseura)*, promotes awareness, research, and preservation efforts. The group regularly organises seminars, field visits, and publications. In 2025, the number of members increased significantly due to the launch of the new Industrial Heritage Route. Other relevant bodies working actively around industrial heritage include the Finnish Museums Association and various regional heritage organisations.

PUBLIC POLICIES AND ORGANISATIONS

The Finnish Heritage Agency *(Museovirasto)* advises municipalities on industrial heritage issues. Their strategic priorities include socially effective cultural heritage work, sustainable development, and the promotion of accessibility and the open and active use of cultural heritage. Funding opportunities for heritage work in Finland exist, but have not increased. On a more local scale, municipal policies have recently begun to reflect a more integrated approach to cultural heritage, with industrial sites increasingly included in regional planning frameworks.

Hanasaari power plant ceased energy production in 2023. The city of Helsinki is now in the process of finding a new use for the site (photo by Petteri Juuti)

The main turbine hall at Hanasaari power plant will be open for new users (photo by Petteri Juuti)

Rosenlew museum is one of the newest ERIH anchor points in Finland (photo by Mika Haavisto)

ALTERATIONS TO LEGAL PROTECTION

While Finland has only one industrial site currently listed as a UNESCO World Heritage Site, the Verla Mill Museum's legal framework for protecting built heritage is firmly established. The Act on the Protection of Built Heritage (2010) provides tools for protecting all important heritage buildings, including industrial buildings of cultural significance. Several sites, including mills, factories, and worker housing districts, have been granted national-level protection.

OUTSTANDING PROJECTS AND NOTABLE CASES

In 2023, the Finnish Industrial Heritage Association started a project to promote and expand awareness of Finnish Industrial Heritage sites. The project is partially funded by the Finnish National Board of Antiquities, the Finnish Industrial Heritage Association, and the sites participating in it. The Finnish National Board of Antiquities coordinates the Council of Europe's cultural route programme in Finland.

Verla Mill Museum in a winter landscape (photographer unknown)

Finland's first official Regional Industrial Heritage Route was established during the project. The routes are part of ERIH (European Route of Industrial Heritage). The West Coast Route includes five industrial heritage sites located in the Satakunta region in Finland: Leineperi Ironworks, Friitala Leather Museum, Ahlström Ironworks and Kauttua Ironworks Park, as well as the Rosenlew Museum in Pori, which acts as the route's ERIH anchor point. In 2025, two more Regional Routes were established: The South-West Route and the Kymenlaakso Route.

Being part of the ERIH cultural route strengthens the visibility of Finnish industrial heritage sites and connects them to the European context. As part of the Industrial Heritage Society's project, cooperation between industrial heritage actors was also intensified by creating a network between more than 20 individual sites, which promotes domestic tourism. The sites present Finland's industrial heritage and development from the 17th century to the present day.

The conversion of industrial buildings to an adapted new use is an attractive option. The green transition of the energy economy is already offering new opportunities from coal-fired power plant facilities that are being closed or have already been decommissioned. For example, the City of Helsinki aims to preserve the former coal-fired Hanasaari power plant and has launched a project to determine its future. The Hanasaari power plant is a landmark familiar to Helsinki residents in the eastern inner city. The plant ceased energy production operations in April 2023. In spring 2024, the City of Helsinki launched a vision work process to determine what city residents and stakeholders think of the power plant. The process lays the groundwork for a design competition in which the future use and preservation of the former industrial site are decided.

MUSEUMS AND EXHIBITIONS

Finland has a rich industrial history, and several museums showcase its development in various sectors—metalworking, paper, textiles, shipbuilding, electronics, and more. Key institutions include the Finnish Labour Museum Werstas in Tampere, the Finnish Railway Museum in Hyvinkää, Verla Mill Museum, Outokumpu Mining Museum and the Museum of Technology in Helsinki. New additions include exhibitions focused on digital industries and energy production. New museums are also still being created and opened. The latest addition to the museum offering is the Varkaus Museum Centre Konsti.

TRAINING AND EDUCATION INITIATIVES

Finnish universities, including Aalto University and the University of Oulu, offer courses and research opportunities in heritage conservation, architecture, and history, focusing on industrial heritage. Vocational training programs have also introduced modules on industrial building maintenance and adaptive reuse.

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SWEDEN

The annual Industrial Heritage Site of the Year 2023 award was presented to Frövifors Paper Mill (photo by author)

Roine Viklund

The turbulence surrounding Sweden's green industrial transition has also affected how industrial heritage is perceived and valued. In the face of rapid technological change and economic uncertainty, many have come to see industrial heritage not only as a source of historical identity but as a stabilising cultural reference point in times of transformation. Sites like the Olidan hydropower station in Trollhättan, still operational more than a century after its inauguration, are increasingly appreciated for demonstrating long-term functionality, architectural integrity, and a model of energy production that is both ecological and embedded in community memory.

At the same time, the failure of ambitious projects like Northvolt's battery factory has prompted renewed reflection on the fragility of present-day industrial visions and a deeper respect for the legacy of earlier industrial generations, who built enduring infrastructures under vastly different conditions. Industrial heritage is thus no longer viewed solely as a matter of preservation, but as a living dialogue between past and future, capable of offering perspective, continuity, and caution in an era of accelerated change.

During the period 2023–2025, industrial heritage in Sweden has continued to engage a growing community of professionals, local actors, municipalities and heritage institutions. The Swedish Industrial Heritage Association (*Svenska industriminnesföreningen*, SIM), the national representative of TICCIH in Sweden, has reinforced its strategic direction towards sustainability, intergenerational knowledge transfer, and industrial heritage as a living and active component of contemporary society. Each year has been framed by a specific theme contributing to the overarching congress theme "Heritage in Action: Legacies of Industry in Future Making," set to culminate at the TICCIH Congress in Kiruna, Sweden.

ACTIVITIES

The organisation representing TICCIH in Sweden (SIM) is a network for industrial heritage professionals to support research, preservation, conservation and awareness efforts within the field of industrial heritage. SIM collaborates with ICOMOS Sweden, Europa Nostra Sweden, and other organisations in Sweden that deal with cultural heritage.

Since 2018, SIM's Board has aimed to address the challenges of industrial heritage in contributing to sustainability,

In 2024, the prize went to Pythagoras Industrial Museum in Norrtälje, a fully preserved hot bulb engine factory that offers a wide variety of educational and public programming (photo by author)

remaining relevant, and enhancing societal values in the public debate. SIM has decided to work with the global sustainability goals as a tool for decision-making and work in the organisation.

The annual Industrial Heritage Site of the Year award (*Årets industriminne*) has remained one of SIM's most effective tools for drawing attention to outstanding examples of industrial heritage work. In 2023, the award was presented to Frövifors Paper Mill, a site that exemplifies the theme "Living heritage – methods, knowledge and skills passed between generations." In 2024, the prize went to Pythagoras Industrial Museum in Norrtälje, a fully preserved hot bulb engine factory that offers a wide variety of educational and public programming. The museum reflects the theme "The mobile industrial heritage: communication in time and space," and remains a model of hands-on industrial history education. In 2025, SIM awarded the prize to the Falls and Locks area in Trollhättan. This monumental landscape of hydropower and navigation infrastructure embodies the theme "Industrial heritage architecture and its legacy for the future." The Olidan power station, designed by architect Erik Josephson and completed in 1909, was once the largest hydroelectric facility in Sweden and remains in use.

SIM also awards the Industrial Heritage Publication of the Year (*Årets industriarvspublikation*), recognising outstanding publications and media that engage the public with industrial heritage. The 2023 Industrial Heritage Publication of the Year was awarded to the Centre for Business History (*Centrum för Näringslivshistoria*) for its outstanding public outreach through the magazine *Företagshistoria* and the online platform *BizStories*. The publication was praised for its innovative and accessible storytelling, as well as for its sustained contribution to public understanding of industrial heritage. The 2024 prize went to the book "The Treasury of the Kingdom of Sweden: Maps of the Sala Silver Mine from 1719 and 1731" by journalist Nils Johan Tjärnlund, highlighting the value of cartographic archives in the interpretation of early industrial landscapes.

SIM's organisational development during this period has included a strengthening of its digital infrastructure and communication strategies. The association has maintained a steady rhythm of regular newsletters, online seminars, and digital member engagement, distributing at least four newsletters annually. SIM's annual general meetings have continued as hybrid events, making participation possible from across the country. In 2023, the AGM was hosted by Tekniska Mu-

seet in Stockholm. In 2024, the AGM was hosted at the Centre for Business History in Bromma, and in 2025 it convened at Jernkontoret in Stockholm.

Throughout the period, SIM has prioritised the coordination of working groups focused on communications, awards, seminars, and preparations for TICCIH 2025. The planning and execution of the 19th TICCIH Congress, to be held in Kiruna in August 2025, has been a central focus for SIM during these years. In collaboration with Luleå University of Technology, University of Gothenburg, and Jernkontoret, SIM has established a project group responsible for all aspects of the congress. Key preparations have included developing the thematic programme, creating a dedicated congress website, and initiating partnerships for exhibitions and sponsorships. One of the main innovations for the congress is the design of a travelling exhibition lab that will debut in Kiruna and tour throughout Sweden, with potential for Nordic outreach.

SIM has continued its work as an expert body within national heritage discussions, especially through its involvement in the Water Historical Network. Throughout 2023–2025, SIM has remained a collaborative and outward-facing organisation, strengthening its partnerships with ICOMOS Sweden, Europa Nostra Sweden, ArbetSam, and various regional heritage institutions. It continues to act as Sweden's voice within the international TICCIH network, encouraging Swedish researchers, professionals, and institutions to contribute to global conversations on the value and future of industrial heritage. As the Kiruna congress approaches, SIM is well positioned to showcase how industrial legacies—whether in steel, energy, logistics, or labour—can be active agents in shaping sustainable, inclusive futures.

PUBLIC POLICIES AND ORGANISATIONS

Actors and organisations in industrial heritage in Sweden can be divided into official and unofficial actors. Formally, through the Swedish National Heritage Board (*RAÄ*), the Swedish government is responsible for all heritage on the national level. They support SIM and other industrial heritage initiatives. On the regional level, the county administrative boards are responsible for cultural heritage. The board's involvement with industrial heritage has declined. At the local level, municipalities are responsible for cultural heritage as part of their regular municipal planning. Other official heritage actors include some of Sweden's museums. A vital group are also the working life museums, numbering approximately 1,500. Various actors in the unofficial heritage sphere deal with industrial heritage.

Another organisation researching industrial heritage is the Swedish Steel Producers Association, *Jernkontoret*, which focuses on the history of mining and metallurgy, as well as the protection of related heritage sites. A substantial effort is their Atlas project, which aims to publish reports with archaeological and historical data about the medieval history of mining and metallurgy in Sweden. There is also the Falun Copper Mining Heritage board, which works with the World Heritage of the Falun copper mine.

Alterations to legal protection

A new regulation for the marking of cultural property, following the 1954 Hague Convention, will take effect on August 14, 2022. This will change how cultural property is marked for protection in the event of armed conflict. At the same time, the government has decided to establish a Council for the Protection of Cultural Heritage, which will strengthen emergency planning for the protection of collections and culturally valuable properties and environments.

At the beginning of 2024, the government decided to establish the Council for the Protection of Cultural Heritage. The purpose of the Council is to contribute to effective emergency planning for the protection of cultural heritage collections and culturally valuable properties and environments in Sweden. The mission is to provide a forum for collaboration, knowledge exchange, and experience sharing within the cultural heritage sector and with relevant actors within the total defence sector.

One area where a need for collaboration has been identified is the removal of cultural heritage in the event of a heightened state of alert or war, as well as planning for the protection of cultural heritage that cannot be removed. Cybersecurity and secure storage of cultural heritage data are other vital areas.

The Council will also assess and prioritise identified needs for preparedness measures to protect cultural heritage in Sweden. Information on legislation and prominent Industrial Heritage sites in Sweden is available at the Swedish Industrial Heritage Association and the Swedish National Heritage Board.

OUTSTANDING PROJECTS AND NOTABLE CASES

Actors in the heritage sphere in Sweden, including SIM, have taken initiatives to save historical remains that are in danger of demolition. A particularly important category is historic industrial sites located near waterways in Sweden, which are under threat of demolition on a large scale as a consequence of the EU Water Framework Directive, which requires member states to open up migration routes for fish in inland waterways.

MUSEUMS AND EXHIBITIONS

No significant changes from the last report period. The number of visitors to museums and sites is currently increasing (4-6% annually, 2022–2024) and is estimated to exceed the pre-pandemic numbers in 2025.

TRAINING AND EDUCATION INITIATIVES

Heritage research, which includes university-based academic studies on industrial heritage, is conducted at several universities in Sweden, including KTH-Royal Institute of Technology, Stockholm University, University of Gothenburg, LTU-Luleå University of Technology, Dalarna University, Karlstad University, and Södertörn University.

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AUTHOR

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GREAT BRITAIN

Mark Watson

This report refers to the British Isles. It excludes the island of Ireland to permit activities in Northern Ireland to be reported together with those in Eire. The last three years, from 2022 to 2025, were a time for recovery and renewal. The COVID-19 pandemic has fostered a renewed connection to one's locality, while also opening up new lines of communication. It had not resulted in widespread permanent closures: tourism has bounced back, and there is a renewed sense of connection to place.

Redcar steelworks in the Northeast of England, covered in the 2022 national report, has now been demolished. This was followed by the closure of the blast furnaces at Port Talbot in South Wales, which were adapted to produce steel from scrap alone. The ability to produce steel from blast furnace pig iron has been reduced to just one UK site, British Steel at Scunthorpe in Lincolnshire. The owners had neglected to order the necessary coking coal in March 2025 until the government (now Labour) intervened. Soon, many commentators presumed to have expertise in iron and steel technology.

It is likely that the only substantial example of late 19th- to 20th-century iron and steel-making technology preserved in Britain will be the electric arc furnace at the Templeborough Steel Works in Rotherham, South Yorkshire. This became the *Magna Science Adventure Centre* in 2001.

No blast furnace will be preserved. This then highlights the importance of preserved blast furnaces in Mexico, the USA, Spain, Czechia, Russia, Luxembourg, Germany, and elsewhere.

ACTIVITIES

Many groups and individuals are involved in Industrial heritage, most with a focus on a local asset, as a community of place, or by drawing people from further away as a community of interest. Some reach across the country as a whole and engage internationally. The national TICCIH Group does not aim to compete with these; it is simply a collection of TICCIH members with British addresses, comprising 62 of them.

The Association for Industrial Archaeology (AIA) marked its 50th anniversary in 2023, at the location where it began, in Bath. AIA has a 'Young Member' category for members under the age of 36, with a reduced fee. Many articles in *Industrial Archaeology Review* tackle international subjects. Several workshops and conferences are available for viewing on YouTube.

The AIA Restoration Grant programme started in 2009 and is entirely funded by three anonymous donors. Almost half of the awards have been given to transport structures, such as cranes, railway turntables, canal locks, and swing bridges, as well as mobile heritage items, including locomotives, boats, and road vehicles. AIA grants often provide seed funding to lever in larger sums of money.

Port Talbot blast furnaces in Wales, 2023 (photo by author)

The Newcomen Society, now "The International Society for the History of Engineering and Technology," was founded in 1920. Its objectives are to promote, encourage and coordinate the study of the history of engineering and technology from ancient times to the present. Its diverse membership reflects the breadth and scope of engineering's history.

ICOMOS-UK has been in conversation with colleagues across the UK industrial heritage sector to explore the role it can play in building international consensus around understanding, interpretation, and conservation of industrial heritage. An Industrial Heritage Committee is in formation, with colleagues from TICCIH, a key partner given the Memorandum of Understanding with ICOMOS, which was renewed in 2014. The clear common ground provides scope for collaboration, paralleling the Industrial Heritage ISC established by ICOMOS.

PUBLIC POLICIES AND ORGANISATIONS

A new Labour government was elected in 2024, after 14 years in opposition. The All-Party Parliamentary Group (APPG) for Industrial Heritage, which was covered in the 2022 report, is now "defunct" since the 2024 election. It had produced a helpful Report on the Challenges facing the Industrial Heritage Sector in 2018, assisted by AIA and others. There is still a parliamentary group of 4 MPs for Heritage Rail (with the Heritage Rail Association, concerned about coal supplies).

Since 1994, the National Lottery Heritage Fund (HLF, now NLHF) has awarded nearly £630 million (approximately € 747 million) to over 1,600 industrial, maritime, and transport heritage projects across the UK. Less was spent than that.

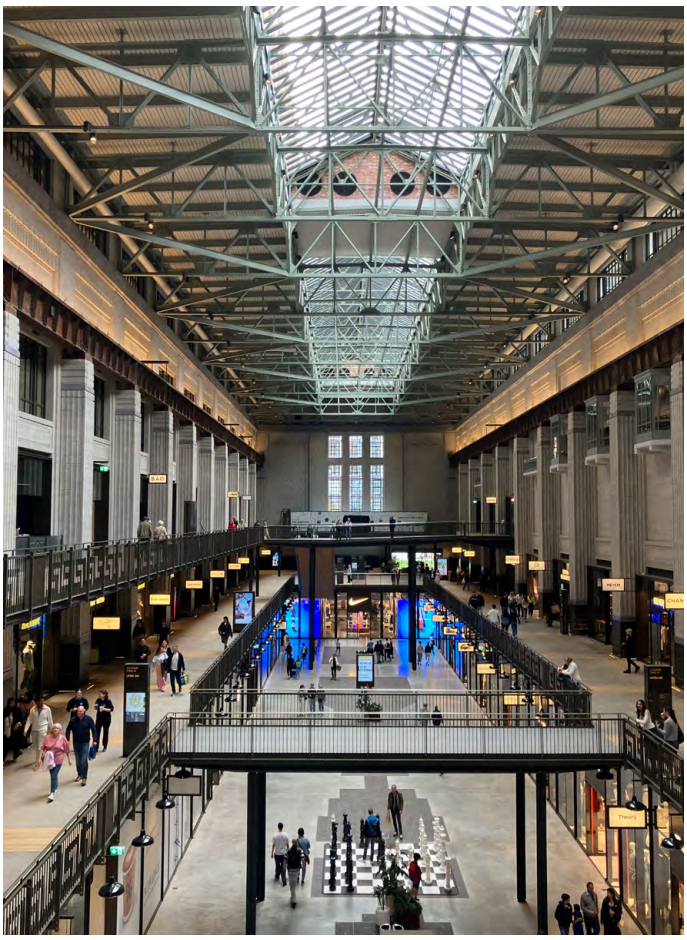
ALTERATIONS TO LEGAL PROTECTION

The legislation in Wales is consolidated by the Historic Environment (Wales) Act 2023, and best practice in applying legal protection in Wales is explained here, regarding earlier Acts (Laws). A review of the designation process is underway in Scotland.

The pace of listing has slowed across the nations of Great Britain as consultation over changes to grades absorbs more time. As the possibility of certification that a building will not be listed (for example, Bankside Power Station/Tate Modern in London), and appeals against listing are exploited by those with resources to do so.

The Slate Landscape of Northwest Wales World Heritage Site has been able to utilise World Heritage status (from 2021) as a means of securing additional funding for staff, artworks and a *Caring For The Slate Landscapes of Wales* booklet. Cadw has also funded, with government and National Lottery Heritage Fund (LleCHI LleNI), the redevelopment of the National Slate Museum and adjoining Parc Padarn Country Park.

Today, ten of the 33 World Heritage Properties in the UK relate to industry, science or technology. The revised UK tentative list (2022) contains no industrial properties.



Battersea Power Station: power hall A and control room B, a cafe, 2024 (photo by author)

OUTSTANDING PROJECTS AND NOTABLE CASES

Medlock Mill (Hotspur Press) was built in 1794, making it the oldest cotton mill in Manchester. A steam engine recirculated water to a wheel. Its designation as a listed building is under consideration.

Battersea Power Station has opened as a mixed-use development in London, more than 40 years since it was going to become a fun fair, and the roofs were removed. The travelling cranes and Art Deco control rooms of both A and B power halls are preserved, and it is possible to go up one of four controversial chimneys by Sir Giles Gilbert Scott.

West Ham beam engines in London had been neglected for decades, but now are intended to open to the public. Cragend Farm, Rothbury, Northumberland, was derelict in 2011 but is now restored, and Armstrong's Hydraulic Silo is interpreted for visitors.

The gas industry in Scotland has eight listed large but empty gasholders. Gasholder Number 1 at Granton in north Edinburgh has been repainted and is the centrepiece of a new public park. A gas purifier House at Dalmarnock in Glasgow is now converted to "Eastworks" business space by Clyde Gateway in 2023.

Granton gasholder, built in 1903, now a park in North Edinburgh, 2025 (photo by author)

Whisky distilleries are in good spirits: new ones were created in a power station in Hawick, the Scottish Borders, in Guardbridge Paper Mill in Fife, the Hydraulic Power Station in Queens Dock, Glasgow, and progressing at Castletown Mill, Caithness. Welsh whisky has been produced at Hafod Morfa Copperworks in Swansea since 2023, resurrecting the tradition after long closures. Notably, Rosebank Distillery, Falkirk, Annandale, Dumfriesshire, and Dallas Dhu, Moray, were also revived. Dallas Dhu, in particular, was presented as a time capsule by Historic Environment Scotland for 27 years, from 1988 to 2015. Now, it will be presented as a working whisky distillery.

MUSEUMS AND EXHIBITIONS

Shrewsbury Flax Mill Maltings (Ditherington Mill) was opened to the public by Historic England in 2024. The first iron frame in the world is illustrated in the 2015 TICCIH National Report (pages 185-186). Visitors are handled by English Heritage (the two organisations were one until 2015).

North Mill in Belper is an 1804 cotton mill, the second iron-framed mill to survive. It closed in 2023 as a visitor interpretation centre. Its future, along with that of the larger East Mill, is under consideration. Also in the Derwent Valley Mills World Heritage Site, Masson Mill (whose closure was reported in the 2022 national report) was acquired by a hydroelectric company. In addition to generating power, the company has reopened the working textile machinery museum and established a new visitor centre.

The *International Early Engines Conferences* presented recent research on early steam engines in Elsecar, Yorkshire, in 2017, followed by the event at the Black Country Living Museum in Dudley, West Midlands, in 2021, and the third at Summerlee Industrial Museum in Coatbridge, North Lanarkshire, in 2024. This last saw visits across Scotland from Prestongrange to Ayrshire, and the identification of early Newcomen engines, even in Slovakia. Proceedings of the first two conferences are now published. A fourth will take place in Bristol in March 2026.

"The father of civil engineering," and designer of Eddystone Lighthouse, John Smeaton, was born in Leeds, Yorkshire, in 1724. The tercentenary was marked by events in 2024 led by the Institution of Civil Engineers (ICE) in the UK and by the continuing Smeatonian Society of Civil Engineers.

The 200th anniversary of the Stockton and Darlington Railway in 2025 has brought events together under the brand "Railway 200," examining how rail has transformed lives.

TRAINING AND EDUCATION INITIATIVES

No academic courses focus exclusively on industrial heritage. Instead, industrial heritage is embedded into other universities and vocational training, such as at Keele, Edinburgh and Sheffield.

SOCIAL AND COMMUNITY-BASED PROJECTS

There are many examples, such as the swing bridge in Bristol, designed by I.K. Brunel, which volunteers are repairing.

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AUTHOR

Mark Watson works in the External Relations and Partnerships Directorate, Historic Environment Scotland. He wrote the UNESCO nomination for New Lanark and contributed to parts of the nomination for the Forth Bridge. Co-author of the TICCIH comparative study of the global textile industry, he researches industrial architecture and engineering heritage.

Thanks: Robert Carr, Lou Renwick, Adrian Farmer, Dan Amor.

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ESTONIA

Henry Kuningas

A notable positive development over the past decade is undoubtedly the conservation and renovation of several important historical industrial complexes, as well as the growing interest in Estonia's industrial heritage in both public and academic circles. This has been caused by several circumstances, including the opening and renovation of previously closed historical complexes located in larger cities that have lost their industrial function and become multifunctional, attractive urban spaces. The accompanying public attention in the media has certainly favoured the consolidation of a positive image of industrial heritage in the public, and also increasingly the industrial architecture of the Soviet period, which previously had a rather negative connotation. At the same time, the real estate developments of several industrial complexes have also been accompanied by a process of gentrification and social segregation. The dismantling of factory equipment that has ceased work and, more broadly, the demolition of the dissonant industrial heritage of the 20th century continues to be problematic.

PUBLIC POLICIES AND ORGANISATIONS

Various institutional and historical factors have shaped the protection of Estonia's industrial heritage. The National Heritage Board, under the Ministry of Culture, manages heritage listings, including those related to industrial heritage. In major cities such as Tallinn, Tartu, and Narva—home to Estonia's most significant industrial sites—heritage protection tasks have been delegated to local governments.

Academic interest in industrial heritage grew in the 1980s, leading to Estonia's first national inventory of industrial sites from 1984 to 1991, led by the National Design Institute of Cultural Monuments. Despite covering a wide range of sites, from factories to railway stations and mills, the survey was hindered by Soviet-era restrictions, particularly regarding large industrial complexes and classified factories controlled by the Moscow government. As a result, the inventory primarily focused on railway infrastructure, bridges, and small rural industries. A key figure in the effort was Tõnu Hagelberg, who actively promoted Estonia's industrial heritage. His advocacy led to national protection for structures such as the Kasari reinforced concrete bridge (1904) and Tallinn's seaplane hangars (1917).

A significant portion of Estonian monuments, including industrial heritage, was listed in the newly independent Republic of Estonia between 1995 and 1997. Several important industrial complexes, such as the Sindi and Kreenholm textile factories, along with their surrounding buildings, continued to be added to the protection lists vigorously until 2000. However, the protection process lacked thorough research and inventory. The rapid transition from Soviet governance also meant that heritage laws and administrative procedures were still in the process of development. By the early 2000s, the pace of industrial heritage protection slowed, partly due to limited funding and resources. While the early efforts faced challenges, they were crucial in shaping Estonia's approach to industrial heritage conservation, a trend that continues to evolve.

EKA peahoone, the main building of the Estonian Academy of Arts in Tallinn used to house the Rauaniit/Suva knitwear factory (architect E. Habermann 1926-33, renovated by Kuu Arhitektid 2015-18), 2019 (photo by Martin Siplane)

ALTERATIONS TO LEGAL PROTECTION

In connection with the broad review of the lists of cultural monuments, a critical analysis of the lists of Estonian protected industrial heritage will also begin in 2025, during which, in addition to reviewing the existing protected heritage, it will also be possible to submit proposals for bringing previously unprotected valuable heritage under national protection. There are no Estonian industrial heritage sites on the World Heritage List.

OUTSTANDING PROJECTS AND NOTABLE CASES

Over the past decade, several important historical industrial complexes and factories have been revitalised. A large part of the historical factories in the capital city centre have already been rebuilt, mainly into residential and commercial premises. Some industrial buildings have also acquired a cultural and educational function under the leadership of the public sector. The vast majority of Tallinn's historical indus-

Part of a revitalised former submarine factory Noblessner (1912-1916) in Tallinn, 2024 (photo by Tõnu Tunnel)

trial complexes have been rebuilt or added to to a greater or lesser extent with a new function: the former Rotermann food industry in the city center, which now has a residential and commercial function; the Ülemiste City business center in the historic Dvigatel machine-building factory; the Estonian Academy of Arts, which has moved to the former Rauaniidi knitwear factory; the Tallinn Power Station, which has been adapted as a Culture Factory and the Estonian Museum of Contemporary Art.

The former pulp and paper factory on Tartu Road, the former Volta electric machine factory quarter and the latter's neighbor, the Krull machine-building factory complex, the historical quarter of the Luther factory, Estonia's largest wood industry, the Põhjala rubber products factory, and the Baltic Cotton Manufactory are in various stages of renovation. It is inevitable that the refurbishment of major industrial areas has lasted for over 10 years and will continue in the future. A positive trend is the revitalisation of several industrial complexes without large-scale reconstruction, which reflects both the appreciation of industrial heritage and the desire for minimal intervention and maximum reuse arising from environmental conservation - e.g. the former Tartu Instrument Factory.

MUSEUMS AND EXHIBITIONS

Although there is no technical museum in Estonia, there are nevertheless several museums dedicated to or operating in industrial heritage sites. The most prominent of them: the Estonian Mining Museum in the former Kohtla-Nõmme oil shale mine, the Motorsport Museum in the picturesque former Ellamaa Power Plant, the Energy Discovery Center in the former turbine hall of the Tallinn Power Plant, the Kohtla-Järve Oil Shale Museum, the Peat Museum in the perfectly preserved former Tootsi peat briquette factory, the Haapsalu Railway and Communications Museum.

TRAINING AND EDUCATION INITIATIVES

There are currently no courses specifically dedicated to industrial heritage in Estonian higher education institutions, but joint short courses are regularly organized, for example, between students from the Department of Restoration and Architecture of the Estonian Academy of Arts and the Department of Civil Engineering of the Tallinn University of Technology, to develop specific renovation strategies and methods for disused industrial sites.

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AUTHOR

Henry Kuningas was born in Tallinn, Estonia, in 1979. He graduated from the Estonian Academy of Arts, Faculty of Art History, with a Bachelor's degree in architectural history and a Master's degree in heritage protection and conservation in 2015. He worked at the Tallinn Heritage Protection Department for over twenty years and has been involved in the study of Estonian industrial heritage for nearly twenty years, giving lectures, curating exhibitions and publishing numerous articles on the subject.

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DENMARK

Susanne Krogh Jensen

In March 2025, the Danish Society for the Conservation of the Industrial Heritage chose to liquidate the association due to declining membership. Thus, the last edition of the journal *Fabrik og Bolig* was published digitally in 2024. Denmark's representation in TICCH has been transferred to the Danish Museum of Science and Technology. The curator of collections, Susanne Krogh Jensen, holds a PhD in cultural history and is currently undertaking this project.

The museum, founded in 1911 by the Danish Industrial Association and the Craftsmen's Association in Copenhagen, focuses on the history of technology and industry in Denmark. It is situated in Helsingør, north of Copenhagen, and holds a collection of more than 30,000 objects that describe the historical development spanning over 400 years.

PUBLIC POLICIES AND ORGANISATIONS

In Denmark, the Agency for Culture and Palaces has the regulatory responsibility for sites and monuments, listed buildings, as well as the state-subsidised museums. According to Danish law, buildings which are more than 50 years old can be selected for preservation. The Agency must grant permission for any construction work on listed buildings, and it offers advice and information on maintenance as well as contributes to funding restorations.

ALTERATIONS TO LEGAL PROTECTION

In 2022, the Historic Building Council, which advises the Agency in selecting buildings for preservation, presented a new strategy for preserving buildings of historical value. The strategy was built on an analysis of approximately 7,000 buildings listed for preservation. The study showed that very few buildings from 1945 to 1975 had been selected,

The powerplant Svanemølleværket in Copenhagen has been suggested preserved as an industrial heritage site (photo by Danish Museum of Science and Technology)

although about one-third of the Danish building stock was built after 1945. Furthermore, the Council noted that only three factories, built after 1950, had been designated as preservable.

The strategy identifies nine themes significant for evaluating potential cultural heritage sites, one of which is related to industry, highlighting the need to consider the preservation of industrial heritage sites actively. The strategy emphasises the importance of considering the sites' functions both now and in the future, as well as the costs of restoration and preservation.

However, the practical preservation policy has been debated repeatedly. The Agency for Culture and Palaces has been criticised for imposing unrealistically expensive solutions on owners of historical sites, making it challenging to preserve physical cultural heritage. Furthermore, when it comes to industrial areas and commercial harbours, the sites often constitute significant economic value, providing square meters, especially in urban areas in need of housing or office spaces. Therefore, buildings and areas are often changed before heritage evaluations can take place.

Nevertheless, in recent years, a renewed interest in sustainability has led to a growing interest in reusing existing buildings and materials instead of replacing them, resulting in several projects that demonstrate the potential for preserving industrial environments. In Aalborg, the former boiler house of the distillery, which was designated one of Denmark's protected industrial sites in 2007, is currently being transformed into an art hall that preserves the old building. The architect has obtained permission to secure extra space by building on top of the building, thereby preserving the facades and surroundings of the complex.

Also, in the spring of 2025, Svanemølleværket, the powerplant in Copenhagen, has been proposed for preservation as an architecturally significant site. The building, dating back to 1953, represents the centralisation and efficiency improvements in power production during the 20th century, as well as the dependency on fossil fuels and the necessary infrastructure, which placed the power plant at the harbour. Simultaneously, the municipality of Copenhagen has developed a plan for the whole area, suggesting that part of the complex become the Danish Museum of Science and Technology. Both proposals are currently under consultation.

AUTHOR

Susanne Krogh Jensen holds a PhD in cultural history and is curator of collections at the Danish Museum of Science and Technology.

Contact the author

Members of TICCIH Poland during the study visit at Ignacy shaft in Rybnik (photo provided by the authors)

Julian Kołodziej & Bartosz M. Walczak

Poland's industrial heritage, comprising coal mines, steelworks, textile mills, and transport infrastructure, is a vital component of the country's national identity and European history. The years 2022–2025 have witnessed intensified efforts to protect, reinterpret, and repurpose these sites, driven by both local initiatives and international collaboration. Central to this process is the work of TICCIH Poland, which has advocated for legal reforms, public engagement, and the integration of industrial heritage into broader sustainability agendas. This report provides a comprehensive overview of these developments, drawing on recent policy documents, academic studies, and the outcomes of the 2025 Katowice conference.

HISTORICAL, THEORETICAL AND INSTITUTIONAL CONTEXT

1. Evolution of Industrial Heritage Recognition

Formal recognition of industrial heritage in Poland lagged behind Western Europe, with early efforts focusing primarily on monumental architecture. The establishment of TICCIH Poland in 1999 marked a turning point, advocating for the inclusion of factories, mines, and machinery as integral to national and technological history. By 2025, over 3,600 industrial sites were listed as immovable monuments, with a growing number recognised for their technical and social value.

2. Theoretical Frameworks

The protection and adaptive reuse of industrial heritage can be understood through several theoretical frameworks. One such framework is the Historic Urban Landscape (HUL) approach, which emphasises the integration of heritage conservation into broader urban planning and development processes. The HUL approach advocates for a holistic view of heritage, considering not only the physical attributes of historic sites but also their social, cultural, and economic contexts.

Another relevant concept is the circular economy, which promotes the reuse, recycling, and repurposing of existing materials and structures. In the context of industrial heritage, the circular economy encourages the adaptive reuse of historic industrial buildings, reducing the need for new construction and minimising waste. By preserving and repurposing industrial heritage sites, communities can contribute to sustainable development and resource efficiency.

3. Legal and Administrative Frameworks

The Act on the Protection and Care of Monuments (2003) provides the legal basis for heritage conservation, administered by the General Conservator of Monuments and regional offices. However, the law was initially designed for castles and churches, creating regulatory gaps for industrial sites. TICCIH Poland has lobbied for amendments to introduce specialised criteria for machinery preservation and adaptive reuse.

4. Quantitative Data

Quantitative data provides valuable insights into the scope and impact of industrial heritage conservation efforts. As of January 2025, Poland has listed 3,605 industrial sites as immovable monuments, representing 4.55% of all protected sites. Additionally, 3,368 technical objects are listed as movable monuments, accounting for 1.22% of all movable heritage.

Funding allocations for industrial heritage conservation have also increased. The National Program for the Protection of Monuments (2023–2026) has allocated over 55 million PLN to heritage initiatives, with a significant portion directed towards railway heritage and coal mining sites in Upper Silesia. Visitor numbers to heritage sites have shown a positive trend, with many adaptive reuse projects attracting both local and international tourists.

ACTIVITIES

1. Advocacy and Policy Influence

TICCIH Poland has played a pivotal role in shaping the national heritage discourse through its dual function as both a think tank and an advocacy group. Collaborating with the Ministry of Culture, it contributed to the formulation of national guidelines for repurposing post-industrial sites, emphasising sustainability and community involvement. These guidelines influenced regional strategies in Silesia and Łódź, leading to the adaptive reuse of over 70 industrial complexes since 2022.

2. Educational and Cultural Initiatives

Public awareness initiatives, such as the 2023 Industrial Heritage Week, attracted tens of thousands of participants. Academic collaboration flourished, with universities establishing master's programs focused on industrial heritage conservation, responding to a growing need for professionals skilled in both preservation techniques and sustainable design practices.

The summer schools organised by ICOMOS Poland in Katowice (2023) and Łódź (2024), in collaboration with TICCIH Poland, are part of a long-standing initiative aimed at fostering interdisciplinary dialogue and practical training in heritage conservation. Through workshops, site visits, and lectures led by experienced practitioners, participants engage directly with local heritage contexts, gaining hands-on experience and contributing to the ongoing discourse on sustainable conservation practices.

3. Leadership and International Recognition

TICCIH Poland is led by distinguished figures whose work has shaped industrial heritage conservation in Europe. Dr. hab. Piotr Gerber, President of TICCIH Poland, received the 2024 Europa Nostra Heritage Champion Award for restoring seven major industrial sites in Silesia into working museums, emphasising authenticity and community engagement. His efforts have influenced national conservation standards. Prof. Bartosz M. Walczak, Vice-President of TICCIH Poland, was awarded the 2013 Europa Nostra Award for his monograph on European textile mill settlements, highlighting Poland's growing role in industrial heritage research.

Together, Gerber and Walczak represent a unique distinction in European heritage circles—TICCIH Poland is likely the only national branch to have two Europa Nostra laureates on its board. This dual recognition underscores the organisation's intellectual and practical leadership in heritage conservation.

OUTSTANDING PROJECTS AND NOTABLE CASES

1. Adaptive Reuse as a Sustainability Strategy

The green transition has redefined industrial heritage as a resource for circular economies. In the Górnośląsko-Zagłębiowska Metropolia, 119 industrial sites were catalogued in 2024, with 70 repurposed for commercial, institutional, or recreational uses. Successful projects prioritised low-carbon retrofits, such as the Guido Coal Mine in Zabrze, which uses geothermal energy for heating.

2. Fossil Fuel Heritage in a Decarbonising World

Poland's coal heritage presents unique challenges. The 2025 Katowice conference addressed the ethical and practical dilemmas of preserving coal mines while phasing out extraction. Proposals included allocating limited coal supplies for heritage steam engines and creating "living museums" where visitors can operate historic machinery using sustainably sourced fuel (Katowice Declaration, 2025).

3. Case Studies of Adaptive Reuse Projects in recent years

- Łódź: "EC1 Łódź – City of Culture", a former power plant, now serves as a science and technology centre, while "OFF Piotrkowska" has transformed a cotton mill into an eco-conscious creative hub.
- Silesia: "Fabryka Pełna Życia" in Dąbrowa Górnicza and "Ignacy" shaft in Rybnik exemplify the adaptive reuse of former industrial sites as cultural and public spaces.
- Warsaw: The Norblin Factory, a 19th-century metalworks, has been converted into a mixed-use development with museums and eco-friendly offices.

SOCIAL AND COMMUNITY-BASED PROJECTS

The adaptive reuse of industrial heritage sites can have a significant impact on both the social and economic well-being of local

The conference in Katowice brought together industrial heritage experts from across Europe (photo provided by the authors)

communities. However, it is crucial to consider the potential risks of gentrification and the impact on social equity. Revitalised industrial districts, such as Nowa Huta in Kraków and Nikiszowiec in Katowice, have experienced increased property values and new business opportunities. While these developments can stimulate economic growth, they may also lead to the displacement of long-term residents and changes in the social fabric of the community.

To address these challenges, heritage conservation efforts should prioritise inclusive and participatory approaches. Engaging residents in the planning and decision-making processes can help ensure that the benefits of adaptive reuse are equitably distributed. Additionally, policies and programs that support affordable housing and community services can mitigate the negative effects of gentrification.

TICCIH EUROPE

1. Founding Principles and Objectives

The April 2025 Katowice conference culminated in the decision to establish TICCIH Europe, headquartered in Poland. This regional branch will coordinate efforts across 27 countries, focusing on fossil fuel stewardship, carbon-neutral adaptive reuse, and mobile heritage protection.

2. Synergies with EU Policies

TICCIH Europe aligns with the European Green Deal and New European Bauhaus initiative, framing industrial heritage as a catalyst for just transitions. The Katowice Declaration called for the integration of industrial heritage into regional development funds and highlighted case studies where heritage tourism generates revenue for renewable energy projects.

2. Challenges and Future Directions

Despite progress, Polish heritage laws remain ill-suited for industrial sites. A 2024 study found that 60% of post-industrial complexes lack conservation plans, leaving them vulnerable to demolition. TICCIH Poland has proposed tax incentives for private investors who repurpose factories and mines, mirroring policies in France and Belgium.

Revitalisation projects risk displacing low-income residents, as seen in Kraków's Nowa Huta district. TICCIH Poland's 2024 guidelines stress participatory design, ensuring that adaptive reuse benefits local communities. The Nikiszowiec Model in Katowice, where residents co-manage a historic housing estate, exemplifies this approach.

CONCLUSION

The period from 2022 to 2025 marks a paradigm shift in Poland's industrial heritage conservation, driven by interdisciplinary strategies and the emergence of TICCIH Europe. By embedding sustainability into preservation practices and advocating for transnational cooperation, Poland has positioned itself as a leader in reconciling industrial legacy with green transition imperatives. Future success hinges on legal reforms, equitable community involvement, and innovative funding mechanisms to ensure that the monuments of industry endure as living testaments to human ingenuity.

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GERMANY

Dr. Alexander Kierdorf, Milena Karabaic & Norbert Tempel

In Germany, these years were generally dominated by the undeniable effects of climate change and the war in Ukraine, leading to unpredictable expenses, for example, by replacing Russian energy supplies and supporting refugees. The German industry faced a rapid and unforeseen change in conditions, which slowed down its modernisation process and led to a decline in material output, exports, and financial profit. The government, which aimed to accelerate modernisation and the energy transition *(Energiewende)*, therefore focused on infrastructural modernisation as a driving force for economic stimulation.

Energy transition and infrastructure modernisation result in the disappearance of fossil energy-extracting branches of the economy, such as lignite extraction, and electrification *(Verstromung)*, as well as the massive need for maintenance and replacement of engineering structures, including bridges, rail tracks, and motorways. This is accompanied by "anti-bureaucracy" programs aimed at removing such "barriers" and obstacles. However, some crucial aspects, unfortunately, are often overlooked, such as the justified requirements of environmental conservation and heritage protection.

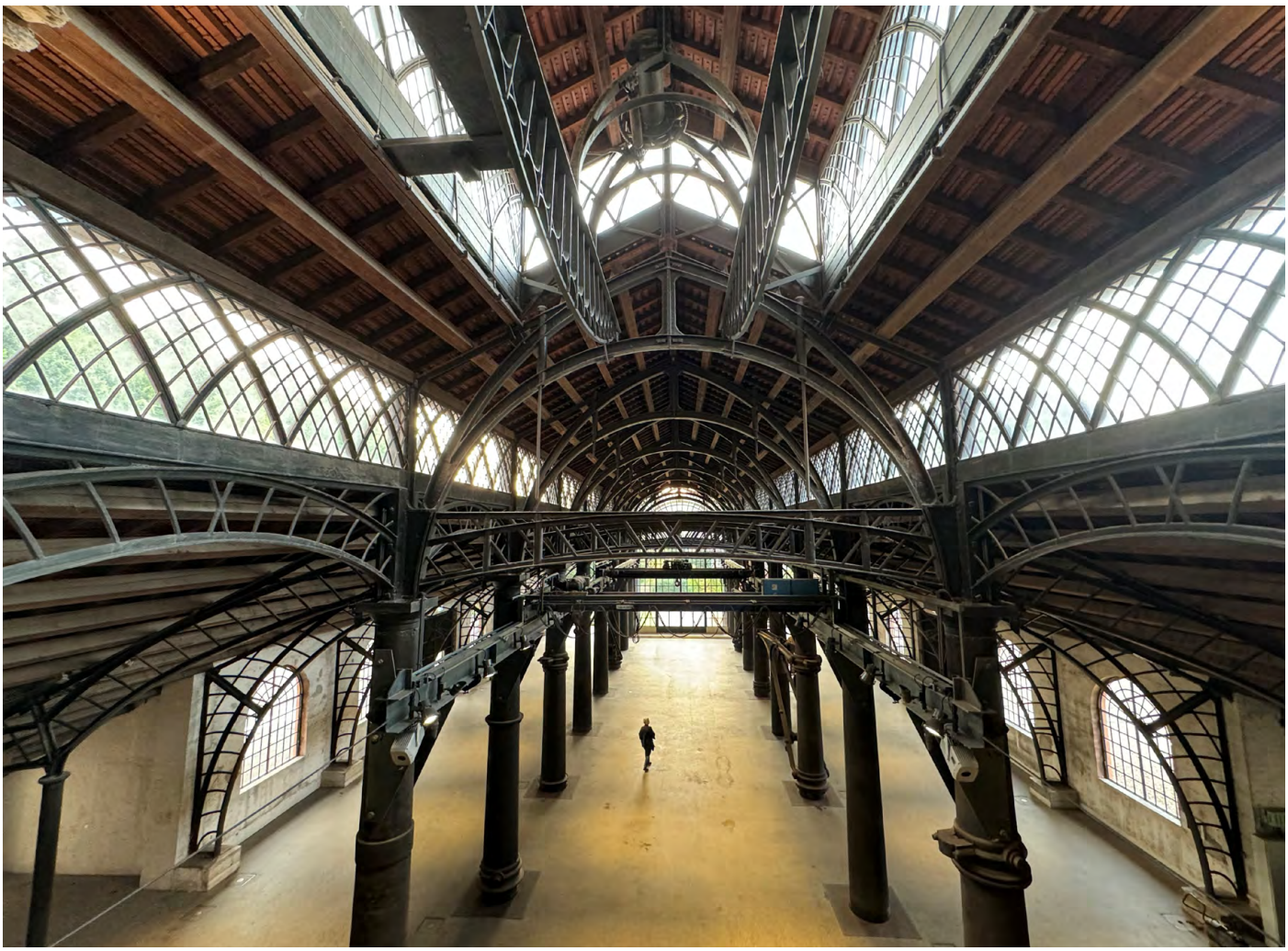
On the other hand, the building sector is undergoing a rapid concept shift by creating new spaces and areas, maintaining and improving existing buildings and urban structures, thereby leading to the preservation and reuse of many more industrial buildings than ever. This is seen as a significant step towards a 'sustainable' economy, now referred to as 'climate-protection-friendly,' and also positively influencing existing social and cultural networks.

The heritage sector has fought for a more "conservative" policy for decades, with ecological arguments always included. Now, the protagonists are supposed to be more satisfied. Still, at the same time, they are losing influence and expertise as specialists due to legislative changes in the various federal states.

OUTSTANDING PROJECTS AND NOTABLE CASES

The lignite industry inventory, as part of the "lignite power generated exit" initiative executed in all federal states with such industries, resulted in a comprehensive

People's House (Volkshaus) at Probstzella/Thuringia, built by the socialist factory owner Franz Itting according to ´Bauhaus` ideas in 1925-27 to house all kinds of cultural activities of his workers and employees, and including a hotel and café. It was, after decades of decline and isolation in the former GDR, saved and restored by a private investor from 2003 (photo by meterstab, Wikimedia)



Georg Agricola Society Annual Conference 2024 in Bendorf-Sayn, Rhineland-Palatinate, "Sayner Hütte" Iron casting mill (1830) (photo by Norbert Tempel)

overview of geographic, industrial-archaeological, social, and local aspects of cultural remembrance, which has been documented in publications as well as the KuLaDig database. The nationally funded research network Kulturerbe Konstruktion (construction as cultural heritage) has one of its scientific clusters focused on railway bridge inventory, documentation, and preservation, which is executed in Lower Saxony.

A practical conservation hub was established at the Georg Agricola University and the German Mining Museum in Bochum, utilising key monuments, such as the Zollverein coke plant, as research sites for "automated" maintenance and practical material treatment.

MUSEUMS AND EXHIBITIONS

Many industrial museums, for example, the joint museum networks in the federal state of North Rhine-Westphalia, must adapt to various new visitor needs and expectations, leading to the modernisation of their sites and the incorporation of advanced presentation technologies in their exhibitions. The reorganisation of staff and facilities accompanies this process, managed mainly by a "new" generation of professionals with more specific skills in education, such as cultural or history communication specialists, supported by scientific and technical personnel from supplementary disciplines.

The most prominent example of a systematic and thorough modernisation is the traditional flagship of technical museums in Germany, the „Deutsches Museum", Munich, which celebrates the centenary of its final opening in the present building complex in 2025.

INDUSTRIAL HERITAGE ASSOCIATIONS AND STATE POLICY

A significant number of individuals, including entrepreneurs, engage in researching, preserving, presenting, and communicating industrial heritage, mostly related to significant buildings or other technical structures. Industrial heritage is a large and ever-growing sector

Roter Sand Lighthouse, Bremerhaven (1885), is an endangered monument; a translocation is planned (photo by Stefan Brending, Wikimedia)

of voluntary work and commitment. In many cases, networking is taking place with museums and other actively managed sites – for reference, see the ERIH network. On the local and regional level, initiatives and organisations also promote sites and historic infrastructure, for example in events like "project-week or -weekends" or permanent formats like "Industrial Heritage Routes" and the "Extraschicht" for a broader audience in the Ruhr area.

Industrial heritage professionals and enthusiasts meet nationally in the "Georg Agricola-Gesellschaft für Technikgeschichte und Industriekultur" (GAG), which organises annual conferences, often in collaboration with local or institutional partners, such as the VDI Geschichtskommission (Association of German Engineers, Historical Committee) or the Society for the History of Electricity. ICOMOS Germany has a working group on industrial heritage conservation. A regional workgroup for industrial heritage has been established for the Rhineland area within the framework of the *Rheinischer Verein für Denkmalpflege und Landschaftsschutz* (RVDL) in 2023. The monitoring group of ICOMOS Germany advises and supports the German UNESCO World Heritage Sites, including several industrial sites. TICCIH Germany meets as an informal group of individual members in connection with the GAG annual conferences. The personal connections between the members of TICCIH, GAG and ICOMOS are very close.

Federal states in eastern Germany (Sachsen, Sachsen-Anhalt) were the first to initiate statewide associations for industrial heritage *(Industriekultur)*. Finally, on April 1st, 2025, the two industrial museums of North Rhine-Westphalia (of the two municipal associations LVR in the Rhineland and LWL in Westphalia) and the Regional Association Ruhr (RVR), supported by ERIH, set up a Federal Association for Industrial Heritage at Zollern II colliery, Dortmund [see TICCIH Bulletin #108, 2025]. The Association's fundamental declaration states the basic value of industrial heritage for modern society. It claims the need to preserve and support monuments of all kinds and sizes in regional contexts. World heritage sites should be treated as landmarks and protagonists of industrial heritage, serving at the same time for the visibility and importance of the enormous amount of industrial heritage in the surrounding areas, and not replacing it.

PUBLICATIONS

Important news concerning the industrial culture scene is published in the quarterly journal Industriekultur. Each issue focuses on a specific topic, such as the anniversary issue No. 100 (3/2022, which explores the evidence of industrial culture in Chile. Relevant new publications are reviewed in each issue.

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Deutsches Museum, Munich Main Exhibition building, opened in 1925, facade to northwest with new entrance building (photo by Burkhard Mücke, Wikimedia)

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Expo Ferro non Ferro at the Museum of Industry. Spectators watch with fascination as a volunteer operates the lathe (photo by Martin Corlazzoli)

Heritage management differs between the French- and Dutch speaking regions of Belgium, each operating within its policy framework and setting distinct priorities. These regional and conceptual variations lead to significant differences in how industrial heritage is managed and in the networks involved. To provide a clear overview, this report is therefore structured around the three central regions: Flanders, Wallonia, and the Brussels-Capital Area.

FLANDERS

Davy Herremans

In Dutch-speaking Belgium, a distinction is made between community-related heritage (intangible and movable elements, such as traditions, artefacts, or collections) and territory-related heritage (archaeology, landscapes, and built structures). As a result, industrial heritage is governed by two separate decrees. The Cultural Heritage Decree (2008, revised 2021) covers movable and intangible heritage. The Immovable Heritage Decree (2015) governs immovable heritage, including buildings and landscapes. A new policy vision is being developed following the 2024 elections, although no significant changes to these decrees are expected.

PUBLIC POLICIES AND ORGANISATIONS

Three major organisations play a leading, overarching role in shaping the industrial heritage landscape. The *Vlaamse Vereniging voor Industriële Archeologie* (VVIA), a volunteer association founded in 1978, focuses on protecting and saving industrial monuments and buildings, often adopting an activist approach in its efforts. With great sadness, we note the passing of Adriaan Linters (1951–2025), co-founder, honorary chairman, and for more than 47 years the driving force behind the VVIA. He was a tireless advocate for industrial heritage in Flanders and a true authority on the industrial past.

For built heritage and landscapes, a dedicated agency of the Flemish Government, the Agentschap Onroerend Erfgoed, is responsible for carrying out several policy-related tasks. It conducts preliminary research for the designation of sites as monuments and provides guidance on managing protected heritage within the context of spatial development. When it comes to valuable but unprotected heritage, this advisory role is delegated to local governments. Industrial heritage, however, has not been a central focus of policy in recent years.

ETWIE, a government-supported knowledge centre for industrial heritage (since 2012), operates from the Museum of Industry in Ghent and focuses on the movable and intangible aspects

Depot of Meta vzw in Schepdaal. For the book and exhibition, a valuation of the tram collection was carried out with the help of volunteers (photo by ETWIE)

of technical heritage. ETWIE supports stakeholders with tools, expertise, and services to enhance heritage care. ETWIE also plays a connecting role across a diverse ecosystem of researchers, craftspeople, museums, grassroots initiatives, and private collectors. Its digital knowledge hub links heritage sites, collections, organisations, and craftspeople, promoting collaboration and knowledge exchange. The hub currently includes around 300 technical and industrial museums in Flanders.

MUSEUMS AND EXHIBITIONS

In 2022, a new visitor centre opened at Noeveren (Brik Boom), a historic site along the Rupel River known for its brickmaking industry. This centre introduces visitors to the rich history of brick production in the region, highlighting how the industry has shaped the local landscape and community.

Between 2023 and 2025, key exhibitions included *Ferro non Ferro* (2023, Museum of Industry, Ghent), which explored the history and significance of ferrous and non-ferrous metalworking techniques and machines in Belgium's industrial development. *Plastic Fantastic* (2024, Museum of Industry Ghent) focused on the rise of plastics and their impact on society and industry. FOMU organised an exhibition about the production of Gevaert, a manufacturer of photographic paper. In this context, they developed a tool to identify Gevaert Photographic Paper. Mijnmuseum Beringen launched a podcast titled *Ondergronds talent* (Underground Talent). In 2022, after seven years of research, the Jenever Museum in Hasselt opened an exhibition about the Fryns Distillery. META organised public events and expos to celebrate 150 years of Flemish tramways in 2023 (Antwerp) and 2024 (Ghent). *Hidden Seduction. A Century of Lingerie and Industry* (2025, Erfgoedcentrum Ename) traced the evolution of lingerie production and its role within the regional textile industry.

In 2023, ETWIE and partners launched Scheldeland Industriecultuur to unify cross-border industrial heritage in Flanders and Zeeland. The network works to bring these efforts together under one brand and formalise collaboration, especially to promote industrial culture tourism. In the future, it is expected to be recognised as part of the wider European Route of Industrial Heritage (ERIH) network.

The Flemish Government launched FAAM, a new digital museum for Flanders, which highlights several industrial heritage

EMABB vzw chairman Luc Verbeeck proudly presents the new visitor centre of Brik Boom, which was set up in the former carpentry workshop of the old Lauwers brickyard in the historic brickmakers' hamlet of Noeveren (Boom) (photo by Martin Corlazzoli)

narratives and offers digital access to key historical developments. The *Canon van Vlaanderen* features sixty thematic windows into regional history, intended for both the general public and education. The industrial past is well represented, with topics such as the Mule Jenny, the first trainline in Belgium, multicultural mining communities in Limburg, and the production of the first steel in Flanders.

TRAINING AND EDUCATION INITIATIVES

There is currently no academic chair dedicated to industrial heritage in Flanders. The topic appears sporadically in broader heritage and history programs, depending on faculty interests. For example, the University of Antwerp is emphasising hazardous heritage, as seen in its October 2023 conference, which includes asbestos in collections—a theme explored through the ETWIE project (2019–2022). ETWIE now shares best practices through training on handling toxic substances.

The VVIA offers an in-depth online course on industrial archaeology and heritage. It covers topics such as material history, energy sources, transportation, and industrial processes. The course is aimed at a broad audience, including history students, heritage professionals, and interested laypeople.

The Centre for Applied Arts Antwerp (CAAA) is a vibrant community dedicated to preserving and advancing traditional craftsmanship through hands-on education and knowledge sharing. They offer a range of practical activities, including blacksmithing, metalworking, bronze and iron casting, traditional woodworking, and open atelier sessions. Their well-equipped workshops serve as a hub for artisans to refine their skills, while members gain access to specialised literature and expert advice.

The *Erfgoedklassen* project, a collaboration between VIVES, ETWIE, and heritage partners, connects primary schools with local heritage actors in West Flanders. In 2024, a practical toolbox for teachers was launched, based on nine pilot programs linking classes with industrial and technical heritage sites. The project promotes hands-on, curriculum-linked learning that integrates industrial heritage into STEM (science, technology, engineering and mathematics) and cultural education, and supports long-term cooperation between schools and heritage organisations.

OUTSTANDING PROJECTS AND NOTABLE CASES

Numerous restoration projects have taken place between 2022 and 2025. The former Rottiers tile factory in Tisselt is being redeveloped into a residential site, with key historic elements preserved. In Beringen, the shell and parts of the interior of the coal washing plant are preserved and will be revitalised through the be-Nature project.

The Vynckier site in Ghent—once home to textile mills and the electrical component maker Vynckier—and the Recor furniture factory in Hasselt are being transformed into modern business parks that respect their industrial roots. In Antwerp and Ghent, iconic harbour cranes were restored as part of the outdoor collections of Museum aan de Stroom (Antwerp) and the Museum of Industry (Ghent), while Antwerp's last working floating grain elevator was brought back to life and opened to the public. Driven by the efforts of the late Adriaan Linters, action groups successfully had the demolition permit for the Kortrijk railway station revoked. However, the future of the modernist monument remains uncertain.

In 2024, significant steps were taken to protect intangible industrial heritage. The *Ambacht in Beeld Festival* was a key initiative and was officially recognised as an inspiring practice for its celebration and transmission of craft knowledge. The *Molennetwerk Kempenbroek* received similar recognition for its work in preserving the craft of millers.

The craft of hand weaving was added to the Flemish Inventory of Intangible Cultural Heritage, thanks to a joint application led by the Industriemuseum and ETWIE. A pending application was submitted for the heritage of diamond cutting, coordinated by the Diamantmuseum in Bruges.

The *Focus Vakmanschap* project supported the sector with a practical toolbox for audiovisual documentation of living heritage and crafts. Films were made about laminated wooden mast making (vzw De Scute, Blankenberge), the grooving of cylinders for industrial mills (Ateliers Bonte, Leuven), and the art of taxidermy.

Over the past three years, various master-apprentice programs were completed in crafts such as taxidermy, brush making (Eperon d'Or, Izegem), Linotype printing (Museum of Industry, Ghent), glassblowing, stained glass, industrial knitting (STEM, Sint-Niklaas), rocaille work, and weaving with flying shuttles (Museum of Industry).

PUBLICATIONS

The growing body of literature on industrial heritage in Flanders and Belgium is closely monitored and made accessible via ETWIE's knowledge hub, which currently lists 9,122 publications. Several noteworthy publications stood out over the past year. The journal *Erfgoed van Industrie en Techniek*, a collaboration between Dutch partners and the Flemish VVIA, continued to publish high-quality quarterly issues. Issue 34 was a special edition on industrial tourism, offering a rich collection of specialised articles.

A series of thematic reports by ETWIE provided in-depth field overviews for Flanders and Brussels, covering topics such as textile heritage, hand weaving, sewing machines, medical heritage, artificial fertilisers and plastics. These publications offer a state-of-the-art view on research and heritage care, highlighting both preserved collections and key stakeholders. In 2022, the research review on textile heritage was published as an in-depth continuation of ETWIE's research review on industrial heritage (2018).

The previously mentioned conference on Hazardous Heritage, organised by the University of Antwerp, has resulted in a conference volume featuring contributions from Flanders and Brussels. Topics include the importance of the victims' voice in valuing toxic heritage and the presence of asbestos in the collection of the War Heritage Museum in Brussels.

Following the earlier-mentioned exhibitions, new books were released celebrating 150 years of autocars in Ghent and Antwerp. Also noteworthy is *Plastic Fantastic*, published in connection with the Museum's exhibition on the history and impact of plastic. The book *Een geschiedenis van België in 100 voorwerpen* offered a unique perspective on Belgian history—from prehistory to today—through the lens of material culture, with significant attention to the country's industrial past. Finally, 2025 saw the release of the *Maritieme Canon van Vlaanderen*, an impressive publication that explores the region's nautical heritage in depth.

In recent years, both policy and the heritage field have continued to invest in digital infrastructure to support the preservation and promotion of industrial heritage. The ETWIE knowledge hub is being steadily expanded with thematic entries, heritage collections, and actor profiles, serving as a growing reference point for the sector. The platform *ziterasbestin.be* (*"Does it contain asbestos?"*) was developed as a specialised tool for identifying asbestos-containing materials in heritage collections. It provides a structured reference framework and helps make museums safer environments for both staff and visitors.

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WALLONIA

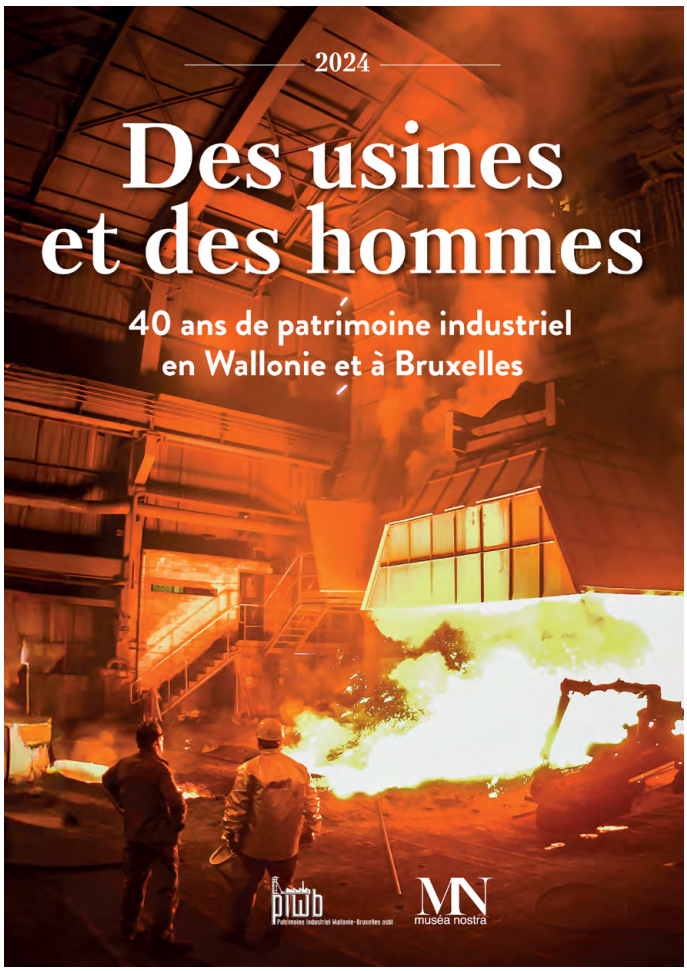
Jacques Crul & Jean-Louis Delaet

Wallonia's industrial heritage is considerable, both in terms of quantity and diversity. It was through Wallonia that technical innovations from Great Britain spread throughout Europe, from textile machinery and steam engines to major innovations in the steel industry. Capitalising on its mineral deposits and longstanding expertise in metallurgy, Wallonia diversified its activities to become one of the most industrialised regions in the world by the end of the 19th century. In the wake of successive economic crises throughout the second half of the 20th century, the conservation of a considerable post-industrial heritage proved essential.

The two pillars of this industry were coal mining and metallurgy. However, the Industrial Revolution began in the textile industry in Verviers with the introduction of spinning and weaving machines. Many machines have been preserved in the former workshops of the Belgian Solvent, and several emblematic buildings have also been converted, mostly into housing. The situation is less favourable in Mouscron, the second-largest textile centre. Still, some buildings have been preserved and converted, such as the Manufacture de Tapis et Couvertures, which houses the town's archives, and a recently restored factory chimney belonging to the La Vesdre company. Finally, there is a very active museum in Comines, focusing on the specific activity of the ribbon industry.

As for the coal industry, each Walloon basin has a major mining site that was jointly recognised as a UNESCO World Heritage Site in 2012: Grand-Hornu for the Borinage region, Bois-du-Luc for the Centre region, Bois du Cazier for the Charleroi region, and Blegny-Mine for the Liège region. In 2022, the mining sites celebrated the 10th anniversary of their UNESCO listing with a variety of activities, including a symposium at Grand-Hornu on the theme *Sharing our industrial memory*, publications and several exhibitions. Other collieries have also been preserved, including Sparkoh! in Frameries, which has been converted into a centre for scientific culture, the Péronnes-lez-Binche sorting and washing plant, which unfortunately has not yet been put to any new use, and part of the Hasard colliery in Cheratte, featuring a beautiful Malakoff tower. There are also the hydraulic lifts of the historic Canal du Centre, whose original purpose was to transport coal and which are also listed as a UNESCO World Heritage Site.

As for other mining activities, the quarries have several interpretation centres, often located on former extraction sites: the Stone Museum in Sprimont, the Marble Museum in Sivry-Rance, the Stone Museum in Maffle, the slate quarries in Bertrix, and the Coticule Museum in Vielsalm. Additionally, related to clay extraction, there is the Ceramics Museum in Andenne, the Keramis Centre in La Louvière (formerly the Royal Boch factories), and the Pottery House, as well as craft workshops in Bouffioulx (Châtelet).



Cover of Factories and People no 14, published in December 2024.

The iron and steel industry has not been preserved in a manner commensurate with its importance. A blast furnace dating back to 1910 has been preserved at the former Clabecq Forges, but it has been isolated from its original context. In Marchienne-au-Pont, the workshops of the former Providence Forges have been transformed into a cultural centre, known as the Rockerill, whose buildings are currently being acquired by the City of Charleroi. But above all, the main problem we face is what can be preserved of the recently closed factories? On this subject, the President of *Patrimoine industriel Wallonie-Bruxelles* (Industrial Heritage Wallonia-Brussels), in short PIWB, presented a paper at the TICCIH 2022 conference on Steel heritage, a resilience tool for Charleroi and Liège, Belgium's former steel capitals. Two Master plans exist, providing for some safeguards, including those of two blast furnaces, HF4 at Marcinelle and HFB at Ougrée. But their future remains uncertain, despite public protests, torch-lit marches and spotlighting actions that have forced the authorities to consider ways of saving them. A thermo wagon has been preserved for the Liège House of Metallurgy and Industry, with the help of the SNCB (National Railway Company). Buildings have been saved in Seraing (Central Workshops, Ougrée-Marihaye party hall). However, the challenges of conversion are considerable, given the value of the land involved and its optimal location for reindustrialisation.

Mrs Valérie Debue, Walloon Minister for Heritage, at the *Share our industrial memory* symposium at Grand-Hornu in November 2022 (photo by Jacques Crul, PIWB)

Little attention is paid to the heritage of non-ferrous metallurgy. The site of the Copper & Zinc Company at Angleur has been completely destroyed. A few buildings and the Museum Vieille Montagne, located in the former offices at La Calamine, remain, but this hardly reflects the pioneering role that Wallonia played in this area. An old bell foundry and its equipment have been preserved at Tellin.

Another area in which Wallonia was a pioneer is the engineering industry. The automotive sector is represented by the fine Mahy collection on display at Leuze-en-Hainaut (and at Autoworld in Brussels). Mons has its Road Museum, housed in former casemates, but it needs to find a new location very soon. The Belgian Aviation Preservation Association in Gembloux mainly manages aeronautical heritage. The Ars Mechanica Foundation, created by Claude Gaier, who was the first chairman of the PIWB association, showcases the entire heritage of the *FN* in Herstal. A beautiful book was published in 2022, FN Herstal - Browning. *La force d'innover* ("the power of innovation") and an exhibition will be held at La Boverie in Liège in 2025.

The heritage of the electricity industry is, to say the least, neglected, as is that of the chemical industry. Yet Wallonia has seen some great entrepreneurs in these fields, such as Julien Dulait (ACEC) and Ernest Solvay. Current work is focused on safeguarding old power plants, with varying degrees of success. Three have been saved, at Marchienne-au-Pont, Soignies, and Sprimont, but a Cockerill substation dating back to 1904 has just been dismantled in Seraing.

The transport heritage is promoted by several voluntary associations, including the 3 Valleys Steam Railway in Mariembourg, Railway Heritage and Tourism (PFT) in Saint-Ghislain, which operates the Bocq railway in the Yvoir region, and the narrow-gauge railway in Sprimont. Vicinal transport heritage is mainly in the hands of the Museum of Public Transport in Wallonia in Liège, and the Association for the Tramway Safeguard (in short ASVi), which manages the Tram Museum in Thuin and the Lobbes-Thuin vicinal line.

Another emblematic industry is the glass and crystal sector. Charleroi and Liège have their museums, on the Bois du Cazier site and in the Grand Curtius, respectively. The Cristalleries of Val-St-Lambert have been restored in a generally satisfactory manner, despite the recent bankruptcy of the developer. The Durobor site in Soignies warrants attention that extends far beyond the current preservation of the façade. The 'Glass Hive', headquarters of the glassblowers' union, has been preserved in Lodelinsart. Several residences of glass

Study trip to discover Flanders mining heritage, organised by *PIWB* and *Het Vervolg* in November 2024 (photo by Jean-Pierre Lensen, PIWB)

industry owners around Charleroi, such as Mondron Castle in Jumet, also need special attention.

A final sector that has received mixed attention is the agri-food industry. Several mills, breweries and maltings have nevertheless been preserved, such as the Dubuisson steam brewery in Pipaix and the Février brewery in Momignies, both in Hainaut.

Some institutions deal more specifically with archives, such as the Institute of Labour, Economic and Social History (IHOES) in Seraing and the Safeguarding of Industrial, Commercial, Workers', and Mining Archives (SAICOM) in Bois-du-Luc. And many others specialise in a specific sector. There are also generic museums, such as the Walloon Life Museum and the Liège House of Metallurgy and Industry, as well as the Industry Museum in Charleroi, located on the Bois du Cazier site.

PUBLIC POLICIES AND ORGANISATIONS

Heritage management is a responsibility shared by two distinct authorities in French-speaking Belgium. Movable heritage, intangible heritage and archives are the responsibility of the Wallonia-Brussels Federation (FWB), which is based in Brussels. Immovable heritage is the responsibility of the Walloon Region, which is supported by the AWaP (Walloon Heritage Agency). In addition to its administrative services, located in the former steam mills at Beez near Namur, the AWaP manages two heritage training centres, one in Amay in the former Paix-Dieu abbey, and one in Soignies in the former Gauthier-Wincqz quarries, dedicated explicitly to stone expertise and skills.

Concerning fieldwork, several associations are actively involved in promoting and preserving industrial heritage, particularly PIWB, which receives subsidies from the FWB and AWaP. The year 2024 was all about its anniversary, as PIWB celebrated 40 years of existence. The association was founded in 1984 to showcase large rehabilitated sites and encourage the preservation of those that could be rehabilitated. Faithful to its initial ambitions, the four successive teams at the head of the association have tirelessly pursued this work of coordination and awareness-raising.

To mark this anniversary, four events took place: the publication of a special issue of the magazine *'Des Usines et des Hommes'* ('Factories and People'), co-published with Mons University. The 278 pages retrace, with contributions from more than 35 specialists, the actions taken to preserve and

promote the sites, trades and know-how inherent in Walloon and Brussels industries; the production of four short videos aimed at raising awareness among young people, broadcast as part of campaigns on social networks and the web; a study trip to discover Limburg's mining heritage in collaboration with Flemish partners; and an academic session, in the presence of Culture Minister Elisabeth Degryse, at *BRASS*, the Forest cultural centre, a symbolic place since it preserves a steam engine restored by the association *BruxellesFabrique*, under the leadership of Guido Vanderhulst, winner of the Europa Nostra prize.

Also in 2024, in terms of raising awareness of industrial heritage, PIWB joined the organisers of the cycle of seven study days on the "reallocation and rehabilitation of industrial heritage," the Federation of Belgian Engineering Associations (FABI) and AWaP. The proceedings, with over 70 contributions, will be published in 2026. Following the day devoted to industrial heritage associations on 8 February, it was decided to send a memorandum entitled *Industrial Heritage, a Tool for Tomorrow* to the French-speaking political parties in the run-up to the general elections on 9 June 2024. Supported by PIWB, the memorandum was signed by 80 associations and individuals.

Since 2021, PIWB has been focusing on the specific problem of factory chimneys. An inventory of these is being completed, following a call for contributions from the general public. The task now is to determine which examples should be saved and to advocate for a proactive policy to be implemented to anticipate any disappearances. A book and an exhibition are in preparation.

In Wallonia, still marked by economic and social difficulties, the resources available for heritage preservation remain insufficient to meet the needs. In addition, despite the existence of an inventory that is currently being updated, there is a lack of long-term policy and debate on setting priorities. Safeguarding actions are often the result of opportunities or individual actions. PIWB is aware of the numerous shortcomings surrounding conservation, particularly due to the lack of interest shown by owners, and does not hesitate to call on public authorities whenever it sees fit. This was the case recently for the Allard-Minne Spinning Mill in Braine l'Alleud and the 'Iron Castle' Danly in Ath, both of which are threatened with demolition.

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Guido Vanderhulst passerelle in Brussels (photo by Jacques Crul, PIWB)

BRUSSELS

Jean-Luc Debroux

On 29 September 2022, Guido Vanderhulst's birthday, a new pedestrian-cyclist footbridge over the Charleroi canal was inaugurated and named after him. A large number of representatives from the world of politics, culture and associations were present: officials from the municipality of Molenbeek-Saint-Jean, the Brussels-Capital Region, the Port of Brussels, the Royal Commission for Monuments and Sites, Brusselsmuseums, Inter Environment Brussels, the Urban research and action workshop (in short, ARAU), La Fonderie, La Rue, BruxellesFabriques, Industrial Heritage Wallonia-Brussels (in short, PIWB), etc. Members of his family were also present. A tribute ceremony was then held at La Fonderie, of which he was the founding director, with many speakers.

This will perpetuate the memory of the man who, above and beyond his masterly work in preserving our industrial heritage, was a bridge-builder in our all-too-often fragmented and divided society. He was the first to rehabilitate the canal and highlight its vital importance in the socio-economic and urban development of the Brussels region. Unfortunately, Guido's passing is still being felt today, as the various associations he established are sorely lacking his extensive contacts in the political and socio-cultural world.

The industrial landscape of the Brussels conurbation is undergoing profound change: the banks and land along the canal, which have long been used for industrial purposes, are being gradually acquired and converted into luxury residential buildings. Real estate pressure is very strong, and living along the canal has become fashionable. The consequences are numerous: the demolition of industrial heritage, a decline in interest in goods transport on the canal, population changes, and so on.

Against this backdrop, the fight to save Avenue du Port, a typically industrial avenue located between the canal and the emblematic Tour & Taxis site, is more topical than ever. An appeal to the Council of State by BruxellesFabriques against the refusal of classification is still underway.

Following on from an exhibition on Brussels' cafés and estaminets in 2019, the book published for the occasion by BruxellesFabriques has been a great success. Its numerous sales, notably at Belgian Beer World, opened in 2023 at the former Stock Exchange, have necessitated a second edition. The publication is trilingual, available in French, Dutch, and English.

As far as the future of Brussels' industrial sites is concerned, we can mention the following:

The former Citroën garages, an enormous complex with an emblematic façade built in the 1930s near the canal, is being transformed to accommodate the future Kanal-Centre Pompidou art museum. Unfortunately, the work in progress is completely stripping away the building's structures. There will be no trace left of the site's former industrial function.

The last coal silo of the Brussels Tramways power station is undergoing work. Despite the complete preservation agreement signed in 2005 and the protests of Bruxelles-Fabriques, the building has been gutted. Only three walls remain. All the machinery and the old silo structure have been lost.

To end on a hopeful note, the site of the former Atlas breweries in Anderlecht is the subject of a renovation project. According to initial information, there is every reason to hope that the industrial parts of this large complex will be preserved and enhanced.

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CZECH REPUBLIC

Mgr. Jan Zikmund, Ph.D. & PhDr. Benjamin Fragner

Industrial heritage in the Czech Republic has undergone little significant change in its situation over the past twenty years or more. Factories and entire brownfields continue to be targeted by private investors and development companies for the purpose of new construction. In many cases, even highly valuable buildings are being demolished. In the past three years, an increasing number of railway structures have also been demolished. At the same time, however, there is a rising number of activities taking place in the field of industrial heritage. Unfortunately, and paradoxically, their efforts are all too often unsuccessful.

Nevertheless, interest in the value of industrial heritage continues to grow among experts and the wider public, and state-funded research projects have certainly helped this, the preparation of publications on industrial heritage targeting the public, the organisation of conferences, exhibitions, and symposiums, and successful examples of industrial buildings converted to new uses. Cities and towns are also starting to embrace industrial heritage as part of their identity and incorporate it into their public projects. The majority of activities aimed at promoting and preserving industrial heritage, however, continue to emerge on a grassroots level among local communities outside the heritage, museum, and academic environments, which, through online platforms and social networks, are able to share their aims with a wide range of people.

The interdisciplinary Vestiges of Industry platform (Industriální stopy) serves as a hub of information on all activities related to industrial heritage in the Czech Republic. This platform was developed mainly at the initiative of the Research Centre for Industrial Heritage (Výzkumné centrum průmyslového dědictví – VCPD) at the Faculty of Architecture of the Czech Technical University in Prague (CTU). It is designed to informally bring together all the activities of scholars, experts, institutions, amateur enthusiasts, and civic initiatives relating to industrial heritage, and it works closely with the CTU's Faculty of Civil Engineering and the Czech National Heritage Institute.

ACTIVITIES

The VCPD, as an institutional member of TICCIH, closely cooperates with the Czech National Committee of ICOMOS in a working group on industrial heritage and has become involved in activities to save the unique Vyšehrad Railway Bridge in the capital city of Prague. The bridge is part of the historic centre of Prague, which has been recognised as a UNESCO World Heritage Site since 1992.

In 2023, the town of Žatec and the surrounding Saaz Hops Landscape were inscribed on the UNESCO World Heritage List (photo by Martin Vonka)

The opening of the reconstructed Automatic Mills in Pardubice (photo by Jakub Potůček)

In 2023, the VCPD began work on a five-year research project titled *Industrial Architecture in the Second Half of the 20th Century: Extension, Transformation, and Identity*. The general objective of this project is to enhance a specific national and cultural identity by understanding, interpreting, and highlighting the cultural significance and possibilities for the sustainable preservation of one of the most at-risk categories of built heritage from the second half of the 20th century.

Other institutions that should be mentioned here include the Czech National Heritage Institute (and especially the Methodology Centre for Industrial Heritage in Ostrava), which plays a coordinating role in the process of nominating industrial buildings for heritage protection. The National Heritage Institute's prestigious Patrimonium pro Futuro Award in 2022 was presented to the long-term research into factory chimneys conducted at the CTU's Faculty of Civil Engineering.

PUBLIC POLICIES AND ORGANISATIONS

A positive signal is that the state administration, mainly the Ministry of Culture of the Czech Republic, is providing financial support for research projects on industrial heritage. In addition to generating new knowledge, these projects also produce various publications, exhibitions, and conferences that draw public attention to the topic of industrial heritage. Activities designed to inform the public about industrial heritage, which often involve building community relationships, also receive support from local governments. The popularity of the topic of industrial heritage is demonstrated by the growing number of industrial sites that participate in the annual Architecture Day, a popular nationwide event during which the public is given access to buildings that are ordinarily closed to them through excursions, lectures, and bike rides.

ALTERATIONS TO LEGAL PROTECTION

In 2023, the town of Žatec and the surrounding Saaz Hops Landscape were inscribed on the UNESCO World Heritage List. This is a significant site with a unique history of continuous development in the cultivation, processing, and international trade of hops, a vital ingredient in beer brewing worldwide. There are also several sites on the Czech Republic's Tentative List of UNESCO World Heritage, including the old wastewater treatment plant in Prague–Bubeneč, the Ještěd mountain-top hotel and television transmitter near Liberec, and the mill for the production of handmade paper in Velké Losiny, which has been nominated for inscription in a group of six unique paper mills in Poland, Germany, Italy, and Spain.

OUTSTANDING PROJECTS AND NOTABLE CASES

The conversion of industrial buildings to new uses continues to be an attractive prospect for open-minded investors and an inviting challenge for architects. Several new examples of the successful conversion of sites for various new uses have emerged in the Czech Republic over the past three years. One of the most closely watched cases was the opening of the Automatic Mills site in Pardubice for use by several institutions for cultural purposes. Work has also continued on the gradual renovation of newly used buildings of the Hlubina Mine in Ostrava, which is part of the Dolní oblast Vítkovice national cultural monument. Examples of industrial buildings in the Czech Republic that have been converted to new uses between 2020 and 2025 will be presented in a book and exhibition by the VCPD in 2025.

The international conference *Industrial Topography/Cultural Clusters/Czech Republic – Europe*, organised by the Architectura association in 2024, also played a role in increasing public awareness of the topic of new cultural uses for industrial heritage. An exhibition and catalogue, available in both Czech and English, accompanied this event.

Adaptive reuse and the development of local communities are recognised on the international level by the prestigious European Heritage Awards/Europa Nostra Awards. In 2023, one of the winners of this award was the Steam Engine Brewery in Lobeč, recognised for its over fifteen years of work in conserving and revitalising the brewery and the local community.

MUSEUMS AND EXHIBITIONS

In 2023 the Czech National Museum of Brewing (Národní muzeum pivovarnictví) was officially opened in a renovated brewery in Kostelec nad Černými lesy. The brewery's complete renovation and the establishment of a unique brewery museum were funded by the Norway Grants. A professional meeting of owners, architects, brewers, conservationists, and historians titled 'Breweries to the Power of Two' (Pivovary na druhou) was organised to coincide with the opening of the museum. Exhibitions dedicated to local traditional industries or industrial heritage are also organised around the country by regional museums.

TRAINING AND EDUCATION INITIATIVES

Student projects devoted to the conversion of industrial buildings are regularly assigned at the Czech Technical University's Faculty of Architecture and Faculty of Civil Engineering. An overview of such projects between 2002 and 2022 was presented in the book *'Searching for a Current Theme: New Uses for Industrial Heritage in Student Projects at the Czech Technical University'* (Hledání aktuálního tématu. Nové využití průmyslového dědictví ve studentských projektech na ČVUT), published in 2023 by the VCPD. Adaptive reuse is also a popular topic at the schools of architecture in the Czech cities of Brno and Liberec.

Between 2023 and 2025, international cooperation took place within the framework of the International Visegrad Fund, with the Czech Technical University's Faculty of Architecture participating on behalf of the Czech Republic. In a project titled *'Railway Heritage for Engaging the Young Generation – Rail4V4+V 2023'*, a broad team headed by the CULTstore Cultural Studies Platform in Novi Sad set out to strengthen the role of young people in the response to the current challenges facing railway heritage. Another project, *'Promoting V4 Industrial Heritage for Conservation and Tourism'*, aimed to raise awareness and promote the shared industrial heritage of the V4 countries as a key element in cultural tourism.

The Steam Engine Brewery in Lobeč won the prestigious European Heritage/ Europa Nostra Award in 2023 (photo by Pavel Prouza)

Automatic telephone exchanges are one of the most at-risk types of industrial heritage (photo by Jan Zikmund)

A student workshop and exhibition organised by the Czech Technical University's Faculty of Architecture in Prague in 2024 showcased the current creative perspectives of young people on the topic of reusing automatic telephone exchanges, one of the most at-risk groups of architectural heritage.

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FRANCE

Dr Paul Smith

In France, the industrial heritage has been studied, promoted, and – in some cases – given statutory protection since the 1970s. It has become a component of the national heritage, which is now fully appreciated by different cultural actors and the population. The conversion of former industrial sites to new, non-industrial uses is now commonplace. This trend is encouraged by a greater awareness of the environmental benefits of such operations, which are less wasteful of non-renewable resources than demolition and new construction.

This, however, does not mean that all the battles are won. Industrial heritage sites in France remain under threat today due to a lack of proper recognition, neglect, insufficient funding, or the interests of real estate developers. At Roubaix, the textile city in northern France, where all the heritage is industrial, a 1840s factory was recently demolished, and several of the city's *courées*, its characteristic alleys of workers' dwellings, are threatened by a renovation project. These *courées* were included on Europa Nostra's 2024 list of the 'Seven Most Endangered Heritage Sites'.

At Corbeil-Essonnes, to the east of Paris, historic buildings belonging to an exceptional flour-milling plant are similarly threatened, despite their protection, by a project which will disfigure them by adding new storeys on top. At Eppeville (Somme), the legal protection of a spectacular Art Deco sugar factory is being contested by a developer. Nearby, in Amiens, the protected workshop of the Cosserat velvet manufacture, admired by Jules Verne, was seriously damaged by a conversion project which is now abandoned.

ACTIVITIES

The national industrial heritage organisation which represents TICCIH in France is CILAC *(Comité de liaison pour l'archéologie, l'étude et la mise en valeur du patrimoine industriel)* founded in 1978. It is an independent association with about 120 active members today, but it reaches a broader audience through its review, online newsletter *Info CILAC,* and website. It federates several local and regional industrial heritage associations. Also, it works in close collaboration with two other national organisations: *Rails & Histoire*, the leading association devoted to the history and heritage of railways, and the *FDMF*, the federation that brings together fans and owners of windmills and watermills.

The CILAC's review, *Patrimoine industriel*, is published twice a year. Except for printing and distribution costs, the production of the review is based entirely on voluntary work. Subscriptions cover the cost of one issue a year. Financial support has to be found for the second issue. Two of the six issues produced over the past three years have consequently focused on regional industrial heritage, with support from the local authorities concerned: the Franche-Comté region (No. 81) and the Isère department (No. 85).

Along with the special visits it arranges for its members, the CILAC also organises and participates in scientific conferences devoted to industrial heritage. Conferences in December 2022 and again in June 2024 focused on converting industrial sites and buildings to new uses. The latter event, co-organised with the University of Nantes, was particularly interested in former industrial buildings that had been recycled to accommodate universities. In December 2024, two study days were devoted to the role of industrial heritage in French localities designated as 'towns and territories of art and history' *(Villes et Pays d'Art et d'Histoire)*, a label awarded by the Ministry of Culture since 1985.

The Vallée cane sugar factory, constructed in 1871 at Saint-Pierre, La Réunion (photo by DAC La Réunion)

PUBLIC POLICIES AND ORGANISATIONS

Since 2004, the study and protection of heritage has been decentralised to France's regions, of which there are now 13 in mainland France, with five overseas territories. This means there are as many public policies regarding the industrial heritage, and the elected authorities in the regions show varying degrees of enthusiasm for our field. Certain regions have also invented new heritage labels. The Île-de-France region, for example, now has a special label for historic places of regional interest, which opens up funding for restoration work and has been attributed to several industrial and railway heritage sites.

There are no new UNESCO initiatives of industrial interest at the national level. France's participation in the European project on nineteenth-century large-arched iron bridges is

The printworks of the Démocrate de l'Aisne newspaper, Vervins, Aisne (photo by Les Amis du Démocrate)

underway, with hopes for inscription in 2030. At the national level, the last three years have seen about fifty industrial sites added to the country's total stock of about 46,000 historic monuments. Three of these deserve special mention here.

In 2023, six sites on La Réunion were protected, bearing witness to the island's cane-sugar industry, which dates back to the first half of the nineteenth century and remains an essential component of the island's economy today. In 2022, the Hottinguer coal mine, at Épinac (Saône-et-Loire) was 'classified' as a historic monument, the higher level of protection in France. This remarkable structure was constructed in 1876 to house a unique system for bringing coal to the surface by exhausting air from a 600-metre vertical tube. Finally, in 2022, a series of protections covered all the machines still in operation today to produce the weekly newspaper *Le Démocrate de l'Aisne*, which is still printed using traditional hot lead typesetting.

OUTSTANDING PROJECTS AND NOTABLE CASES

Two industrial heritage success stories have come to fruition during the last three years. At Cerdon, a nineteenth-century copperworks, now a property of the Ain department where it is situated, is fully preserved, complete with all its machinery, and has been sensitively adapted to receive visitors. The site is famous for supplying silk-throwing equipment, which is installed at Tomioka, Japan.

In Brittany, the Morlaix state tobacco factory, dating back to the 1730s, has now seen the completion of a programme of adaptive reuse undertaken since 2004, following the end of cigar production there. The site is now a new neighbourhood for the city, featuring a technological university, a cultural centre with a theatre and three cinemas, and a centre of scientific, technical, and industrial culture that interprets the history of tobacco production in Morlaix and elsewhere. The key attraction comprises the carefully restored snuff grinding mills, installed in 1870.

MUSEUMS AND EXHIBITIONS

Regarding industrial museums, three sites are worth mentioning here, not as new creations, but as places where several decades of existence have recently been celebrated. The best known is at Le Creusot-Montceau-les-Mines, where the first eco-museum was born, fifty years ago, conceptualised by Georges Henri Rivière, Hugues de Varine and Marcel Evrard. The industrial museum of the Corderie Vallois, located near Rouen, was first opened in 1994 after the site, complete with its late nineteenth-century machinery, had been saved by a local association. At Trélon, in the Nord department, a remarkably preserved glassworks founded in 1823 opened as a museum in 1983. The entire site, with its furnaces dating back to 1894 and 1925, was recently (and belatedly) inscribed as a historic monument.

Another long-established industrial museum, the Musée du Fer at Jarville, near Nancy, is devoted to the history of iron. First opened in 1966, it has recently reopened under the new name 'Le Féru des Sciences', supposedly more exciting for younger visitors.

TRAINING AND EDUCATION INITIATIVES

Several of France's twenty architectural schools offer courses on industrial buildings, their history, and their conversion. Additionally, several universities, notably those in Mulhouse, Chambéry, Arras, and Saint-Etienne, offer master's degrees in heritage studies, including industrial heritage. The Université Paris-I-Panthéon-Sorbonne participates in the Erasmus Mundus Joint Master's Programme in Techniques, Patrimoine, Territoires de l'Industrie (TPTI). The Belfort-Montbéliard University of Technology and the École Centrale at Nantes offer engineering students specific training in industrial heritage. At the École du Louvre and the Université Paris Cité, courses are provided on industrial and technical heritage for undergraduates, preparing them for competitive examinations to become curators in national or local heritage services. A post of state curator has recently been created, specially earmarked for the scientific and technical heritage.

SOCIAL AND COMMUNITY-BASED PROJECTS

In 2023, France was one of six European countries to inscribe the knowledge, craft and skills of handmade glass production. Two centres in France, at Meisenthal (Moselle) and Vannes-le-Chatel (Meurthe-et-Moselle), offer training and research possibilities in this domain. For 2024, the element inscribed on the list is exclusively French, namely the skills of Parisian zinc roofers. 80% of the capital's roofs are covered in zinc. France's national inventory of intangible heritage includes other craft and industrial production elements, such as boat building in Britanny and Normandy or glove production in the region of Millau.

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Delphine Berthélémy

Over the past two centuries, Luxembourg's economic trajectory has been closely linked to its industrial development, particularly in the fields of mining and steel production. By the early 20th century, the Grand Duchy had established itself as a major steel-producing nation, with the iron and steel industry remaining a pillar of the national economy for decades.

The structural crisis that struck the global steel industry in the 1970s had profound repercussions in Luxembourg. Mining activities were progressively phased out, and the country's last blast furnace ceased operation in Esch-Belval in 1997. This industrial decline marked a deep rupture—economically, socially, and symbolically. It left behind a complex legacy of abandoned sites, technological infrastructures, and communities searching for identity and meaning.

This turning point triggered a gradual shift in perception. Local reactions rooted in collective memory and regional identity began to foreground the cultural significance of the industrial landscape. The south of Luxembourg, historically shaped by the iron and steel sector, has become a focal point for initiatives aimed at recognising and preserving industrial heritage.

A milestone in this trajectory was reached in 1996, when Luxembourg's Chamber of Deputies unanimously passed a motion to preserve one of the remaining blast furnaces in Esch-Belval. This decision reflected a growing institutional commitment to safeguarding emblematic industrial sites. In 2002, the government launched the transformation of the Belval brownfield into a Cité des Sciences, integrating the University of Luxembourg, the National Archives, the Rockhal (music venue), and the newly established Centre national de la culture industrielle (CNCI).

The CNCI's mission is both ambitious and multifaceted: to document, safeguard, and activate Luxembourg's industrial heritage, not merely through architectural conservation, but by reimagining these spaces as places of knowledge, culture, and public engagement.

Although the CNCI was only officially established in 2020, following the signing of a framework agreement with the Ministry of Culture, its activities began to take shape in the cultural momentum of Esch2022 – European Capital of Culture. Between 2020 and 2022, the CNCI initiated a range of public programming and academic encounters, laying the groundwork for a national strategy on industrial heritage.

Today, as it presents its first institutional report in 2025, the CNCI affirms its strategic focus in three priority areas:

- Network-building: Establishing a cooperative ecosystem of stakeholders involved in the promotion, preservation, and interpretation of Luxembourg's industrial heritage;
- Site redevelopment: Supporting the requalification of industrial sites and brownfields through creative, sustainable, and participatory approaches;
- Public engagement: Fostering awareness, dialogue, and cultural mediation to bridge heritage and society.

View of Belval, featuring its iconic blast furnaces and part of the university campus (photo by author)

This trajectory reflects a broader European pattern in which deindustrialised regions are actively reclaiming their material and immaterial heritage, integrating it into new urban, cultural, and educational frameworks. Luxembourg's experience contributes a unique case study to this ongoing redefinition of industrial memory in the 21st century.

The CNCI aspires to become a key reference and research centre for industrial culture, with the long-term objective of establishing a public institution supported by a national and international cooperation network. Since 2024, the CNCI has been a member of TICCIH. It is also active within several European networks, including ERIH (host and organiser of the 2022 conference, participant in 2023) and Europa Nostra (Simone Beck, a member of the CNCI Board of Directors, has represented both the Grand Duchy and the CNCI on the Europa Nostra Council for three years).

In 2020, the CNCI had 17 historical partners. Since then, it has significantly expanded its collaborations with Luxembourg's cultural and educational institutions, established new partnerships with local municipalities and organisations involved in industrial heritage, and initiated cooperation with other industrial culture centres across Europe. Today, the CNCI's network includes more than 40 partners, both in Luxembourg and across the borders with France, Germany, and Belgium.

Workshop Mini Schmelz (photo by Romain Girtgen)

ACTIVITIES

One of the CNCI's key strategies for audience development lies in its ability to create engaging content that sparks public interest in industrial heritage. This takes various forms:

- Themed guided tours which explore the historical, architectural, and technical significance of industrial sites. One such example is In the Footsteps of the Minett — "Minett" being the local name for the red soil in southern Luxembourg, rich in iron ore but of lower quality than that of neighbouring Lorraine. Offered during the European Heritage Days, this guided tour of iconic sites across the *Terres Rouges* (Red Lands) helps visitors understand the workings and legacy of Luxembourg's mining and metallurgical industries.

- Hands-on workshops, offering immersive experiences that allow participants to explore traditional trades, understand historical skills, and connect with the lives of former workers and their families. For instance, the Torchons d'Usine workshop invited families to design and print tea towels inspired by those once used in factories. It provided a unique opportunity for parents to talk to their children, sometimes for the first time, about the professions of family members who worked in mines or steel plants.

- Community-driven events that highlight the rituals and traditions associated with industrial heritage, while shedding light on their social impact, past and present. One such example is La Grande Soirée Sainte-Barbe, held on December 4 at the Kulturfabrik in partnership with the venue. This intergenerational event is open to all, combining fun workshops (such as *Boarbelzockerséiss* and screen-printed tattoos), artistic performances (a procession created by Luxembourgish artist Trixi Weis), and festive moments (with the brass band Hunneg Strepp).

These activities aim to bring industrial heritage to life and make it accessible to the broadest possible audience, while highlighting its technical, social, and economic dimensions.

OUTSTANDING PROJECTS AND NOTABLE CASES

Between 2022 and 2025, several notable restoration, conversion, and adaptive reuse projects have been coordinated by INPA (Institut national pour le patrimoine architectural), ensuring a careful balance between preservation and contemporary use, while working collaboratively with all relevant stakeholders. The CNCI maintains close cooperation with INPA and provides ongoing support throughout these projects.

NeiSchmelz: Blast Furnaces and Forges in Dudelange

For over 120 years, steel production shaped the identity of Dudelange until the site was closed in 2005. It is now being redeveloped into a 36-hectare, CO_2-neutral eco-district. VEWA — the *Vestiaires* (changing rooms) and *Wagonnage* (wagon repair hall) from the steelmaking era — has been carefully reconstructed and restored over several months by dedicated volunteers and local associations. Today, these partners animate the space with creative activities and public events, turning it into a dynamic hub for artists, artisans, and the community. The VEWA is an inspiring example of successful rehabilitation driven largely by citizen involvement an has become an essential part of the new NeiSchmelz district, where the CNCI also plays an advisory role.

Schluechthaus in Hollerich

Located on a 2.5-hectare site, the former Luxembourg City slaughterhouse, which has been closed since 1997, has found new life as a hub for the local and international graffiti scene, a skate park, and temporary storage spaces. The city plans to transform the Schluechthaus into a socio-cultural centre. An example of 1930s industrial architecture, the site is partially listed as a national cultural heritage site. In 2023, the CNCI took part in the architectural competition jury for the site's transformation. In the meantime, a variety of cultural, sporting, and intergenerational events are being held there. This interim phase is being used to test and evaluate whether the proposed concepts align with community needs.

Rout Lëns in Esch-sur-Alzette

Rout Lëns is a former industrial site in Esch-sur-Alzette, previously home to the Arbed steelworks (now ArcelorMittal), abandoned in the 1970s. The area is being transformed into a sustainable new urban district. Five historic buildings have been preserved in consultation with the CNCI: the factory outlet, the turbine hall, the Möllerei gantry, the Blowers Hall,

and the signal box. One of these buildings will house the future National Sports Museum, set to open in 2028. The museum will showcase the rich history of sport in Luxembourg and beyond.

ONGOING CHALLENGES

One key challenge is the *Gebläsehalle* in Belval (also known as the Blowers Hall or *Halle des soufflantes* in French). This significant industrial heritage building was nominated by the CNCI and preselected among the 14 most endangered heritage sites in Europe by Europa Nostra. Unfortunately, it did not make it to the final list of the '7 Most Endangered'.

TRAINING AND EDUCATION INITIATIVES

The CNCI also develops educational and entertaining programmes for young people, such as *Mini Schmelz* (literally translated as "small foundry" or "mini factory") — a summer initiative designed for children aged 8 to 12. The annual summer school enriches Luxembourg's youth programming while introducing children to the country's mining and industrial history in a playful and hands-on manner.

The Minett Mash Up podcast further enhances outreach by focusing on culture and industrial heritage. Throughout the year, CNCI and its partners — including the Minett UNESCO Biosphere and the MUAR (*Musée vun der Aarbecht*, or Museum of Work) — utilised the podcast to explore and present key industrial heritage sites across southern Luxembourg and beyond, into neighbouring Belgium, Germany, and France. Since its launch in October 2021, *Minett Mash Up* has continued to grow. It has now reached over 3,000 listeners across major platforms (Spotify, Deezer, Apple Podcasts, Google Podcasts, YouTube) — representing approximately 0.5% of Luxembourg's population. The podcast attracts a notably young audience, with 72% of listeners under the age of 34, and has an international reach spanning 16 countries, with 68% of listeners based in Luxembourg. Episodes are available in Luxembourgish, German, and French.

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SLOVAKIA

Two granaries, Jarovce (photo by Design Factory)

Eva Kráľová & Viera Krešáková

Several sites in Slovakia—such as the mint in Kremnica, the copperworks in Banská Bystrica, and mining facilities in Banská Štiavnica—played a pioneering role in Europe's technical and industrial development.

A remarkable feature of Slovakia's industrial heritage has been the effective use of local resources and the environmental sustainability of both production and the surrounding environment (e.g., the use of water as an energy source, regeneration of forests after logging, waste recycling, etc.).

Over the past decade, there has been a noticeable shift in public interest toward the preservation and active use of the unused capacity of former industrial activities and processes. The initiators of this movement include former implementation professionals, academic experts, enthusiasts of technological history, and advocates of environmental sustainability. Under growing public pressure, public policies are gradually adapting, and private investors (owners and developers) are finally, albeit slowly, beginning to participate.

The problem of unused heritage following the end of industrial production lies in its volume, high territorial density, and especially the excessive capacity of the released areas and structures. These often exceed the current needs of society in their locations. Investor interest is primarily focused on available space for residential development, frequently overlooking the social, environmental, and cultural value that industrial heritage offers for creating a comprehensive living environment. Environmental contamination—particularly in the chemical and heavy industry sectors—remains a significant obstacle. In these cases, state support is essential.

ACTIVITIES

- TICCIH - no organisational representation in Slovakia.
- Groups of activists for the exploration, presentation, and preservation of industrial heritage:
    - Civic associations, non-profit organisations, clubs, volunteers, eg.: design factory, *Klub na ochranu technických pamiatok* (Club for the Protection of Technical Monuments), Čierne diery, *Coburgovci na Slovensku* (Coburgs in Slovakia), Za! Medený Hámor, Althandel Nová Baňa, Banskoštiavnicko-hodrušský banský spolok, Herrengrund Špania Dolina, NPO Barbora, Spolok vodný mlyn Kolárovo, Geopark Malé Karpaty, Čiernohronská železnica, *Klub priateľov železníc Trnavy a okolia* (Railway Friends Club), and many others.
    - Museums focused on technical and industrial heritage: state, regional, municipal, corporate and private initiatives.

PUBLIC POLICIES AND ORGANISATIONS

Environmental Policy Updates and Industrial Heritage

Slovakia's 2021–2027 Recovery Program was amended in 2023–2024 to enhance environmental performance—reducing carbon emissions, conserving energy and materials, and promoting waste reduction and recycling. These updates support circular economy principles, including the adaptive reuse of inefficient or non-functional industrial heritage sites. Successful implementation, however, depends on targeted education for the public, government, and businesses.

Policy Measures Supporting Industrial Heritage Transformation

Following the amendments to the Recovery Program, several measures were adopted, including:

Update of the State Aid Scheme (2024)

Adjusted to support the renewal and repurposing of non-functional industrial heritage through funding from the Just Transition Fund.

Key objectives:

- Address social, economic, environmental, and employment impacts of the green transition.
- Support the EU's 2030 climate goals and the 2050 climate-neutral economy target.
- Enable the revitalisation and adaptive reuse of industrial sites.

Brownfield Mapping Initiative

In February 2025, the Ministry of Investment, Regional Development and Informatisation launched a dedicated call to map and inventory brownfields across Slovakia, aiming to support the reuse of industrial heritage. The initiative is currently underway.

Targeted calls for the regeneration and adaptive reuse of brownfield sites were launched with financial support in the Trenčín Region (towns of Partizánske and Prievidza), Banská Bystrica Region (Handlová Park) and Košice Region.

These initiatives aim to transform underused industrial areas into functional spaces aligned with regional development and sustainability goals.

Railway Steam Heritage Recognised

In January 2025, railway steam heritage was added to the List of Intangible Cultural Heritage of the Slovak Republic, creating opportunities for public funding to support related preservation and promotional activities.

ALTERATIONS TO LEGAL PROTECTION

- No fundamental legal changes regarding the protection of industrial heritage.

Visualisation of the reconstruction of the Coburg railway station in Pohorelská Maša. Design by Kupec architekti (photo by Banskobystrický region)

Industrial walk 2025: Around Apollka (photo by Design Factory)

- World Heritage Sites in Slovakia that include elements of industrial heritage—such as Banská Štiavnica and the technical monuments in its vicinity—are governed by a dedicated protection statute that is both functional and oriented toward long-term preservation and active use.

- The state purchased the river port areas in Bratislava and Komárno from private owners to preserve their function, cultural and social value. Several original buildings and the pier edges in Bratislava's Winter Port have been designated as national cultural heritage, while in Komárno, the designation of selected buildings as cultural heritage is currently being prepared.

- One of the four buildings that form part of the significant cultural monument Medený Hámor in Banská Bystrica was sold to a private owner, who began implementing his project in early 2025. The remaining three buildings are owned by the city of Banská Bystrica.

OUTSTANDING PROJECTS AND NOTABLE CASES

- "Two granaries," Jarovce – conversion and revitalisation of former storage buildings for cultural, residential and social purposes.

- Conversion and revitalisation of the former distillery complex Stará likérka in Liptovský Mikuláš into a multifunctional commercial, cultural and social complex in the city centre.

- Revitalisation and conversion of the Coburg industrial heritage in Slovakia: Park Pohorelská Maša.

- *Pradiareň* (Spinning mill), Kežmarok – conversion and revitalisation of a former flax processing factory for alternative production purposes (alcohol production), complemented by public-facing commercial spaces (café and restaurant, company store), and a museum.

- Conservation of the foundations of Potter's fire engine; opening of a temporary exhibition at the site where the foundations of the fire engine room were discovered; creation of artistic graphics depicting the earliest historical illustrations of fire engines in Slovakia.

- Demolition of architecturally and structurally valuable buildings within the historic MERINA textile factory complex in Trenčín, carried out to make way for the construction of a standardised Kaufland retail hall.

TRAINING AND EDUCATION INITIATIVES

Education at Universities

Faculty of Architecture and Design of the Slovak University of Technology (FAD STU) in Bratislava - topics related to

the research, protection, and sustainable use of industrial heritage are regularly integrated into the curriculum. These themes are addressed through semester assignments, diploma projects, dissertation research, and qualification (habilitation) theses.

The subject of industrial heritage and its preservation is also explored in research and education at other Slovak universities: Comenius University in Bratislava, Technical University in Košice, University of Žilina, Matej Bel University in Banská Bystrica.

Projects

Railway heritage for engaging the youth generation Rail 4V4+V 2023

International research and education project funded by the Visegrad Fund, 2023 – 2024.

Slovak University of Technology in Bratislava (STU) and partners from the Czech Republic, Hungary, Poland, and Serbia.

V4 Industrial Heritage project

International research and education project funded by the Visegrad Fund, 2024–2025.

Slovak University of Technology in Bratislava (STU), Bratislava and OZ design factory, partners from the Czech Republic and Hungary.

INTERREG Slovakia-Austria

Common Development of the Model Regions Geopark Malé Karpaty, Biosphärenpark Wienerwald, Naturpark Rosalia-Kogelberg, 2024-2026.

Partners: Barbora (NPO) Slovakia, Biosphärenpark Wienerwald, Wirtschaftsagentur Burgenland, GmbH – Austria.

Horizon Europe

ARAGORN - Achieving Remediation And Governing Restoration of Contaminated Soils Now - remediation and restoration of contaminated soil.

17 partners from 12 EU countries, also the Slovak University of Technology in Bratislava (STU).

Participation of the former mine Budúcnosť in Pezinok (Slovakia) in the research.

SOCIAL AND COMMUNITY-BASED PROJECTS

Metropolitan Institute of Bratislava - Mapping of brownfields in Bratislava

results: 113 brownfield sites in Bratislava covering an area of 580 hectares. Nearly half of this area is located within the inner city or its broader central zone. In its strategic documents, the City of Bratislava recognises the transformation of brownfields as a key step toward creating a high-quality urban environment.

Industrial walk 2025: Around Apollka

To commemorate the 130th anniversary of the establishment of the Apollo refinery in Bratislava, a guided walk was organised around the site of the former refinery, known locally as Apollka. The event was held in cooperation with Slovnaft, a member of the MOL Group, which is the historical successor to the Apollo refinery.

Industrial Day VII (regular festival)

Organiser: Design Factory Civic Association

Date: November 13–14, 2025

Specialised events held during the festival:

- International Exhibition: Industrial Heritage SK – HU – CZ
- Exhibition of architectural projects focused on the conversion of industrial sites in Slovakia (2022 and 2025)
- I.CON.A - Competition for the Best Conversion of Industrial Architecture in Slovakia
- Public panel discussion on the current state of industrial heritage conversions in Slovakia
- Industrial walk – Guided tour of selected industrial heritage sites in Bratislava

(Ne)zabudnutý industriál / (Un)forgotten industrial heritage

An event held as part of the European Museums and Galleries Night 2025 in Banská Bystrica.

- Presentation of four active industrial heritage sites in the Banská Bystrica region
- Guided tour of Banská Bystrica focused on its industrial heritage

Organizers:

Civic initiative (Ne)zabudnutý pivovar in cooperation with the Faculty of Economics, Matej Bel University in Banská Bystrica.

Presentation of 4 active industrial monuments in the Banská Bystrica region + guided tour of Banská Bystrica focusing on its industrial heritage

Organiser: civic initiative (Un)forgotten Brewery+Faculty of Economics, University of Matej Bel in Banská Bystrica

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AUTHORS

Eva Kráľová, Assoc. Prof. has worked for many years as a lecturer and researcher at the Slovak University of Technology in Bratislava. She has led several national and international research projects, focusing on the protection, restoration, and sustainable use of architectural heritage. Her work places particular emphasis on industrial heritage and its integration into contemporary urban and cultural contexts.

Viera Krešáková is an Assistant Professor at the Department of Professional Language Communication, Faculty of Economics, Matej Bel University in Banská Bystrica, specialising in teaching foreign languages for specific purposes. In recent years, she has expanded her academic interests to include research and public presentation of industrial heritage sites in Slovakia and Germany.

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SWITZERLAND

Toni Häfliger

The group of TICCIH members in Switzerland is small. Currently, the group comprises only six people, some of whom live abroad. Efforts to increase membership have not been particularly successful to date. One reason for this could be that Switzerland has various national and local organisations, specialist bodies, and institutes that deal with industrial heritage and are committed to preserving relevant monuments. Particularly noteworthy here is the Swiss Association for Industrial Heritage and Technology History (VINTES), which has been in existence for several years and links relevant associations, foundations, and public collections, including museums. The association is involved in cultural policy and supports its members in preserving and safeguarding the heritage of the Swiss industrial age.

Against this background, there is no need for TICCIH Switzerland to exert greater influence on cultural policy or current projects, except in unique cases. However, TICCIH International is very valuable and important for international networking and the resulting transfer of knowledge.

ACTIVITIES

Of particular interest to TICCIH Switzerland is the international symposium on railway heritage conservation, held in 2022. This project was managed by TICCIH members Toni Häfliger, former head of SBB Monument Preservation, and Dr Bärbel Schallow-Gröne, research assistant at SBB Monument Preservation. The symposium was organised on behalf of the Swiss Federal Railways (SBB) Department of Heritage Preservation and the Chair of Construction Heritage and Heritage Preservation at the Swiss Federal Institute of Technology (ETH) in Zurich. The conference provided a broad overview, featuring presentations and digital contributions on findings, positions, and methods in railway heritage conservation. The international, professional exchange served to give an overview of key topics and current discussions in railway heritage conservation, particularly in the areas of inventorying, practical heritage conservation (restoration, transformation, and conversion), and world heritage, as a basis for more in-depth studies. The conference has now been documented in a detailed publica-

The book Eisenbahndenkmalpflege brings contributions from around 50 authors from around the world (photo by author)

Representatives of world heritage railways (photo by author)

Opening of the Railway Heritage Preservation Conference in 2022 (photo by author)

View of Zürich's central railway station (photo by author)

tion. This was published in December 2024 by Verlag Schwabe, Basel-Berlin [see TICCIH Bulletin #108, 2025]. It comprises around 50 texts on 460 pages and was coordinated by Toni Häfliger and Dr Bärbel Schallow-Gröne. The presentations and digital contributions from the 2022 conference are available on the Railway Heritage website.

Following the conference, an international working group was formed on the initiative of the SBB's specialist department for monument preservation, in collaboration with the ETHZ chair. It is currently discussing the theoretical and methodological foundations for systematic railway monument preservation tailored to the existing stock. The results will be coordinated with a wider group of experts and published in a position paper.

Railways in operation are large-scale technical – or so-called socio-technical – systems that are constantly exposed to influences from society and politics, as well as innovations in technology, standardisation and operations. Changes in

Workshop SBB Zürich (photo by author)

the system are a constant feature of heavily used facilities. Accordingly, buildings and facilities are under pressure to adapt. These influences drive the system, but in turn are also a driver of development. These circumstances pose a particular challenge for the practical preservation of railway monuments. How can important concerns regarding the preservation of railway monuments be safeguarded while at the same time ensuring high-quality development of the system in line with requirements?

At the end of January 2025, the aforementioned chair at ETH Zurich organised an international symposium on the topic of *The Transformative Value of the Built Environment*. This was based on the thesis that transformability forms the basis for sustainable urban development. The topic is of considerable interest to industrial culture, particularly in the preservation of railway monuments. Against this backdrop, new possibilities for conversion, further construction and reuse are increasingly being discussed. This raises new questions that need to be explored. Here, too, the SBB and the undersigned have contributed to the content. It remains to be seen whether and to what extent the findings will be incorporated into the work on the aforementioned position paper on methodology.

AUTHOR

Toni Häfliger, TICCIH Switzerland

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AUSTRIA

DI Silvia Mariani, Dr Roland Tusch, DI Hubert Schnedl, Markus Landerer, DI Martin Uhlig, Dr Günter Dinhobl, DI Richard Dieckmann

Austria's industrial heritage has a wide range of industrial monuments. It includes one dedicated industrial UNESCO World Heritage Site, the *Semmering Railway*, while industrial heritage is part of all other World Heritage sites in Austria. Of high importance is the UNESCO World Heritage Site *Hallstatt-Dachstein/Salzkammergut Cultural Landscape*, which features salt mining that has been exploited since the 2nd millennium BC and remains in use today. In 2024, the Monuments Register contains slightly more than 39,000 listed properties, nearly 6% of which are classified as industrial heritage (see table below).

In addition to the listed industrial heritage, numerous industrial monuments are not protected by national or international laws. These buildings still face an uncertain future, particularly in or near emerging urban areas.

ACTIVITIES

The share of classified industrial heritage remains slightly lower, decreasing from 6.0% in 2021 to 5.8% in 2024. This is a sign of the difficult conditions of industrial heritage in Austria today. Digitally reconstructed buildings are used for visual documentation of the past, but they can also serve as

A view into the main hall of Rotunde in Vienna, Digital Reconstruction, 2023 (photo by Hubert Schnedl)

table: Austria - classified industrial heritage

	number of entries* in database 'protection of monuments' (ÖBDA)				
	2012	*2015*	*2018*	2021	**2024**
energy, supply	*152*	*154*	*160*	*163*	**171**
hydraulic engineering, navigation	*308*	*310*	*311*	*306*	**306**
machines	*3*	*3*	*4*	*5*	**5**
mining, metallurgy	*163*	*171*	*217*	*202*	**203**
production - building materials, glass	*44*	*47*	*49*	*54*	**58**
production - food industry	*176*	*183*	*185*	*145*	**141**
production - general	*74*	*80*	*78*	*70*	**74**
production - metal	*140*	*145*	*149*	*117*	**119**
production - paper, printing	*10*	*10*	*11*	*9*	**9**
production - textile, leather	*60*	*61*	*62*	*47*	**49**
trade	*43*	*49*	*51*	*35*	**36**
traffic - aerial cableway	*13*	*15*	*16*	*17*	**16**
traffic - railway	*510*	*541*	*512*	*545*	**564**
traffic - road	*554*	*561*	*577*	*557*	**502**
traffic - tram & underground railway	*49*	*49*	*50*	*52*	**51**
classified Industrial Heritage - Overall	***2 299***	***2 379***	***2 432***	***2 324***	**2 304**

source: Österreichisches Bundesdenkmalamt (ÖBDA) 7/2012, 4/2015; 4/2022, **4/2025**

**: at one database entry there might be several classified monuments*

The station building of Mixnitz-Bärenschützklamm, 2024 (photo by Günter Dinhobl)

an interactive environment within the context of metaverse strategies. Currently, a virtual exhibition prototype takes up the Rotunde building, the central building of the Vienna World Exhibition of 1873. It was the largest domed building in the world at that time [see TICCIH Bulletin #104B, 2024]. A fire in 1937 destroyed it.

PUBLIC POLICIES AND ORGANISATIONS

Conservation and preservation cannot be ensured solely by the limited instruments of federal monument protection. The relatively new approach of *Baukultur* (see Davos Declaration) requires a comprehensive building culture that involves the cooperation of various administrative institutions and other stakeholders. The recent anchoring of Baukultur in spring 2025 by a Law Amendment is an essential step towards its development in Austria.

ALTERATIONS TO LEGAL PROTECTION

In 2024, a new Monument Protection Act came into force following extensive discussions in the past. During the parliamentary review procedure, more than 100 statements were submitted. TICCIH Austria submitted a statement with 53 recommendations, but even the most essential ones were not implemented. The new act's main issues concern, e.g., the extension of the obligation to maintain protected monuments and special liability provisions. A new criterion of "economically unreasonable" (!) for monument owners makes this act a step backwards.

Between 2022 and 2024, no new World Heritage site in Austria was added; however, the evaluation of the Großglockner High Alpine Road is ongoing and has not yet been completed. Austria's tentative World Heritage list includes one more site of industrial heritage: the "Iron Trail with Erzberg and the old town of Steyr."

OUTSTANDING PROJECTS AND NOTABLE CASES

Railway station building of Mixnitz-Bärenschützklamm

The Mixnitz-Bärenschützklamm station building was built in 1844. However, due to a track rearrangement, the demolition of this building is planned. The responsible authorities negate cultural and social aspects, and around 1,000 people have signed a petition for its preservation. The building has been shortlisted by the Europa Nostra 7 Most Endangered Programme at the beginning of 2025.

Bundessammlung – federal collection of historic railway vehicles

The Republic of Austria owns a collection of approximately 150 historical railway vehicles. The so-called *Bundessammlung* survived two world wars and was systematically expanded until recent times. Due to the poor condition of numerous vehicles, even parliamentary discussions were held. In a resolution, the National Council spoke out in favour of historic rail vehicles.

Examples of the Austrian Bundessammlung – a collection of historic railway vehicles in different conditions and cars of the Railway Museum Strasshof, 2010 (photo by Günter Dinhobl)

Cog railway Achenseebahn

Following the bankruptcy, the Achenseebahn [see TICCIH Bulletin #89, 2020] resumed operations in 2022. Since 2022, around 70,000 people per year have been travelling, and the Achenseebahn also attracts young people, e.g., Ms. Lechner was examined as the youngest steam locomotive driver in Austria. TICCIH Austria recommended starting the process of World Heritage inscription, but neither the state of Tyrol nor the federal government has begun this process.

Steel grider bridge at Mautern

The Mautern Bridge is 374 meters long and consists of five spans. Three bridge spans, dating back to 1896, remain in their original condition. The bridge is a listed monument and part of the UNESCO World Heritage Wachau Cultural Landscape. After an agreement for restoration, the regional government suddenly stated that a widening of the road was "necessary", which would destroy the original supporting structure. A renovation variant that would have minimised the loss of original substance and financial outlay was rejected by the bridge maintainer. The future of the Mautern bridge remains uncertain.

Neutor Salzburg

The *Neutor* in the city of Salzburg is a UNESCO World Heritage Site. It was opened in 1766 with magnificent portals and obelisks carved directly out of the rock. A project for a branching tunnel to access the caverns planned behind the Festival Theatre complex will compromise the unique quality of this early tunnel structure. This technical monument is still undervalued, likely due to the numerous other listed buildings in the World Heritage city zone.

Hammerbrotwerke Schwechat

The Hammerbrotwerke in Schwechat, Lower Austria, were built between 1908 and 1909 according to the plans of Otto Wagner, a renowned architect. It was listed in 1994 due to its significance in terms of technical, economic and architectural history. The factory complex is privately owned, and new uses could not yet be realised. The buildings have been damaged by fires, which is why urgent safety measures had to be carried out.

Ybbstal Bergstrecke, Feistritztalbahn

There are ongoing discussions about abandoning railway operations in favour of bike paths on the railway tracks, thus questioning the continued preservation of the railways for decades. This is the case for the mountainous section of the Ybbstalbahn (Lower Austria), which has been operated and restored as a museum railway since 1990 by private associations, and the Feistritztalbahn in Styria.

Burnt out building of Hammerbrotwerke Schwechat, 2024 (photo by Richard Dieckmann)

Dieselzentrale Schwechat

The 1906 diesel power station is a rare example of a diesel-powered power plant used for the electricity supply of the Schwechat Brewery in Lower Austria. This privately owned industrial monument will be used for events.

Industrial Heritage In Operation

A general problem with listed industrial heritage in use is that it must comply with current regulations and standards; an example is the listed vessel "Gisela" at the inland lake Traunsee. It was built in 1871 for a capacity of 300 people and is one of the oldest paddle steamers. Now, a bow thruster is required corresponding to the Austrian authority, which argues with EU regulation ES-TRIN (intentionally for international waterways); otherwise, "Gisela" will be rated as "traditional ship" where only six people onboard are allowed, which, of course, is not acceptable for cost-covering public operation.

MUSEUMS AND EXHIBITIONS

Eisenerz is renowned for its rich industrial heritage, particularly in iron ore mining. One tannery, which supplied the miners and workshops, dates back to 1548 and has housed the "Eisenerz Gerberei Museum" for several years.

A guild of builders has existed in the village of Au in Bregenzerwald, Vorarlberg, since 1657. The guild constructed approximately 800 Baroque buildings in western Austria, eastern Switzerland, southern Germany, and eastern France (Alsace). In 2022, the "Barockbaumeistermuseum Au im Bregenzerwald", in a listed building, was opened.

"Backhausen & Söhne" was founded in 1849 in Hoheneich, Lower Austria, and produced upholstery and decorative fabrics based on designs by outstanding Jugendstil and Wiener Werkstätte artists until 2023. In 2022, the Backhausen Archive became a listed entity, comprising around 11,000 objects, mostly textile designs and fabric samples. In 2023, it was permanently loaned to the "Leopold Museum" in Vienna.

TRAINING AND EDUCATION INITIATIVES

There is no explicit study programme on industrial heritage in Austria. At Vienna University of Technology, the Institute of Art History, Building Archaeology and Restoration organises seminars, courses and lectures on building conservation, including industrial heritage issues. The following research units deal with heritage issues: History of Architecture and Building Archeology and Heritage Conservation and Building within Existing Fabric.

At Graz University of Technology, the Institute of Design in Existing Structure and Architectural Heritage Protection carries out research and offers teaching in the fields of documentation of cultural heritage, building research, damage analysis and monument conservation.

The Institute of Architectural Theory and History of Building at the University of Innsbruck offers courses on architectural history, building surveys, construction history and the conservation of historical buildings and monuments.

The Danube University at Krems hosts the Research Lab Sustainable Cultural Heritage and a Centre for Cultural Property Protection. Courses in building refurbishment and re-use are included in the Architecture Studies curricula.

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HUNGARY

Gyárkert Factory'ard CulturePark in Veszprém, 2023 (photo by Csaba Szalai)

Dr. István Gergely Szűts

The issue of Hungary's industrial heritage has primarily been discussed in recent decades in terms of its real estate usability, or, in fortunate cases, as part of the cultural (leisure) repurposing of former industrial zones. After 1990, industrial areas in Hungary lost their original function and, as evolving (growing) settlements developed, these areas often shifted from peripheral zones to central locations, changing their role and value. In recent years, several initiatives and repurposing projects have been undertaken, highlighting the value of industrial heritage and bringing decaying structures to the attention of local communities.

Unfortunately, negative examples also exist. Particularly in central, well-located urban areas, industrial sites and the buildings within them face challenges. A common solution is the development of new city districts on former industrial areas, where, in worst-case scenarios, even protected buildings may be demolished, as happened at the Közvágóhíd in Budapest. In better cases, at least a few heritage buildings are preserved. A full rehabilitation has not occurred in the past three years.

ACTIVITIES

The topic of industrial heritage has gained more prominence in recent years, thanks in part to the Veszprém-Balaton region, which was designated as the European Capital of Culture in 2023. Several events and investments focused on the cultural reuse of industrial sites, such as the transformation of a former furniture factory area in downtown Veszprém into a community space. This space, now known as Gyárkert (Factory'ard CulturePark), retains only its name as a reference to the original site, but has evolved into a well-known open-air concert and leisure venue. Another successful initiative is the audiovisual festival held at the former Inota power plant since 2023. Additionally, cultural programs are organised at the Ajka Krypton Factory, built in 1937 as the world's first krypton gas factory. The issue of industrial heritage was significant in Veszprém's European Capital of Culture project, partly due to its 40-year partnership with Bottrop in the Ruhr region, which played an active role in Essen's 2010 European Capital of Culture programs.

Beyond large-scale cultural repurposing, committed civil organisations, alongside TICCIH Hungary, continue to advocate for the preservation of local industrial heritage. Successful examples can be found in cities such as Győr, Ózd, Miskolc, and Budapest. City tours focusing on industrial heritage have also gained popularity, attracting both locals and tourists. Several of these tours take place in Budapest, allowing visitors to explore sites like the *Kelenföldi Erőmű* (Kelenföld Power Plant) and the *Csepel Művek* (Csepel Works).

MUSEUMS AND EXHIBITIONS

The most important Hungarian institution for preserving and showcasing industrial heritage is the Hungarian Museum of Science, Technology, and Transport, which maintains 24

Inota Erőmű Power Plant, 2023 (photo by Csaba Szalai)

locations displaying Hungarian technological and industrial artefacts. In 2022, they organised the National Industrial Heritage Preservation Conference at the Diesel Hall of the North Budapest Vehicle Repair Centre, followed by another conference in 2024 at the Székesfehérvár Aluminium Industry Museum. In addition to this institution, smaller collections operate in various cities, emphasising industrial heritage as a local cultural and identity-defining value.

A significant recent international program was the Visegrad Fund project, which facilitated online conferences for Hungarian, Polish, Czech, and Slovak experts to discuss the preservation of industrial heritage.

PUBLICATIONS

Over the past three years, Hungarian academic journals have devoted special issues to the subject. In 2023, Octogon architecture and design magazine covered industrial heritage, while MúzeumCafé museum journal did so in 2024. The most significant publication in recent years has been Haba Péter's book, *Hungarian Industrial Architecture 1945-1970*, published in Budapest in 2019.

TRAINING AND EDUCATION INITIATIVES

Industrial heritage and preservation studies are taught and researched at several Hungarian universities, with standout programs at the Budapest University of Technology and Economics (BME) and Óbuda University. In 2024, BME hosted a professional conference titled *Industrial Heritage of the Socialist Era – Values and Utilisation*. Unfortunately, the specialised industrial heritage training program at the University of Miskolc has been discontinued.

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UKRAINE

Kresivskyi flooded quarry member of industrial pilot projects 'The Quarry Revitalisation' in Kryvyi Rih (photo by Viktoriia Patsiuk)

Viktoriia Patsiuk & Volodymyr Kazakov

Ukraine has continued its efforts to preserve, document, and re-evaluate its industrial heritage, despite the ongoing war with Russia and the extensive destruction caused by the Russian invasion. The ongoing full-scale Russian invasion has profoundly impacted Ukraine's industrial heritage. Many sites have been severely damaged or destroyed. This destruction often extends to sites of historical industrial significance, as these areas are frequently strategic targets.

Despite the extraordinary challenges posed by the ongoing war and widespread destruction, the Ukrainian industrial heritage community continues to demonstrate remarkable resilience. The war has forced rapid adaptation and innovation in heritage protection. However, it has also fostered new forms of solidarity within the international heritage community and prompted a critical rethinking of the profound role of industrial heritage in shaping postwar identity and sustainable development.

Leading international organisations focused on industrial heritage preservation, including ICOMOS, TICCIH, ERIH, and Europa Nostra, have expressed full support and solidarity with the Ukrainian people. In March 2022, the Board of Europa Nostra declared the rich and diverse heritage in Ukraine to be the most endangered heritage in all of Europe.

Some notable events in 2023 include the ALIPH Forum 2023, the EU Ukraine Consortium known as "Cultural Heritage Recovery for Ukraine's Benefit and Support – Building Capacities for Rescue, Protection and Resilience" (CHERUBS), and the UNESCO International Coordination Meeting for Emergency Response for Culture in Ukraine (since 2022).

ACTIVITIES

While a national TICCIH group has not yet been established, Ukraine is represented in the organisation by individual members. Representation in the European Route of Industrial Heritage (ERIH) is more active. Currently, 19 Ukrainian sites are featured on the ERIH locations map, including two in the occupied Donetsk region. Additionally, the city of Kryvyi Rih has traditionally represented Ukraine at the ERIH dance event, "Work It Out." It has consistently placed third at this event for three consecutive years, from 2022 to 2024.

PUBLIC POLICIES AND ORGANISATIONS

Ukrainian researchers, heritage conservation activists, and museum professionals are actively engaged in emergency heritage protection. This critically important work includes comprehensive documentation of war-induced destruction of industrial sites through the preservation of photo archives, digitisation of artefacts, photo-documentation and mapping of the scale of damage and destruction, and collection of personal testimonies. Significant losses of industrial heritage sites have occurred in the cities of Kryvyi Rih, Zaporizhzhia, Nova Kakhovka, Mariupol, Bakhmut, Soledar, Kherson, Dnipro, Pokrovsk, Myrnohrad, Nikopol, Vuhledar, Avdiivka, and many others.

OUTSTANDING PROJECTS AND NOTABLE CASES

The Un-archiving Post-industry project was a winner of the European Heritage Awards/Europa Nostra Awards 2023 in the category of Citizens' Engagement and Awareness-raising.

Un-Archiving Post-Industry is a collaborative initiative carried out by the Centre for Urban History (Ukraine) and the University of St Andrews (Scotland), in partnership with the Mariupol Local History Museum, the Pokrovsk Historical Museum, and the Donetsk Regional Museum of Local History. The project was supported by the House of Europe and the Global Challenges Research Fund.

Its core objective was the digital preservation of visual heritage from the Donbas region. As part of the initiative, approximately 30.000 photographic negatives and 82 films were digitised. These materials included press photography from the 1940s to the 1990s, archival collections from industrial enterprises, family photo albums, home videos, and amateur films.

The project also fostered multi-layered dialogue between generations, through interviews with former industrial workers, engineers, photographers, and amateur documentarians; between regions traditionally perceived as industrial and non-industrial; and among museum professionals, private archive holders, as well as Ukrainian and international scholars, artists, and activists.

Launched in the context of Russia's ongoing war against Ukraine, the initiative aimed to safeguard unique testimonies of community life in the Donbas. It sought to challenge the instrumentalisation of history, resist the manipulation of collective memory, and counter the spread of disinformation.

Projects aimed at the adaptive reuse and revival of industrial zones and spaces are being initiated. Notably, two Ukrainian industrial pilot projects, "The Quarry Revitalisation in Kryvyi Rih" and "Industrial complex of Soltworks, Drohobych," have become participants in CPD Ukraine – Continuous Professional Development Program on Sustainable Development with Heritage – UREHERIT. This project was initiated by the Architects' Association of Lithuania and Architects Sweden, co-financed by the European Union's Creative Europe program.

In Lviv, which has become a hub for internally displaced persons, discussions continue regarding the reuse of industrial areas for cultural and creative industries.

Postindustrial space '!FESTrepublic' in Lviv (photo by Viktoriia Patsiuk)

The 4th All-Ukrainian Scientific Conference, "Industrial Heritage in Culture and Landscape," is planned to be held at Lviv National University in the spring of 2026.

MUSEUMS AND EXHIBITIONS

The full-scale invasion that began in February 2022 has slowed various initiatives aimed at preserving industrial heritage and fostering an industrial culture in Ukraine's industrial regions. Specifically, the "Industrial Fest" festival in Kryvyi Rih, which had been held since 2017 following the model of Germany's ExtraSchicht and Poland's Industriada, was cancelled.

Industrial museums continue to operate in non-occupied cities such as Kharkiv, Zaporizhzhia, Kryvyi Rih, Dnipro, Mykolaiv, and Drohobych. Some of the most valuable exhibits have been relocated to safer conditions. The process of decommunization and derussification of industrial museum collections is also ongoing.

SOCIAL AND COMMUNITY-BASED PROJECTS

Despite the war, revitalised industrial heritage sites in Ukraine continue their activities. While locations in Kyiv (Art-Zavod Platforma) and Kharkiv (Art-Zavod Mekhanika) have scaled down their operations, sites located in western Ukraine (!FESTrepublic and JamFactory in Lviv, Adrenalin City in Lutsk, PROMPRYLAD.UA in Ivano-Frankivsk) remain actively engaged and host numerous cultural, educational, outreach, and community events.

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SLOVENIA

Dr. Sonja Ifko & Irena Marusic

The Slovenian National Board of TICCIH is organized within the Slovenian Working Party for Industrial Heritage/*Slovenska delovna skupina za varstvo industrijske dediščine* (SLO-IND-DED). Since its establishment in 2016, it has closely cooperated with ICOMOS Slovenia and other professional organisations in the field of cultural heritage. You can follow our activities on Facebook.

Between 2023 and 2025, the industrial heritage sector is expected to continue gaining recognition and, consequently, experience increased protection. There is a positive trend in the inscription of industrial heritage sites into the national register of intangible heritage. Several projects at various levels—from museum exhibitions to publications and the presentation of industrial and technical heritage sites—have been introduced and made accessible to the public.

In addition to the Slovenian Working Party for Industrial Heritage, there is also a professional museum association dedicated to industrial heritage: the Section for Technical Heritage within the Slovenian Museum Association. Established in 2001, this section includes representatives from around 20 national, regional, and private museums. The curators from the Technical Museum of Slovenia play a leading role in its activities.

OUTSTANDING PROJECTS AND NOTABLE CASES

Čermak-Špirek Furnace at the Idrija Hg Smelting Plant

The Idrija Mercury Heritage Management Centre has restored and reinstalled the unique furnace, once the most advanced mercury smelting technology in the world. Designed by Josip Čermak and Vincenc Špirek, the furnace was installed in 1886 and operated for 86 years. This is the only preserved furnace of its kind worldwide and a key feature of the UNESCO-listed "Heritage of Mercury. Almadén and Idrija." Since 2024, it includes a new exhibition and 3D display, enhancing educational and tourism offerings.

Auersperg Ironworks: A Landmark of Industrial Heritage

The former Auersperg Ironworks in Dvor, near Žužemberk, is a key site in Slovenia's industrial heritage. Operating from 1795 to 1891, it was owned by the Czech noble family Auersperg. In 1822, under the leadership of Ignaz Vitus Engelbert Pantz, the facility was transformed into the largest iron foundry south of the Alps. The foundry produced a wide range of decorative and functional iron goods, including candlesticks, kitchenware, grave crosses, fountains, and bridges. In 2024, the site underwent renovation and now features an exhibition space with an interactive Natura 2000 presentation, an information centre, a multimedia hall, a souvenir shop, and a café.

View of the exhibition area at the Idrija Mercury Heritage Management Centre (photo by Jošt Rovtar)

The Photo House preserves and celebrates Celje's photographic, technical, and cultural heritage (photo by Egon Horvat)

Industrial Heritage of Ajdovščina

The Industrial Heritage of Ajdovščina is a dispersed open-air exhibition that showcases the town's long and rich industrial tradition, dating back to the 16th century. The exhibition is arranged as thirteen marked stops located at sites of former or still-operating industrial facilities. Each stop includes an information board with a brief description of the location's industrial role. By scanning the QR code on each board with a smartphone, visitors can access in-depth information and multimedia content, offering more profound insights into the historical significance of each site. **New European Bauhaus and industrial heritage in Slovenia**

The transformation project 'From Ironworks to FutureWorks!' of the Old Ironworks Museum Area into a Meeting Point of Industrial Heritage and creativity in Ravne na Koroškem was listed among the case study projects presented in the *New European Bauhaus Toolkit*.

MUSEUMS AND EXHIBITIONS

In April 2024, the Museum of Recent History "Celje" opened the Photo House Pelikan, marking the completion of a major renovation and the museum's most significant expansion in decades. The project garnered widespread public and professional recognition, earning the museum several prestigious awards.

The house was built in 1899 by photographer Johann M. Lenz and later owned by Josip Pelikan (1885–1977), who lived and worked there for nearly 60 years. A master portraitist and documentarian, Pelikan captured key moments in Celje's history and trained many young photographers. His name became synonymous with photography in the region.

The original skylight studio, built by Lenz and used by Pelikan before World War II, is the only preserved example of its kind in Slovenia and one of the few in Europe. Since 1997, it has been part of the museum. Following the death of the last owner, Božena Pelikan, in 2016, the museum took over the entire building, now offering over 600 m² of space, comprising a historic photographic studio, a period family apartment, a multi-purpose room, and Gallery Božena, which features both historic and contemporary photography. The Photo House preserves and celebrates Celje's photographic, technical, and cultural heritage.

Steel for a Green Future

In 2023, Koroški pokrajinski muzej, Muzej Ravne na Koroškem, Gornjesavski muzej Jesenice in Železarski muzej Štore, in cooperation with Slovenian Steel Industry and Slovenian Iron Culture Route, prepared a joint travelling exhibition titled *Steel for a Green Future*.

Today's production of green steel, or steel for a green future, builds on a tradition of knowledge and skills, safe

The Summer School focused on industrial heritage for the sustainable future (photo by author)

working conditions, environmental protection, innovation, and technological modernisation, as well as the recycling of raw materials and the optimisation and automation of production. It is also rooted in the social responsibility of steel companies.

The European Green Deal emphasises the need to modernise and decarbonise energy-intensive industries as a key step toward achieving carbon neutrality by 2050. Meeting climate goals will require an "environmental quantum leap," which in the steel sector will be shaped by newly emerging breakthrough technologies. These include the use of alternative fuels, such as green hydrogen, and the capture and utilisation of carbon dioxide, paving the way toward a carbon-free society.

The Velenje Coal Mine outdoor mining exhibit

In 2025, to mark the 150th annive rsary of the Velenje Coal Mine, the Coal Mining Museum of Slovenia unveiled its largest outdoor mining exhibit. Installed in the museum park, the impressive display features a hydraulic support system with 10 sections, a JOY 4LS5 LWS431 shearer loader, and a chain conveyor. The longwall section measures 18 meters in width and up to 4.7 meters in height. The JOY shearer, delivered in 1997, was the first high-capacity, computer-controlled, double-drum machine of its kind used in Velenje. Built in the USA and adapted for local conditions in England, it required special adjustments due to its size, weight, and power demands. The shearer operated for 15 years, extracting over 12 million tons of coal across various longwalls. Today, it stands as a symbol of technological advancement and a testament to mining heritage.

TRAINING AND EDUCATION INITIATIVES

The Interdisciplinary Institute of the University of Ljubljana for Sustainable Protection of Heritage (ITD UL), in cooperation with TICCIH Slovenia and ICOMOS Slovenia, organised the third Summer School on Sustainable Heritage in 2023, titled *Industrial Heritage for a Sustainable Future: Adaptive Re-use*.

The school focused on comprehensively and interdisciplinarily researching both the tangible remains and intangible aspects of industrial heritage, and on integrating them into contemporary sustainable development through adaptive reuse.

The speakers and mentors included Dr. Miles Oglethorpe, President of TICCIH, and Grethe Pontoppindan, an architect and Vice President of the International Heritage of the 20th Century Committee. – ISC20C ICOMOS, Ms. Tatjana Dizdarevic, Director of the Mercury Heritage Management Centre, and the summer school was led by Prof. Dr. Sonja Ifko, Head of ITD UL, Faculty of Architecture, University of Ljubljana.

SLOVENIA

SOCIAL AND COMMUNITY-BASED PROJECTS

The second biennial festival of industrial culture, Betrib 2023, took place in the Hg Smelting Plant of the Idrija Mercury Heritage Management Centre on 29 and 30 September 2023.

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CROATIA

Rijeka – Benčić block – Art District (T building – City Library and brick house – Children's House; Saša Randić) (photo by author)

Zrinka Barišić Marenić

Croatia's industrial heritage is marked by a wide range of fates and approaches, from devastation to successful restoration, which is an ongoing process. Pro Torpedo, the Association for the Protection and Promotion of Rijeka's Industrial Heritage, has significantly contributed to industrial heritage.

ACTIVITIES

In 2023, Rijeka hosted the 9th International Conference on Industrial Heritage, focusing on industrial heritage after 1945. The 10th International Conference on Industrial Heritage has been announced for October 2025.

PUBLIC POLICIES AND ORGANISATIONS

There have been no significant alterations in public policies or legal protection of industrial heritage. None of the industrial heritage sites has been included in the World Heritage list. In a wave of devastation of industrial heritage, the protected building of the Railway Car Equipment Workshop, part of the former engine room of the Hungarian State Railway/ Janko Gredelj complexes, collapsed. A part of the remaining buildings is gradually being demolished. After partial collapse, the neighbouring former steam mill (Paromlin) complex is currently being reconstructed and converted into a city library and community centre (UPI-2M), which will contribute to the regeneration of the city centre. The post-earthquake restoration of the Glyptotheque of the Croatian Academy of Sciences and Arts, located in the building of the former Zagreb tannery (architect Davor Mateković), is also underway.

OUTSTANDING PROJECTS AND NOTABLE CASES

Revitalisation of the Rikard Benčić Factory complex was gradually completed in Rijeka during the 2020 Rijeka – European Capital of Culture project. This included the reuse of industrial buildings for the Museum of Modern and Contemporary Art (by architect Dinko Peračić), and the reconstruction of the Sugar Refinery Palace for the City Museum of Rijeka (by architect Irma Huić), the brick house for the Children's House (by architect Saša Randić), and, finally, the T building for the City Library (by architect Saša Randić). Rijeka, the cradle of industry and industrial archaeology of Croatia, is enriched by this exceptional cultural block.

MUSEUMS AND EXHIBITIONS

In 2025, the Museum of the City of Zagreb held an exhibition entitled 1947–1952 Ideology and Planned Industrialisation (Goran Arčabić). In Sisak, the restoration of the Dutch House in the former grain warehouse was completed, and the building is now home to the first Centre of Industrial Heritage in Croatia.

Reconstruction of the former steam mill complex Paromlin in Zagreb to house a city library and community center (UPI-2M) (photo by author)

In Dubrovnik, a well-visited Museum of Red History was opened in the former TUP factory of Carbon Graphite Products. It was a bottom-up realisation, spontaneously followed by the conversion of the factory into a co-working space, libraries, etc.

The current nominations for Croatia's most important architectural awards, awarded by the Association of Croatian Architects (UHA), indicate a valuable refocusing on industrial heritage and its revalorisation, from two aspects. Two Zagreb designs secured the nominations focused on reusing industrial complexes: the Slaughterhouse (Klaonica, architects Filip and Krešimir Romić) and the Container (Kontejner), located in the former part of the Vjesnik publishing house (SKROZ). On the other hand, due to a series of changes in global relations, the theme of reindustrialisation is also noticeable in the nominations for the UHA awards: the Rimac Campus electric car production facility (3LHD), and the production and office building in Dubrovčan (MVA).

TRAINING AND EDUCATION INITIATIVES

Industrial archaeology is included in study programmes at the Faculty of Architecture of the University of Zagreb. It is also taught, in condensed form, at the Faculty of Civil Engineering of the University of Rijeka, the Faculty of Civil Engineering, Architecture and Geodesy of the University of Split, and the Faculty of Civil Engineering and Architecture of the J.J. Strossmayer University of Osijek. Numerous graduation theses done in all four study programmes focus on the restoration and reuse of industrial heritage.

SOCIAL AND COMMUNITY-BASED PROJECTS

Following the conversion of a part of the mining complex in Labin into the Public Library in Labin (arch. Ivana Žalac, Margita Grubiša, Igor Presečan and Damir Gamulin), the re-GENERATOR - Center of Urban Culture was built following the project by MVA architects by transforming the former Regeneracija factory. Spontaneous use of the old industrial warehouse for concerts resulted in forming a new youth centre in the former industrial zone.

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re-GENERATOR - Centre for Urban Culture (MVA) in Zabok (photo by author)

Ploče,a modern planned port and industrial city in the south of Dalmatia (photo by author)

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Zrinka Barišić Marenić, Ph.D., is a professor and scientific advisor in a permanent position at the Faculty of Architecture, University of Zagreb. Her research and teaching focus on industrial archaeology and modern and contemporary Croatian architecture. She is the laureate of two Croatian State Awards for Science (2009, 2020). She was a member of the author's team of the Croatian performance at the 14th Venice Architecture Biennale in 2014 and the Board of Directors of the Zagreb Society of Architects (2019-2024), the president of the Jury of the Open House Zagreb festival (2023-2024), and the national representative of Croatia in TICCIH.

As the Croatian national representative of TICCIH, the engagement of the author of this paper involves research, scientific and teaching work in industrial archaeology. As part of the scientific research at the University of Zagreb, she is leading a scientific research project at the Faculty of Architecture named The Contribution of Industrial and Modern Heritage to the Development of a Contemporary City. She has published a concise encyclopaedic entry on industrial architecture in Croatia, published in the Croatian Technical Encyclopaedia, and a series of papers on the industrial heritage of Ploče, Rijeka, Zagreb, and Dubrovnik. She mentors student papers on industrial heritage, for example Ivan Vukojević's graduation thesis and doctoral dissertation, awarded summa cum laude (Urban and Architectural Complexes of Tobacco Industry in Dalmatia and Herzegovina: Criteria for Evaluation, Renewal and Revitalisation, 2004). She teaches the Industrial Archaeology course, part of the Architecture and Urban Planning graduate study programme at the Faculty of Architecture of the University of Zagreb. She also teaches in the Redesigning the Post-Industrial City (RePIC) international study programme.

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SERBIA

Prof. Dr. Anica Draganić

In 2013, industrial heritage was recognised as the most vulnerable category of historical remains at the national level (Serbian Society of Conservators). At that time, experts identified the outdated legal framework, specifically the 1994 law, as a primary reason for this vulnerability, as it did not classify industrial heritage as a distinct type of cultural heritage. Since 2022, a new Law on Cultural Heritage has come into effect. However, contrary to the expectations of the professional community, this law still does not categorise industrial buildings or sites as a separate type of immovable cultural property.

Consequently, a systematic approach to protecting industrial heritage has yet to be established. Despite these challenges, many individuals are actively working to educate and raise awareness among young people and the general public about the value and potential of industrial heritage. Recently, there has been a growing interest in this field among students and young researchers in architecture, urbanism, tourism, and creative industries, as evidenced by the increasing number of bachelor's and master's theses focused on this topic.

ACTIVITIES

The National TICCIH Group was formed in 2022, during the previous Congress in Montreal, when Miles Oglethorpe, President of TICCIH, and Anica Draganić, National Representative of Serbia, signed the National Agreement.

As part of European Heritage Days 2024, we organised the I TICCIH Serbia International Scientific Conference, *'Rethinking Industrial Routes and Networks'*, on 13 and 14 September in Novi Sad. Following the ongoing debates on the European Cultural Heritage Foundation, the Conference rethought the role of industrial heritage in addressing the challenges facing common historical, present, and future cultural values.

Professors from the University of Novi Sad and the Cultural Studies Platform CULTstore are the core of the National TICCIH group. This group has implemented several projects over the last three years.

Multidisciplinary Approach in Critical Heritage Studies - CHS network (2025-26), part of the CEEPUS program (Central European Exchange Programme for University Studies). The CHS network aims to foster a holistic approach to heritage studies across Central Europe and the Balkans.

Hydroelectric Power Plant "Vučje," Vučje, Cultural Monument 2279 (photo by Republic Institute for the Protection of Cultural Monuments)

I TICCIH Serbia International Scientific Conference Rethinking Industrial Routes and Networks, Proceedings cover (photo by CULTstore)

It will enhance the quality of research and education, facilitate academic and student mobility, and support joint activities. It will leverage multidisciplinary collaboration to address multifaceted challenges, such as memory politics, contested heritage, localised vs. globalised narratives, ethics in digital heritage, participation, commodification, and intersectionality.

The *Sleeping Giants – (Re)thinking Mutual Industrial Heritage* (2024-2025) project aims to address contemporary challenges in the industrial heritage by empowering young professionals and students to explore and creatively respond to the layered context of socialist industrial culture. The project is being implemented through a series of activities, including research residences, creative workshops, and participation in two festivals, namely the Sarajevo Days of Architecture and the newly created Festival of Industrial Culture in Novi Sad.

Railway Heritage for Engaging the Young Generation - Rail4V4+V 2023 (2023-2025) aimed to empower youth in responding to the current challenges facing railway heritage through constructive dialogue, creative learning, and interactive participation. In line with the aim of the EYY 2022 and the strategic priorities of the Visegrad Group, the main goal was to involve youth in building a more sustainable and inclusive future for underdeveloped areas in V4+V regions.

The V4+V virtual train journey brought the youth closer together, allowing them to explore the Visegrad and Vojvodina regions in all their diversity and travel virtually through space and time over the former Habsburg Monarchy.

The *Virtual Railway Journey through Banat (2023-2024) carefully selects elements of Banat's railway heritage and digitally presents them* within the online platform. Digital processing and creative interpretation of archival materials, original projects, and photographic documentation created virtual cultural routes along the railway lines Kikinda-Zrenjanin and Zrenjanin-Pančevo.

ALTERATIONS TO LEGAL PROTECTION

Insight into the Information System of Immovable Cultural Property shows that in the last three years (2022-25), only three industrial sites in Serbia have been listed:

- Fire Station, Trg Maršala Tita 5, Baranda, Cultural Monument 2272, 27 December 2023.

- Hydroelectric Power Plant "Vučje", Vučje, Cultural Monument 2279, 24 July 2024.

- Hydroelectric Power Plant "Sićevo", Sićevo, Cultural Monument 2280, 24 July 2024.

During 2024, the Republic Institute for the Protection of Cultural Monuments submitted to the Ministry of Culture Draft Decisions for three more cultural properties:

- Hydroelectric Power Plant "Temac", Temska

- Wooden Warehouse at the Railway Station, Kovačica

- Pumping Station, Dubovac

OUTSTANDING PROJECTS AND NOTABLE CASES

The former turning point for steam locomotives in Belgrade will be reconstructed and turned into a multipurpose centre by the end of 2025. The project of the creative-innovative multifunctional centre *Ložionica* aims to contribute through the synergy of old and new to the natural, social and semantic healing of the area of the former semicircular locomotive hall and water tower of the Belgrade Railway Station and its immediate surroundings, as well as to strategically position the location in question as a symbolic place of modern progress in the field of creative industries and beyond.

Although the building of the former Milan Vapa's Paper Mill has not been in use for several decades, this significant building, due to its representative, architectural, construction and historical values, was declared a cultural monument and is under special protection of the state, as one of the best-preserved examples of the industrial architecture in Belgrade and Serbia. The Open International Contest for Architectural and Urban Conceptual Design for the new Nikola Tesla Museum in the building of the former Milan Vapa's Paper Mill in Belgrade lasted from October 4 to December 17, 2024. It attracted a significant number of participants from Serbia and abroad, and the obtained Contest Designs reflect a wealth of ideas, high standards of design and commitment to sustainability. The first prize is awarded to the team of authors Zaha Hadid Architects and Bureau Cube Partners.

MUSEUMS AND EXHIBITIONS

- *The Light and Strength of Industrial Heritage.* Exhibition. 22.05-29.06.2025. Museum of Science and Technology, Belgrade. Curator: FASIH – Future Art Science Industrial Heritage

- *100 Years of the National Aviation Industry.* Exhibition. 07.11.2023-19.02.2024. Aeronautical Museum, Belgrade. Curators: Ivan Vujić, Nebojša Isailović, and Nemanja Glišić

- *The Power of the Tin Box: "Kulpin" Factory.* International exhibition. 20.12.2023. Svilara Cultural Station, Novi Sad. Curators: Maria Silađi and Anica Draganić

Exhibition "Beer Culture in Pančevo", Old Wiefert Brewery, Pančevo, 2022 (photo by Anica Draganić)

- *Accents of the Industrial Past of Veliki Liman: From Cement Miniatures to Concrete Giants. International exhibition. 06-12.09.2022. Former Beton Factory, Novi Sad.* Curators: Anica Draganić, Maria Silađi, and Predrag Uzelac

- *Beer Culture in Pančevo,* International exhibition. 1-30.07.2022. Old Wiefert Brewery, Pančevo. Curators: Anica Draganić and Maria Silađi

TRAINING AND EDUCATION INITIATIVES

University-based academic research on industrial heritage is conducted at the University of Novi Sad, Faculty of Technical Sciences, Department of Architecture and Urbanism, within the Master's program in Architecture and Urban Design – Adaptive Reuse of Built Heritage.

- 2022/23, Summer Semester 2023, Studio Industrial Past of Novi Sad.

- 2023/24, Summer Semester 2024, Studio Reactivation of the Nova Crnja railway station.

PUBLICATIONS

- Draganić, A. (Ed.) (2025). *Railway Heritage for Engaging the Young Generation - Rail4V4+V 2023.* Novi Sad: Cultural Studies Platform CULTstore.

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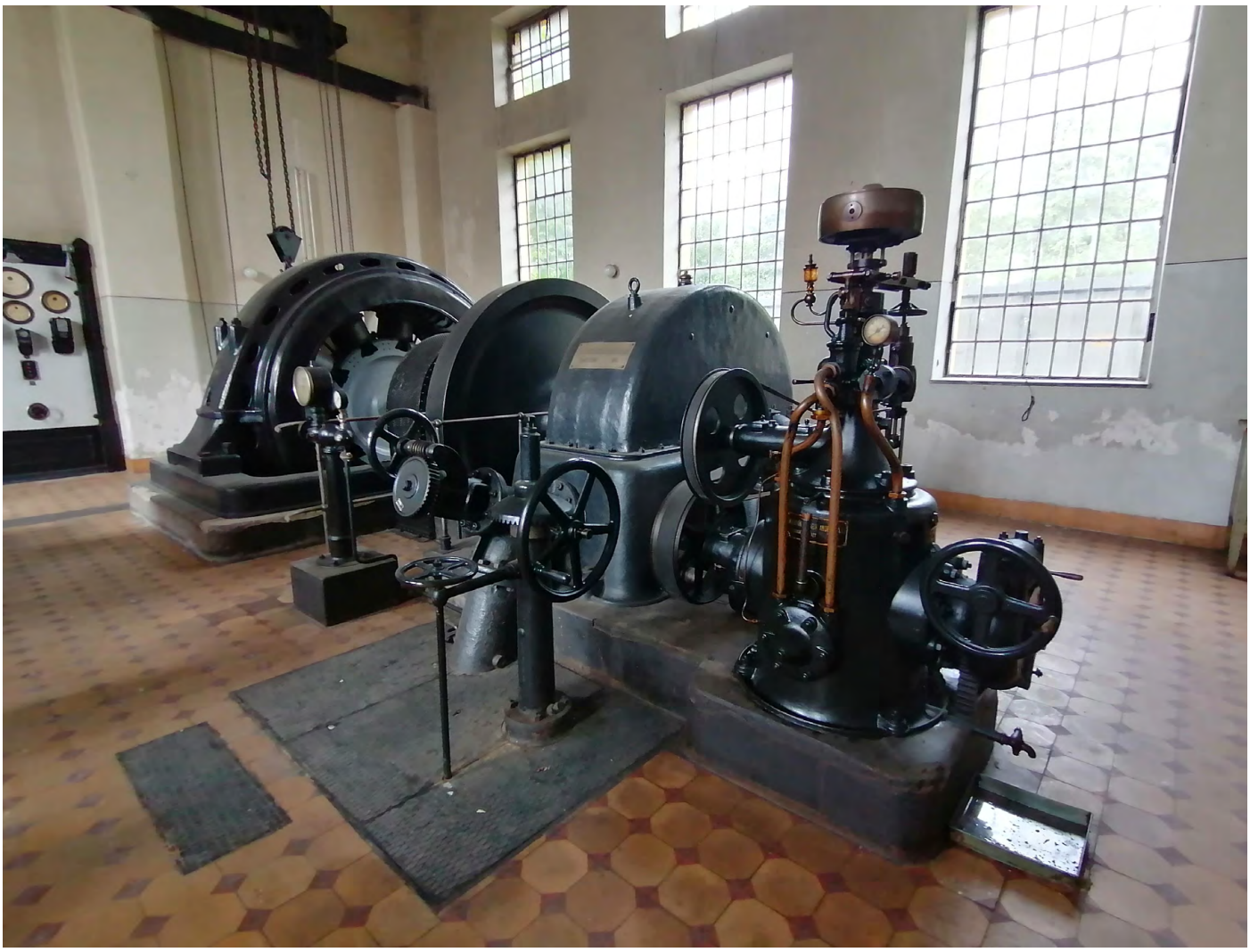
AUTHOR

Anica Draganić is a Full Professor at The University of Novi Sad, Serbia. She has taught architectural history and heritage preservation at the University of Alcala and Brno University of Technology. Draganić has received awards and fellowships from the Getty Conservation Institute, the Getty Foundation, the University of Graz, the DAAD, the Western Balkans, the Visegrad Fund, and Creative Europe. Her work focuses on nineteenth- and twentieth-century European architecture, with a particular emphasis on industrial heritage and identity issues in the intercultural context of Central Europe. She is the president of CULTstore and TICCIH Serbia.

Contact the author

BOSNIA AND HERZEGOVINA



Electric Power Plant in Hrid, Sarajevo (photo by author)

Maja Pličanić

Industrial development in Bosnia and Herzegovina occurred later than in other, more developed regions. It can be divided into two main phases: the capitalist (1878–1945) and socialist (1945–1992) periods, which have shaped the country's economic and spatial structure. The Austro-Hungarian and interwar periods emphasised resource exploitation and infrastructure without broader spatial transformation based on industrial development. In contrast, the socialist era focused on the planned development of heavy industry, the establishment of large industrial complexes, and rapid urbanisation. Significant investments in energy, mining, metallurgy, and military sectors positioned Bosnia and Herzegovina as a core industrial region in ex-Yugoslavia.

By the end of the 20th century, this continuity was abruptly disrupted. The political and economic transition, initiated in the aftermath of the 1992–1995 armed conflict, resulted in non-transparent privatisation and fragmented industrial restructuring. Conducted without a clearly defined strategic framework, this process led to widespread deindustrialisation, the closure of numerous production facilities, and the disappearance of industry as a foundation of the national economy.

ACTIVITIES

Recent years have seen a series of local initiatives that reflect a growing interest in the subject and contribute to the development of a broader professional and public discourse. One of the first events to highlight the significance of industrial heritage was the roundtable *120 Years of Industry in Vareš* (2011), marking the anniversary of establishing the first ironworks in Bosnia and Herzegovina. The project "New Uses for Old Industrial Buildings" (2016), authored by Axel Föhl, significantly raised awareness on the subject.

In 2017, a symposium titled *Industrial Heritage in the Bihać Area: Between Reality and Vision* was organised in Bihać, focusing on Kombiteks, a former industrial giant. The multimedia exhibition *Industrialisation in Progress…* (2020), a result of the Cultural Heritage Without Borders (CHwB BiH) project funded by the European Union, presented the industrial heritage of Bosnia and Herzegovina within the context of European cooperation and the establishment of the European Coal and Steel Community.

An essential step towards institutionalising this topic was the roundtable *Perspectives on Industrial Heritage*, organised in response to the demolition of the Sarajevo Electric Power Plant—a national monument and one of the city's most signif-

icant industrial facilities. The event led to the first publication in Bosnia and Herzegovina dedicated to industrial heritage, prompting urgent action from both the professional and academic communities. Participants discussed the challenges of deindustrialisation, the adaptive reuse of industrial soites, and participatory approaches to heritage preservation [see TICCIH Bulletin #105, 2024].

PUBLIC POLICIES AND ORGANISATIONS

Industrial heritage remains outside the scope of institutional recognition and cultural and political priorities. In addition to institutional neglect, industrial heritage in Bosnia and Herzegovina faces further challenges stemming from political indifference, a complex governance structure, and increasing investor pressures. 65 sites and structures in Bosnia and Herzegovina have been identified as "industrial and economic facilities." Of these, only five sites are legally protected, primarily due to their historical significance related to the Second World War rather than their industrial value.

Since its establishment in 2002, the Commission to Preserve National Monuments of Bosnia and Herzegovina has designated 920 properties as national monuments, of which only three are explicitly recognised as industrial heritage:

- Salt production in Tuzla (three sites, 2007),
- Electric Power Plant in Hrid, Sarajevo (2009),
- Hydroelectric Power Plant in Jarak (2011).

In addition, fifteen designations of the Commission pertain to immovable historical heritage that, in substance, belongs to the industrial heritage domain. Yet, this affiliation is not reflected in their official classification. The absence of adequate categorisation and contextualisation hinders the recognition of industrial heritage as a vital component for understanding the socio-economic development of Bosnia and Herzegovina and its connections to regional and global modernisation processes.

OUTSTANDING PROJECTS AND NOTABLE CASES

Of particular significance is the railway heritage, much of whose documentation is the result of the enthusiasm and dedication of individuals such as Fevzija Ajdin (History of the Railways of Bosnia and Herzegovina, 2005) and Srećko Ignjatović, who founded a small museum in the old railway station.

One of the most striking examples of adaptive reuse of industrial architecture is the Museum of Contemporary Art of the Republic of Srpska, located in a former railway station constructed in 1891 and converted for museum purposes in 1981. In 2007, the building was declared a national monument, ensuring its long-term protection.

The adaptive reuse of the former Astro soap factory (1894) in Sarajevo into the contemporary administrative and technical complex of the ASA Institute represents a successful example of preserving the architectural value of industrial heritage.

Cover page of the publication Perspectives on Industrial Heritage (cover design by Alisa Burzić)

Recent doctoral research offers partial responses to these challenges, which provides an essential theoretical and methodological foundation for the further development of the discipline. Tijana Veljković's study on the industrial heritage of Tuzla is grounded in the need for an integrated approach to preservation—one that goes beyond the mere conservation of physical structures to encompass broader social, economic, and urban contexts *(Veljković, 2022)*.

In Sarajevo, Maja Pličanić's study developed a methodological framework that enables the precise identification, analysis, and typological classification of industrial buildings. This approach establishes a foundation for developing guidelines that facilitate informed decision-making regarding the protection and reuse of industrial sites, taking into account their architectural, spatial, and social characteristics *(Pličanić, 2021)*.

Despite their limited public reach, academic studies often lay the groundwork for future heritage protection policies.

MUSEUMS AND EXHIBITIONS

Bosnia and Herzegovina still lacks a national technical museum that systematically documents, interprets, and presents the country's industrial heritage. Without a centralised institution, preserving fragments of the industrial past has been left to individual initiatives within existing industrial complexes and institutions. Notable examples include the Saltworks Museum in Tuzla, situated within the still-operating salt factory complex established in 1885. The museum traces

the history of salt production from the Neolithic period to the present day. The salt boiling facility, however, is closed to visitors due to a lack of maintenance.

The Sarajevo Brewery Museum, founded in 2004 within the historic industrial complex, showcases the continuity of brewing in Sarajevo and Bosnia and Herzegovina across multiple historical periods. The Sarajevo Tobacco Factory Museum highlighted the factory's role in the country's industrial development but became inaccessible to the public after it closed in 2021.

The Zenica Ironworks Museum, located on the ground floor of the ArcelorMittal administrative building, preserves documents, tools, photographs, and other artefacts that testify to the 128-year history of the Zenica steelworks.

Although valuable and informative, these museums have limited capacities and are primarily tied to their respective industrial complexes. They lack the institutional support necessary to achieve broader public outreach or educational impact. Nevertheless, their existence indicates both interest and potential for the systematic presentation of industrial heritage in a museological context.

TRAINING AND EDUCATION INITIATIVES

Bosnia and Herzegovina does not have a university program that systematically addresses the protection of industrial heritage. Education on this topic occurs sporadically, primarily through individual initiatives and the enthusiasm of certain instructors, without an integrated and interdisciplinary approach at the national level.

CONCLUSION

The industrial heritage of Bosnia and Herzegovina represents a significant yet underutilised resource in the context of sustainable development, cultural policy, and the strengthening of local identity. Without systemic support and clearly defined protection strategies, initiatives in this field often rely on the efforts of individuals and local communities. The integration of industrial heritage into broader narratives of modernisation and European integration opens up opportunities for its preservation and the transformation of post-industrial landscapes into spaces of knowledge, creativity, and collective memory.

PUBLICATIONS

- Pličanić, M. (2021). *Prilozi za metodološki postupak zaštite graditeljskog naslijeđa kroz aktivnu zaštitu industrijskog naslijeđa grada Sarajeva* (Doctoral dissertation). Architectural Faculty of the University of Sarajevo.
- Veljković, T. (2022). *Endüstri miras alanlarının bütünleşik korunması için bir öneri: Tuzla (Bosna Hersek)* (Doctoral dissertation). Mimar Sinan Fine Arts University.
- Pličanić, M. (Ed.). (2024). *Perspectives on Industrial Heritage / Perspektive industrijskog naslijeđa* [Electronic version]. Sarajevo: ICOMOS National Committee in Bosnia and Herzegovina. ISBN 978-9926-8463-4-3
- Pličanić, M., & Veljković, T. (2024). Early industrial landscapes in Bosnia and Herzegovina. In N. Ademović, T.

Adaptation of the Astro soap factory (photo by Nida Krečo)

Tufek-Memišević, & M. Arslanagić-Kalajdžić (Eds.), *Interdisciplinary advances in sustainable development III (Lecture Notes in Networks and Systems, Vol. 851, pp. 269–300).* Springer.

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AUTHOR

Maja Pličanić is an architect and researcher specialising in preserving architectural heritage, focusing on industrial and modernist heritage in Bosnia and Herzegovina. She currently serves as the President of the National Committee of ICOMOS in Bosnia and Herzegovina and is a member of TICCIH. She works as an assistant professor at the Faculty of Education, University of Sarajevo, where she teaches courses in cultural heritage. She is the author of numerous academic and professional papers and the publication Perspectives on Industrial Heritage.

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ITALY

Massimo Preite & Edoardo Currà

The *Associazione Italiana per il Patrimonio Archeologico Industriale* (AIPAI)—translated as the Italian Association for Industrial Archaeological Heritage—is a non-profit cultural organisation that plays a pivotal role in the study, preservation, and promotion of Italy's industrial heritage. The activities of AIPAI over the last three years (2022–2024) reflect a strategic and multifaceted effort to establish industrial heritage as a key element of Italy's cultural, educational, and territorial development. AIPAI's recent work integrates historical research, institutional collaboration, public outreach, and urban regeneration. It remains a leading force in promoting industrial heritage not only as a memory but as a cultural and economic asset.

As the Italian member of TICCIH, AIPAI supports global standards in industrial heritage preservation, engages in transnational research and comparative projects and represents Italy at major international forums on industrial archaeology.

These efforts define AIPAI's key areas of action.

ACTIVITIES

AIPAI has expanded its international network by organising congresses with experts from around the world on industrial heritage.

1) AIPAI Triennal Conference: Stati Generali del Patrimonio Industriale

These major conferences foster collaboration and promote strategies for preserving and integrating industrial heritage into society:

- 2nd Stati Generali (2022): Co-organised in Rome and Tivoli, marking 25 years of commitment to industrial heritage. Proceedings are available via AIPAI.
- 3rd Stati Generali (2026): Scheduled for February 2026 in Bari, Matera, and Lecce, focusing on contemporary challenges in industrial heritage.

2) 1st International Congress: General State of Industrial Heritage in Argentina (2024)

Held in Buenos Aires in February 2024, promoted by Iniciativa de Archivos and AIPAI.

3) The international conference The Places of the Modern: Industrial Architecture between the 19th and 20th Century. Technological and productive innovations for industry at the origin of the modern

was organized by Sapienza University in Rome with the collaboration of the Ministry of Culture, AIPAI, TICCIH Italia and the Parco Regionale dell'Appia Antica.

Furthermore, AIPAI's presence, through the active participation of its members, at conferences and seminars on industrial heritage in Italy is as high as ever. Only the most recent and significant initiatives are mentioned below.

4) The Reuse of Industry. Which architecture? The Transition of Reuse (March 2025)

Organised by the Fondazione Ordine Architetti di Modena in collaboration with AIPAI, the event aimed to explore possible solutions to the significant challenges of the energy transition and the European Green Deal through the reconversion of abandoned industrial buildings.

5) RO.ME. Museum Exhibition (2022, 2023, 2024)

AIPAI participated in the 6th to 8th editions of the *RO.ME Museum Exhibition* as a leading partner, supporting sessions on industrial heritage and urban regeneration.

Key initiatives included:

- Il Patrimonio industriale come destinazione culturale: On mining landscapes and cultural reuse.
- Archivi dei disegni di architettura: On preserving and reusing architectural drawings.
- Appia industriale: Focus on industrial heritage along the Via Appia.

6) Seminar From History to the Future: Industrial Archaeological Heritage and Archives

Saturday, 20 May 2023, Auditorium della Porta del Parco, the former ILVA steel plant in Bagnoli, Naples. This event was organised by AIPAI, in collaboration with the extraordinary Government Commissioner for the environmental remediation and urban regeneration of the Site of National Interest of Bagnoli-Coroglio, the Ri.Sto.Ra.Mi consortium, and the Dipartimento di Architettura dell'Università degli Studi di Napoli Federico II.

The seminar aimed to:

- Reopen discussion on the future of the former ILVA site in Bagnoli, with a focus on preserving its structures and archives.
- Evaluate the condition of the ILVA plant's historical and technical archives, which are still in fragile condition.
- Explore conservation strategies through Italian and European experiences in steel heritage, archives, and industrial museums.

PUBLIC POLICIES AND ORGANISATIONS

Many European and Italian interventions aimed at post-COVID economic revival have accelerated the regeneration of brownfields (through reclamation and reuse) and active industrial areas, renewing Italy's industrial culture.

The National Recovery and Resilience Plan (NRRP) has impacted hundreds of industrial areas, many of which are heritage sites. The more relevant 'Missions' include the Urban Regeneration of Historic Industrial Areas (NRRP Mission 5) and the Enhancement of Industrial Heritage (NRRP Mission 1).

ALTERATIONS TO LEGAL PROTECTION

AIPAI works as a lobbying force to protect endangered industrial heritage sites. Its actions include:

- Surveying and cataloguing historic industrial sites across Italy (factories, mills, mines, power plants, etc.).
- Partnering with local and national institutions to propose conservation and adaptive reuse strategies.
- Supporting the legal recognition and protection of industrial buildings under heritage laws.
- Promoting sustainable redevelopment of decommissioned industrial spaces (e.g., into cultural centers, museums, or creative hubs).

In the framework of these activities, AIPAI participated in the presentation of the new cataloguing sheet "SPD - Disused Production Sites" (December 2024), developed in collaboration with the ICCD, ISPRA and other institutions. This tool aims to standardise the documentation of disused industrial sites, facilitating their protection and valorisation.

OUTSTANDING PROJECTS AND NOTABLE CASES

AIPAI, together with other associations, such as Docomomo and Icomos, fought for the recognition of the protection of several sites of exceptional witness value, or the respect of existing constraints.

If the battle was successful for several sites: the Aermacchi aircraft production complex in Varese; the Gasometer of Campi in Genoa (both currently listed), unfortunately it was unsuccessful for some other sites: Hamon hyperboloid towers in the harbour of Ravenna; the structures of the Agricultural Consortium of Gravina (both demolished).

They are still at risk, among many: the pioneering Autogrill motorway bridge station of Feronia in Rome, and the Royal Mint of Rome (despite being listed).

TRAINING AND EDUCATION INITIATIVES

The spearhead of Italian and European training in industrial heritage continues with great vigour: the Erasmus Mundus Joint Master "Techniques, Heritage, Territories of Industry" (TPTI), whose main partners are: University Paris 1 Panthéon-Sorbonne, University of Padua, University of Evora, and AIPAI as associate partner.

PUBLICATIONS

'Patrimonio industriale' magazine

The biennial magazine *Patrimonio Industriale* is the official house organ of AIPAI and represents one of the leading platforms for scientific dissemination of the association. Each issue presents a thematic monographic section and various columns dedicated to different areas of AIPAI research and action. The last issues 2022-today, cover the following topics:

1. Issue 27: *Tobacco factories, cultivation agencies and subsidiary warehouses of the State Monopolies*, edited by G. Bernardo, A. Guida and A. Monte.
2. Issue 26: *Building industries between form and structure. Projects and building sites of the twentieth century*, edited by M. Russo and I. Giannetti.
3. Issue 25: *Industrial landscapes, legacies, and intervention practices*, edited by M. Ramello.
4. Issue 24: *Covered markets between the end of the 19th and 20th centuries. Characteristics, values, conservation and scenarios for the future*, edited by M. Docci and R. Vecchiattini.

Quaderni Del Patrimonio Industriale

Alongside the magazine, a series of *Quaderni di Patrimonio Industriale* (Industrial Heritage Workbooks) has been developed, aimed at collecting conference proceedings, monographic studies and in-depth research on specific topics of industrial archaeology. A "new series" revamped in layout and circulation has been published since 2020:

- Issue NS 1 (2022): *The Pietromarchi Tobacco Factory of Marsciano. Buildings and machinery. Scientific cataloguing sheets*, edited by L. Mencarini and M. M. Montella with R. Covino.
- Issue NS 2 (2023): *The Nicoletti-Rinaldi of Rieti and the wardrobe of memory. An archive and a business history*, edited by A. Pasquetti and D. Scopigno, with a preface by E. Currà.
- Issue NS 3 (2024): *Archeologia e Patrimonio Industriale in Italia. Questioni di metodo e casi di studio*, by R. Covino.

Issue NS 4 (2025): *Lugnano comunità operosa. Dai mulini alla fabbrica di lampadine*, edited by R. Covino and M. Docci.

Books

- Mauri, S., Pompejano, F., & Rocco, S. (Eds.). (2025). *Perspectives and insights on (post)industrial landscapes and heritage* (Series AIPAI *"Patrimonio Industriale. Conoscenza & Progetto"*). Firenze: Edifir Edizioni. ISBN 978-88-9280-232-2
- Currà, E., Natoli, C., & Ramello, M. (Eds.). (2023). *Patrimonio industriale del Ventesimo secolo: Fragilità, risorsa, progetto, messa in valore alla luce del PNRR* (Series *AIPAI*

"Patrimonio Industriale. Conoscenza & Progetto"). Firenze: Edifir Edizioni. ISBN 978-88-9280-105-9.

EVENTS

AIPAI Photo Contest & Exhibition

Since 2022, AIPAI has organised annual photography contests in collaboration with institutions like DICEA – Sapienza University, Do.co.mo.mo Italia, the Ministry of Culture – UNESCO Office, and several foundations to promote industrial heritage through visual storytelling. Aimed at both professional and amateur photographers, the contest raises awareness of the industry, work history, and industrial archaeology. The first three editions featured:

1. 2022: Inaugural contest with Fabio Piccioni's "Mining lands" awarded.

2. 2023: Nicola Bertellotti won with "Soft Machine," and Claudia Mencarelli received the Under 35 Talent Award.

3. 2024: The third edition added the "Appia Moderna e Industriale" prize for modern and industrial aspects of the Via Appia.

Winning photos were showcased in travelling exhibitions, including at the Musil Museum in Brescia and Fondazione AEM in Milan.

PARTNERSHIPS

AIPAI is a key platform for interdisciplinary dialogue on industrial heritage in Italy. It participates in and co-organises conferences with associations like ERIH, Museimpresa, AISU, and the Festival of Industrial Tourism.

Additionally, AIPAI, in collaboration with bodies like Assorisorse, ISPRA, and the Ministry of the Environment, organises National Mining Day. This annual event promotes Italy's geological and mining heritage, encouraging cultural and sustainable tourism in mining and geological areas.

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Edoardo Currà is president of AIPAI.; full Professor of Architectural Engineering – Sapienza University of Rome. Coordinator of research projects of national and international relevance on historical construction, and industrial heritage, recovery processes; and scientific supervisor of collaboration and research agreements with the Ministry of Culture, local, and national institutions. He is the author of more than 200 publications.

Contact Edoardo Currà

SPAIN

Julián Sobrino Simal, Ainara Martínez Matía & Miguel Álvarez Areces

Between 2022 and 2025, Spain witnessed the consolidation of industrial heritage as an integral part of its cultural heritage. This evolution has been driven both by institutional policies, such as the National Plan for Industrial Heritage, and by growing academic and social involvement. Industrialisation is now viewed not only in its technical or economic aspects, but also as a means of expressing identity for territories and communities. Events such as the INCUNA International Conferences have contributed to a more proactive and cross-sectoral approach to preserving industrial heritage. Internationally, Spain gained visibility as the host of the ERIH conference in Bilbao (2023), highlighting industrial tourism as a tool for heritage enhancement.

ACTIVITIES

Its members include researchers, civic organisations, foundations, and museums, which actively collaborate in cultural policy projects with public administrations, such as the monitoring committee of the National Plan for Industrial Heritage in Spain, or in Landscape and Heritage Education Plans.

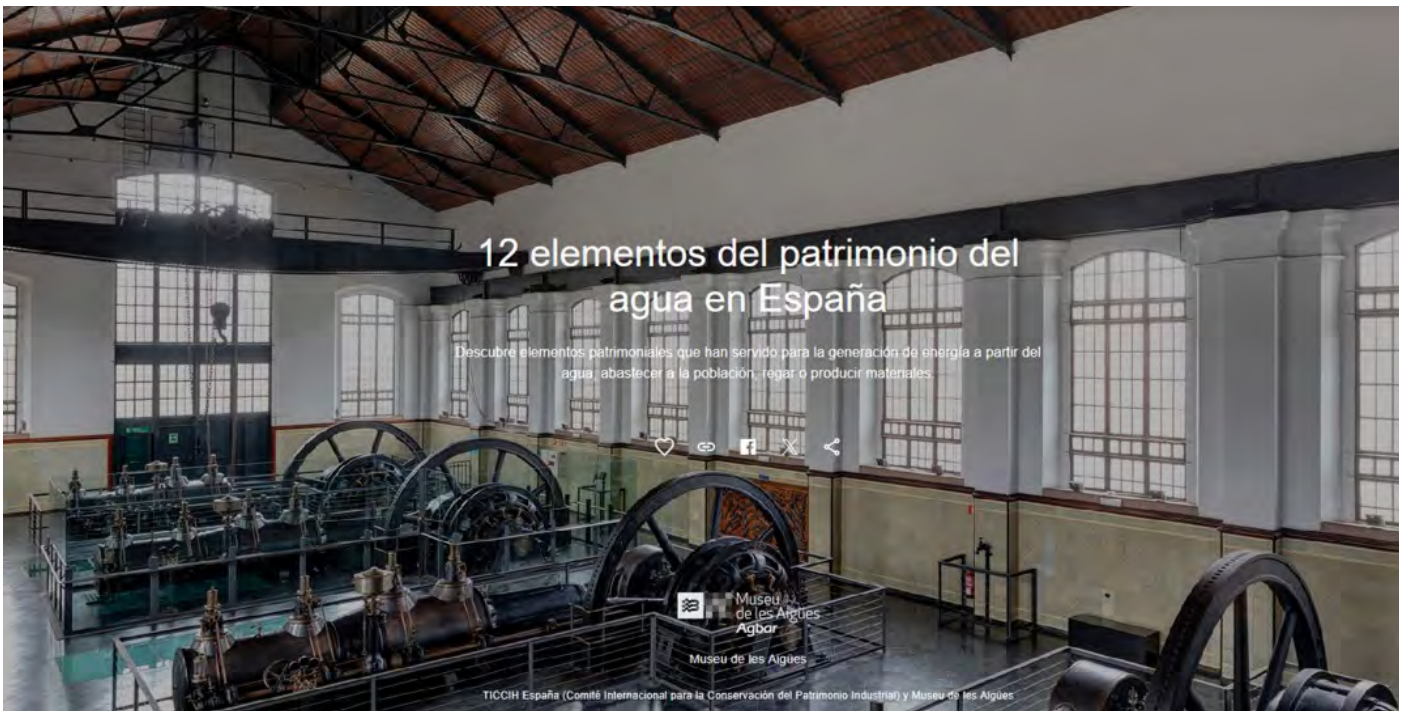
TICCIH Spain, under the presidency of Ainara Martínez Matía, carried out intense activity between 2022 and 2025. The 8th national congress, held in Balmaseda (2022), addressed for the first time the gender perspective in industrial heritage, and its proceedings were published in 2023. International projects such as *MapaPI*—a collaborative map of industrial sites in Ibero-America—and *TICCIH en Ruta: Culturas Mineras*, an itinerant program dedicated to mining heritage with events in mining towns like Peñarroya-Pueblonuevo, Sargentes de Lora, Saelices, Andorra (Teruel), or Riópar, with the collaboration of the Spanish Society for the Defence of Geological and Mining Heritage (SEDPGYM), have also been added to this innovative area of work.

Since its creation in 2021, the Industrial Heritage Network of Cantabria has developed an online-accessible inventory, organised three thematic conferences and two exhibitions — one for the bicentenary of the Santander Tobacco Factory and another on movable heritage — and promoted the restoration of the Prietsman dredger (1889).

Other activities include:

- Seminar *Post-Industrialisation Scenarios,* December 2023 (with the University of the Basque Country).

Medina de Rioseco Flour Factory, located on the Canal de Castilla dock, is an example of good practices in industrial heritage (photo by Linarejos Cruz)



12 Elements of Hydraulic Heritage, Museu Aigües/TICCIH Spain, Google Arts project. (photo provided by the author)

- XXX Symposium of the Valentín de Foronda Institute of Social History, *Between History and Heritage: Industry, Industrial Labor, Deindustrialization,* July 2024.

- 10th Symposium on Heritage and Globalisation, in collaboration with the Nabarralde Foundation, *Industrial Heritage: From Loss to Recovery,* October 2024.

- In September 2025, the 9th National Congress will be held in Motril, focusing on movable industrial heritage. This dynamism reflects a significant expansion of the national group, combining rigour, outreach, and territorial work.

PUBLIC POLICIES AND ORGANISATIONS

Public policies have made progress, especially in strengthening regulatory frameworks. At the state level, the National Plan remains the primary tool of the Institute of Cultural Heritage of Spain (IPCE).

At the regional level, new cultural heritage laws have been published that include industrial heritage:

- Law 8/2023 of March 30, on Cultural Heritage of the Community of Madrid. Chapter III: Industrial Heritage.

- Law 7/2024 of June 20, on Cultural Heritage of Castilla y León. Article 20 f): Industrial Ensemble.

- Draft Law on Cultural Heritage of Andalusia, 2025. Title V, Chapter III: Industrial Heritage.

ALTERATIONS TO LEGAL PROTECTION

Between 2022 and 2024, Spain reinforced legal protection of industrial heritage, highlighting the declaration of the Ayoluengo Oil Field as an Asset of Cultural Interest (BIC), the first time oil facilities have been included. A total of 75 elements were protected: 18 in 2022, 48 in 2023, and 9 in 2024, including movable assets, buildings, and landscapes. Additionally, the management of industrial sites on the World Heritage List, such as the Vizcaya Bridge and Almadén Mines, was strengthened. Although no new UNESCO listings occurred, international oversight was consolidated. Spain also supported transnational candidacies, such as the Iron Route in the Pyrenees, which included sites like Liédena (Navarra).

OUTSTANDING PROJECTS AND NOTABLE CASES

TICCIH Spain has expressed concern in recent years over the destruction of thermoelectric power plants across various regions, particularly in areas that were historically energy hubs in the 20th century (e.g., As Pontes or Meirama in Galicia, La Robla, Compostilla in León, and Andorra in Teruel).

In general, this triennium has presented diverse cases, from exemplary models to irreversible losses:

- The Royal Artillery Factory of Seville, now known as the Magellan Centre, has undergone rehabilitation since 2022, hosting events that represent an exemplary reuse based on reversible architectural conservation and new cultural uses.

- The dismantling of the Santa Cruz de Tenerife Refinery, which began in 2022, marks the loss of an emblematic industrial landscape. Although lacking legal protection, its memory is partially preserved through museological initiatives and a planned interpretation centre.

- The controversy surrounding the demolition of the chimney of As Pontes Power Station (Galicia) symbolises the challenges of the energy transition.

- The *100 Elements of Industrial Heritage in Spain* project is a travelling exhibition, updated by TICCIH Spain, that has visited numerous venues and served as a catalyst for local restoration efforts, such as in Valladolid and Peñarroya-Pueblonuevo.

- Inventory catalogue of Industrial Film from the Spanish Film Archive. Ministry of Culture: National Plan for Industrial Heritage. 2024.

- National Plan for Industrial Heritage Good Practices Cycle. Case studies: 2025 Harinera Gabino Bobo (Zamora), 2024 Former Tannery of Ponte Pedriña (Santiago de Compostela).

- Renovation of the Fondón Mine Shaft in Langreo as the Historical Archive of Asturian Mining, promoted by the public company HUNOSA (Hulleras del Norte S.A.).

- The Superior Court of Justice of Madrid ruled in favour of associations "Madrid, Ciudadanía y Patrimonio" and "Ecologistas en Acción," once again annulling the urban planning of the Cuatro Caminos Depots by architect Antonio Palacios.

These examples illustrate the urgent need to anticipate documentation and conservation before key elements of industrial landscapes are lost.

MUSEUMS AND EXHIBITIONS

The industrial museum infrastructure has experienced a productive period. In 2023, the Venta de Baños Railway Museum was inaugurated, a project promoted by the local community, thereby consolidating Palencia as a hub for railway preservation. Similarly, the Catalonia Railway Museum in Vilanova i la Geltrú reopened in 2023 after a thorough museographic and structural renewal, celebrating the 175th anniversary of Spanish railways.

As for exhibitions, in addition to the *100 Elements,* highlights include:

- *Pioneers of Engineering* (Balmaseda, Biscay, La Encartada Museum, 8th TICCIH Congress, 2022).

- San José Mine Shaft in Mieres: *Pioneers, the Women of Coal.*

- *Homo Faber* (mNACTEC, permanent exhibition).

In the context of digitalisation, the Museu de les Aigües launched the virtual exhibition *12 Elements of Water Heritage in Spain* in 2022. They established a collaboration framework with TICCIH for developing national content on water heritage.

TRAINING AND EDUCATION INITIATIVES

Specialised training has gained strength:

- National Distance Education University (UNED): Postgraduate and accessible development programs with a modular structure—Analysis, Management, and Projects

Project to repurpose the old Peñarroya railway station into a Documentation and Tourist Resources Centre by La Maquinilla Association. (photo provided by the author)

in Industrial Heritage—offering three levels: University Expert, Degree, and a Master's.

- Polytechnic University of Madrid: G+I_PAI Training Classroom on Cultural Heritage Management and Intervention in Architecture and Industry.
- Thematic Network on Industrial Landscapes (RT-PAIND) researches the transformation of industrial landscapes during deindustrialisation.
- The Master's Degree in Management and Tourist Use of Industrial Heritage at the University of Oviedo, in collaboration with INCUNA, remains the national academic benchmark, combining theory, practice, and research.

Other universities have integrated specific content:

- The DOCUMENTA 4ccesib stands out in research, focused on inventory, study, and dissemination of Córdoba's industrial heritage, driven by local researchers and coordinated with heritage entities.
- UPV/EHU with modules on industrial regeneration.
- UPC with seminars on modernist factories.
- The University of Alicante offers a summer course in industrial archaeology.

TICCIH Spain complements this training through workshops, visits, and seminars linked to its congresses and thematic routes. Museums such as MNACTEC and MUMI have developed educational activities for school audiences, while organisations like Arquitectura Sin Fronteras or Hispania Nostra have hosted webinars accessible to broad audiences. Overall, the academic landscape is diversifying and democratising, preparing new generations of professionals and citizens engaged with industrial heritage.

SOCIAL AND COMMUNITY-BASED PROJECTS

Civil society has played a leading role in numerous community-based projects related to industrial heritage in Spain. The *La Maquinilla Association*, located in the Guadiato Valley (Córdoba), restored the Peñarroya smelter chimney through crowdfunding and volunteer efforts, and has operated an interpretation centre at the former railway station since 2023. Their work has inspired new networks such as Fabricando el Sur.

In the railway sector, associations like AVENFER or Friends of the Madrid Railway have restored historical equipment and promoted educational activities. In 2024, marking the 175th anniversary of the first Spanish railway, several entities organised exhibitions and historical reenactments.

In Barcelona, the self-managed Can Batlló project turned a former factory into an active social centre. In contrast, the 2023 demolition of the Abacería Market sparked a strong public response.

In the Basque Country, the Sestao Historia Viva collective, composed of former La Naval workers, preserves artefacts and testimonies from the shipyard. In rural areas, mining associations in León and Palencia operate small museums that have a significant local impact.

Initiatives such as *Minas y Memoria* in Mieres or school heritage routes in Linares demonstrate that industrial heritage is also an educational, identity-building, and community-cohesion resource.

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AUTHORS

This report has been prepared through the collaboration of the members of the TICCIH Spain Board of Directors, Ainara Martínez Matía (President of TICCIH Spain) and Miguel Álvarez Areces (representative of Spain to TICCIH International), and was coordinated by Julián Sobrino Simal (Member of the Board of Directors of TICCIH Spain).

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PORTUGAL

Maria Pia Bridge, opened in 1877. Built by Gustave Eiffel's company with Théophile Seyrig's project (photo by Joseolgon, Wikimedia, public domain)

Prof. Dr. José Manuel Lopes Cordeiro

The situation of industrial heritage in Portugal has not undergone significant changes since the previous report. Successive governments have consistently lacked a coherent policy for the field of industrial heritage, including its museology. There is no concern about creating an inventory of industrial heritage. A national plan to safeguard industrial heritage is increasingly necessary, as it is under ever greater threat, with some important sites having already disappeared. One example of this lack of interest is the Maria Pia Bridge, inaugurated in 1877 and built by Gustave Eiffel's company with Théophile Seyrig's project.

The bridge was designated a National Monument in 1982 and recognised as an International Historic Civil Engineering Landmark by the American Society of Civil Engineers (ASCE) in 1990. Decommissioned in 1991, it has since remained abandoned, with the government taking no steps to preserve it. In contrast, as part of the commemorations of the centenary of Gustave Eiffel's death, the French television channel RMC Découverte produced the documentaries *Tour, ponts, gares: le génie d'Eiffel révélé* and *Le plus grand pont en arc jamais construit*, highlighting the global significance of the Maria Pia Bridge.

The Blast Furnace of the National Steel Company in Seixal, inaugurated in 1961 and designated a Monument of Public Interest in 2012, is abandoned and in an advanced state of degradation, risking delisting and eventual destruction.

There are, however, some positive developments, particularly in the listing of industrial sites and in the government's interest in promoting industrial tourism. Turismo de Portugal carried out the first survey to characterise the Portuguese Network of Industrial Tourism. According to this 2023 survey, industrial tourism units received around 2.2 million visitors, primarily in the Porto and North (33.7%) and Azores (31.5%) regions.

ACTIVITIES

APPI (the Portuguese Association for Industrial Heritage) is the official representative of TICCIH in Portugal. During this triennium, it carried out numerous activities, including the first Meeting on the Industrial Heritage of Alto Minho in 2023 and two international conferences on Heritage and Cultural Landscape of Mining in 2023 and 2024.

APPI also publishes *Arqueologia Industrial* (Industrial Archaeology), a biannual peer-reviewed academic journal. The second issue of 2023 was a special themed edition on "Deindustrialisation and its policies", coordinated by two guest editors, including Steven High, Full Professor of History at Concordia University in Montréal, Quebec, Canada [see TICCIH Bulletin #106, 2024].

APPI has also collaborated closely with Turismo de Portugal within the framework of the Steering Group for the Portuguese Network of Industrial Tourism. The Big Stuff Conference took place in September 2022 and was organised by the Seixal Municipal Ecomuseum. In January 2023, São João da Madeira's Industrial Tourism organised the National Congress of the European Route of Industrial Heritage.

ALTERATIONS TO LEGAL PROTECTION

A double fuel pump station in Covas, Guimarães (1967), designed by architect Fernando Távora, António Estrella/Júlio Afonso Woollen Factory, Covilhã (1853) and Panificadora, Chaves (1962), designed by architect Nadir Afonso, were listed as a Monument of Public Interest. The Former Lionesa Silk Factory, Leça do Balio (1944) and the Nazaré Funicular, built in 1889 to the design of Raul Mesnier de Ponsard, were listed as a Monument of Municipal Interest.

WORLD HERITAGE

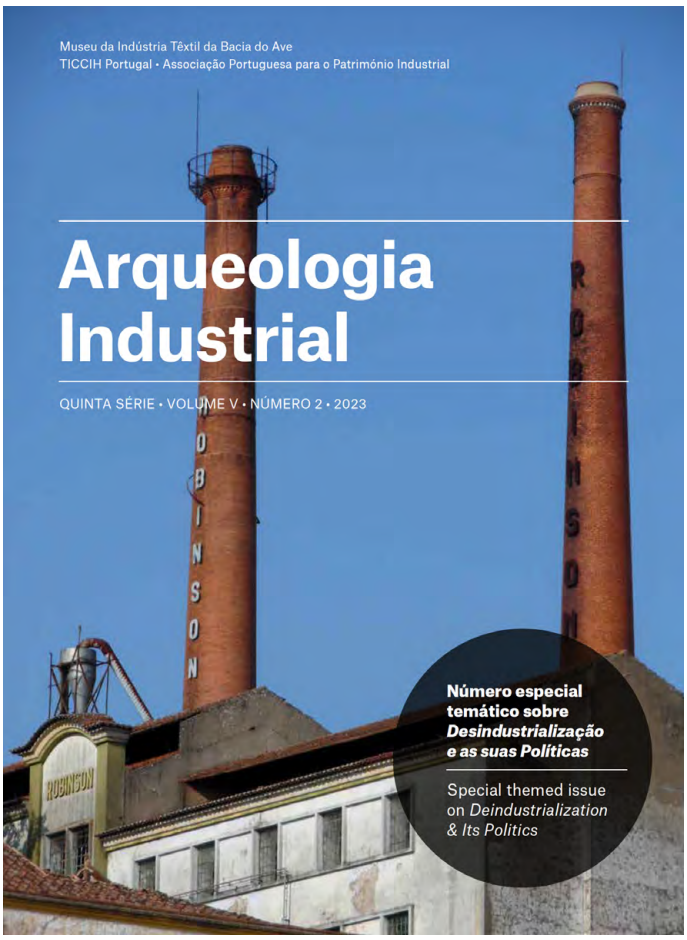
The extension of the Historic Centre of Guimarães to include the Leathers Zone, the historic core of the tanning industry, was approved as a UNESCO World Heritage Site in 2023. The lower deck of the Luís I Bridge, a UNESCO World Heritage Site since 1996, which connects Porto to Vila Nova de Gaia, underwent a meticulous rehabilitation and reinforcement process, completed in 2023.

RE-USE

- Gare do Arco Cego, Lisbon (1904), a former tram depot, repurposed as Lisbon Technical Innovation Centre.
- The Boco Bridge over the Cávado River (1908), Portugal's oldest reinforced concrete bridge, was rehabilitated and reopened to traffic in 2023.
- A steam locomotive used in the construction of Ponta Delgada harbour, Azores, was restored and is on display.
- The Pedorido Bridge over the Arda River, built in 1893, was rehabilitated.
- A public debate was held in the Azores on the rehabilitation of the 1886 Sugar Factory in Ponta Delgada and the 1882 Alcohol Factory in Lagoa.

RESTORATION

- The Fão Bridge over the Cávado River in Esposende (1888–1891), listed in 1986 as a Monument of Public Interest.



Arqueologia Industrial special themed edition on "Deindustrialisation and its policies" (photo by author)

- Fôjo Headframe, Pejão Coal Mine, Castelo de Paiva (opened in 1952 and deactivated in 1968).
- São Vicente Headframe, São Pedro da Cova Coal Mine, Gondomar (1934), classified in 2010 as a Monument of Public Interest.
- In Entroncamento, three former railway neighbourhoods were rehabilitated to provide affordable housing, including a museum centre, a science centre and the National Railway Documentation Centre.
- The old railway station of Mirandela (1887) was restored and converted into a cultural and arts centre.

LOSSES

- The 'Triunfo' Factory in Coimbra, founded in 1913, was built in reinforced concrete and expanded in 1932 to produce pasta, cookies, and biscuits. However, it was destroyed.
- Porto-Boavista Railway Station (1875) is slated for demolition to make way for a shopping centre.
- The Alburrica tide mill in Barreiro was destroyed.

Freixo Thermoelectric Plant, built in 1926

- The Confiança Soap and Perfumery Factory in Braga (1894), listed as a Monument of Public Interest since 2020, will undergo an unrecognisable transformation as it is adapted into a university residence.
- Prado Fish Canning Factory, Matosinhos (1934), was demolished for real estate.
- The Freixo Thermoelectric Plant (1926) and Freixo Industrial Company (1947), both located on the banks of the Douro River in Porto, are slated for demolition and will be replaced with luxury housing.
- Two years after its closure, in 2023, the demolition of the Matosinhos refinery began.
- The tobacco factory "A Tabaqueira", Lisbon, a brick and iron masonry building, built in 1927.

STILL AT RISK

- The Titan steam crane on the North pier of Leixões Harbour, built in 1884, is in poor condition and threatened with demolition.
- Robinson Cork Factory, Portalegre (1848), abandoned and under threat.
- Aurifícia Company, a metallurgical factory founded in 1865 in Porto, is in a state of uncertainty.

MUSEUMS AND EXHIBITIONS

- In Sintra, the Water and Waste Museum was opened, utilising a building from 1901 that had previously served as a garage and tramway workshop.
- In Estarreja, the Fábrica da História museum is dedicated to the history of rice production.
- In Alcanena, the Municipal Museum and Archives were opened, with the Museum housing three long-term collections that focus on the tanning industry, archaeology, and local history.
- In Vila Pouca de Aguiar, the Jales Mining Interpretation Centre was opened, located in a mine which closed in 1992. It was the last gold exploration in Portugal.
- In Torres Novas, the former Caldeirão Hydroelectric Plant, established in 1923, has been repurposed as a museum.
- In Castelo de Paiva, the Pejão Mine Tourist Experience Centre was opened, featuring 3D image projection techniques and sound recreation.
- In Ponte do Sor, reusing part of the facilities of the old cereal milling and rice husking factory, the Municipal Museum was opened, presenting the history of the municipality's rice industry.

- Reusing the former miners' canteen in Barroca Grande, Covilhã, the Interpretive Centre of the Panasqueira Mine, whose exploration began in 1898, was opened. The museum exhibits heavy machinery used for prospecting, excavation, washing, and transportation.
- The Aljustrel Mining Park, located in Beja, was opened. Visitors can explore an old mining gallery.
- The first Portuguese hydroelectric plant, the Biel Power Plant, built in Vila Real in 1894, was restored and transformed into a Museum of Industrial Archaeology.
- The São Pedro da Cova Mining Museum in Gondomar has reopened.
- Vista Alegre Porcelain Factory, founded in 1824 in Ílhavo, began celebrating its 200 years of uninterrupted activity.
- The River Ave Valley Textile Industry Museum, Famalicão, hosted an exhibition titled *175 Years of the Rio Vizela Textile Mill*, marking the oldest mill in the region.
- In Porto, the National Museum of Press, Newspapers and Graphic Arts, founded in 1997, was closed, and its future is unknown.

RESEARCH

The topic of industrial heritage continues to evoke much interest in the academic world, particularly in master's and Doctoral dissertations. Numerous theses were presented in the field of architecture (re-use projects), museology, and historical and archaeological studies. Archaeology and industrial heritage are also part of the study plans of some university courses.

PUBLICATIONS

- The German journal *Industriekultur*, 2/25, focuses on Portugal's industrial heritage.
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I thank Leonor Medeiros for her contribution to this report.

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MALTA

Prof. Ing. Robert Ghirlando

Although the general attitude to Industrial Heritage is still far from satisfactory, there has been, in the period under review (2022-2024), an increased awareness of the importance of preserving and valorising industrial heritage. This is due to some events such as the setting up of the Malta Industrial Heritage Association (MIHA) in June 2002, a seminar on The Future of Industrial Heritage in Malta in January 2023 organised by the Industrial Heritage Platform (IHP) of the University of Malta and the completion of the adaptive re-use of the Farsons Brewery and the former *Deutsche Welle* Radio Station.

There is also a growing awareness of the richness of our water heritage, with many reservoirs built over the centuries being cleaned, repaired and put back into use. Two important books on the subject of water in Malta were also published.

ACTIVITIES

As far as I am aware, there are only two members of TICCIH in Malta, namely Prof Ruben Borg and I. Both of us are members of the IHP and MIHA committees. MIHA has been actively seeking suitable premises for a museum of industrial heritage to house its growing collection of artefacts. MIHA's first project was to save a portable boiler from being scrapped, have it painted, and then place it in a prominent location on the main campus of the University of Malta as a monument to Malta's industrial Heritage. MIHA has published Newsletters and organised visits to industrial heritage sites for its members. MIHA members have participated in a series of interviews on a local TV station and given public lectures. MIHA is also in discussions to be given the management of several industrial heritage sites, which are currently closed to the public.

PUBLIC POLICIES AND ORGANISATIONS

There were no changes to public policies, but the setting up of MIHA, an NGO open to membership to anybody with an interest in industrial heritage has been a significant step forward.

ALTERATIONS TO LEGAL PROTECTION

No changes to report.

OUTSTANDING PROJECTS AND NOTABLE CASES

The Farsons Brewery and the former *Deutsche Welle* Radio Station are notable examples of adaptive reuse. The former has been transformed into an Office Campus and renamed Trident Park. Apart from providing office space to various companies, the complex also features three restaurants and a museum dedicated to the history of the brewery. The original copper kettles and other pieces of equipment have been retained. After extensive restoration

The Portable Boiler at the University of Malta campus (photo by author)

1907 Machine shop for training apprentices (photo by author)

The former *Deutsche Welle* Radio Station adapted for re-use as a Wildlife Rehabilitation Centre (photo by author)

of the former *Deutsche Welle* Radio Station, the building now serves as a sanctuary and wildlife rehabilitation centre, particularly for turtles. On the other hand, the Marsa Power Station, built in the 1960s and further expanded until the 1980s, was recently demolished. For some time, this Power Station was Malta's only source of electricity.

MUSEUMS AND EXHIBITIONS

In the previous National report, I inadvertently omitted mentioning that, although we still lack a museum of industrial heritage, several museums for aviation, railway, and limestone quarrying have been established and are run through the efforts of private individuals. The ancient Salina, used for the production of salt from seawater, has been restored, and a visitor centre added.

Another interesting development has been the restoration of locally built buses by their owners. These are now used as tourist attractions.

TRAINING AND EDUCATION INITIATIVES

There are, as yet, no formal courses in industrial heritage. The IHP seminar mentioned earlier was in itself an edu-

Water reservoir built for the Royal Navy, circa 1906 (photo by author)

cational experience for many. MIHA is discussing with the Commonwealth Forum for Industrial Heritage the possibility of the Forum providing training and expertise in Malta. Prof Ruben Borg is involved in EU-funded projects with other foreign partners that offer educational experiences in industrial heritage valorisation, restoration and conservation.

PUBLICATIONS

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AUTHOR

Robert Ghirlando is a Mechanical Engineer, having studied at the Universities of Malta and Liverpool. He worked in the manufacturing industry before joining the University of Malta in 1987. He is currently a Visiting Professor and a Senior Fellow (Professor Emeritus) of the University of Malta. He has a keen interest in industrial heritage. Apart from lecturing on the subject, he has written about Malta's industrial heritage and founded the Industrial Heritage Platform at the University of Malta. In June 2022, he founded, together with some friends, the MIHA.

Contact the author

THE AMERICAS

CANADA

Dr. Christina Han, Jean Farquharson & Lillia Dockree

Across Canada, attitudes toward industrial heritage have undergone substantial evolution in recent years. Once viewed as functional relics of a bygone era, industrial sites are now appreciated as cultural and architectural assets integral to Canadian identity. This shift has been influenced by growing public interest in sustainability, place-making, and inclusive historical narratives. There is also growing concern around the vulnerability of many industrial sites. Ageing infrastructure, development pressures, and insufficient heritage protections pose ongoing risks. However, this awareness has fueled advocacy efforts and led to new forms of public engagement, including oral history projects, walking tours, community art installations, and augmented reality interpretation tools.

ACTIVITIES

Canada does not have a stand-alone TICCIH national chapter. Instead, the Canadian Industrial Heritage Centre (CIHC), based in Brantford, Ontario, serves as the Canadian representative to TICCIH. CIHC maintains the TICCIH Canada platform, organizes industrial heritage programming, and participates in international and national heritage discourse and symposia.

The CIHC coordinates public exhibitions, oral history initiatives, student placements and advocates for preserving industrial landmarks across Canada. In recent years, CIHC has contributed to TICCIH Congresses and supported collaborations among academics, museum professionals, and urban planners. Other regional contributors to industrial heritage include the Nova Scotia Museum of Industry, Heritage Edmonton, Toronto's Architectural Conservancy, and local archives engaged in documenting and preserving Canada's working past.

PUBLIC POLICIES AND ORGANISATIONS

The last three years have witnessed a nuanced transformation in how public policy frameworks accommodate industrial heritage. While no dedicated national strategy for industrial heritage exists, municipalities and provinces have adopted integrated approaches that align heritage conservation with urban renewal and economic development.

Municipalities like Toronto and Hamilton have expanded their heritage registers to include industrial buildings and landscapes in Ontario. In Toronto, adaptive reuse has become a core component of development proposals in formerly industrial districts, particularly along the waterfront and the downtown west end. Similarly, industrial heritage is being incorporated into British Columbia's planning through projects like Dockside Green in Victoria and the redevelopment of shipyards in North Vancouver.

Federal infrastructure grants and brownfield remediation programs often support these changes. Although these are not heritage-specific, they create conditions for preserving industrial sites. The role of local heritage advisory committees has also increased, with more municipalities requiring Heritage Impact Assessments for developments involving industrial properties.

View of the Mohawk Lake District, a former brownfield site in Brantford, Ontario, featuring the former Cockshutt Moulded Aircraft Ltd. facility, built in 1942 (photo provided by the authors)

ALTERATIONS TO LEGAL PROTECTION

Canada has not added new industrial sites to the UNESCO World Heritage list in the past three years, but discussions are ongoing regarding potential nominations. There is particular interest in transnational submissions that highlight the shared industrial legacy of the Great Lakes and St. Lawrence Seaway.

Recent legislative changes in Ontario have raised serious concerns. Bill 23, passed in 2022, introduced a two-year expiry for non-designated listed properties on municipal heritage registers, impacting more than 31,500 sites. It also prohibits designation once a development application is filed, weakening protection for many heritage resources. These changes risk the demolition of viable heritage buildings and diminish the ability of municipalities to safeguard industrial and underrepresented heritage assets.

At the local level, updates to municipal bylaws in cities like Toronto and Edmonton have created new protections for industrial sites. In Alberta, the Iron Works building in Edmon-

ton was granted heritage status after a successful campaign. New Brunswick and Nova Scotia have added new sites, including shipyards and granaries, to provincial inventories.

A major political development is the outcome of a recent contentious federal election, which resulted in a new national government and a new prime minister.

OUTSTANDING PROJECTS AND NOTABLE CASES

- Niagara Falls Power Station (Ontario): Pearle Hospitality has taken on the restoration and adaptive reuse of this decommissioned hydroelectric power station. The project aims to blend heritage preservation with public accessibility, including tours and event space.
- Waterworks Food Hall (Toronto, Ontario): A former water maintenance facility was transformed into a vibrant food hall and mixed-use development, preserving architectural elements such as brick façades, arched windows, and industrial beams.
- Bathurst Quay Common (Toronto): Incorporating the historic Canada Malting Silos, this waterfront park project has integrated industrial remnants into public infrastructure and art installations.
- Cockshutt Plow Buildings (Brantford, Ontario): The CIHC has been working with the City of Brantford to lobby for the restoration work on the former Cockshutt Plow Company site, once a cornerstone of Canadian agricultural machinery manufacturing. Plans include cultural programming and public heritage interpretation.
- Iron Works Building (Edmonton, Alberta): A rare example of early 20th-century industrial architecture in downtown Edmonton, this building was restored and adapted into commercial space, thanks to advocacy from heritage groups and the city.
- Heritage Home in St. John's, Newfoundland: A routine restoration project unexpectedly uncovered the remains of a 19th-century cooperage. The discovery has sparked renewed interest in documenting hidden industrial histories within residential neighbourhoods.

MUSEUMS AND EXHIBITIONS

Canada's industrial museums continue to evolve, with both permanent institutions and temporary exhibitions playing vital roles in public engagement.

- The Oil Museum of Canada in Oil Springs, Ontario, reopened in 2022 following extensive renovations.
- The Great Lakes Museum, formerly known as the Marine Museum of the Great Lakes, reopened in Kingston in 2024. Highlights include the arrival of the SS Keewatin steamship.
- The Winnipeg Railway Museum is undergoing major upgrades and is anticipated to reopen in late 2025. Pop-up and mobile exhibitions organized by groups like the CIHC and local historical societies have successfully engaged diverse audiences.

Setting up for a Doors Open Ontario event at the former Cockshutt Moulded Aircraft Ltd. site, organized by the Canadian Industrial Heritage Centre (CIHC) and Brant Theatre Workshops (photo by Jean Farquharson)

TRAINING AND EDUCATION INITIATIVES

Education in industrial heritage is expanding through both formal and informal channels. At the post-secondary level, institutions such as the University of Toronto, York University, Wilfrid Laurier University, and the University of British Columbia incorporate industrial heritage into Public History, Urban Studies, and Architecture programs.

CIHC created an annual symposium in 2024. The first year's theme was The 3Rs of Industrial Heritage Renewal: Rehabilitation, Restoration, Regeneration. CIHC in Brantford has led student-involved projects, including digitization of factory archives and oral history interviews with former workers.

Professional development opportunities—such as the Canadian Association of Heritage Professionals (CAHP) conferences and heritage trades programs—have increasingly included topics like adaptive reuse, conservation skills, and sustainability, which are applicable to industrial heritage contexts.

The Swords and Plowshares Revisited exhibition explored Brantford's wartime manufacturing contributions and the temporary conversion of agricultural factories into military production facilities (photo by Jean Farquharson)

Opening lecture for Swords and Plowshares Revisited, delivered by CIHC Director Rob Adlam (photo provided by the authors)

SOCIAL AND COMMUNITY-BASED PROJECTS

Community-driven industrial heritage projects have multiplied in recent years, reflecting the democratization of heritage interpretation. These examples show that industrial heritage is no longer confined to museum walls.

- In Brantford, the CIHC's Immigrant Memories of Brantford series involves immigrant industrial workers and senior communities in documenting their stories. The CIHC hosted a highly successful Heritage Doors Open event at the former Cockshutt Moulded Aircraft Ltd.
- In Newfoundland, the discovery of a cooperage beneath a restored home has sparked a wave of interest among residents in artisanal trades, memory work, and archival research.
- Toronto's waterfront projects, such as The Bentway and Bathurst Quay Common, have successfully incorporated historic industrial structures into accessible community spaces.
- In Manitoba, the Forks redevelopment continues to evolve, blending public markets and green spaces with interpretation of the area's railway and shipping past.
- In Saskatchewan, the South Downtown redevelopment in Saskatoon has attracted interest because it integrates historic rail infrastructure into new public and residential zones.

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AUTHORS

Dr. Christina Han is the President of the Canadian Industrial Heritage Centre (CIHC) and an Associate Professor of History at Wilfrid Laurier University. A specialist in East Asian cultural history and digital public humanities, she brings extensive experience in curatorial work, heritage interpretation, and community-based research. Dr. Han leads numerous public history initiatives that connect academic research with local industrial and immigration histories across Ontario.

Contact Christina Han

Jean Farquharson is the Vice President of the Canadian Industrial Heritage Centre (CIHC). With a background in education and community engagement, she has played a central role in advancing CIHC's outreach programs, exhibitions, and partnerships. Jean is a passionate advocate for preserving Brantford's rich industrial past and sharing it through inclusive, inter-generational initiatives.

Lillia Dockree is a Director at the Canadian Industrial Heritage Centre (CIHC) and an active contributor to heritage education and programming. She is committed to fostering public awareness of industrial history through storytelling, exhibition development, and accessible learning. Her work focuses on building connections between local communities and their industrial heritage.

CANADA, QUEBEC

Alain Gelly

The Association québécoise pour le patrimoine industriel (AQPI) is a national heritage organization whose mission is to promote the study, knowledge, conservation, integration, and development of industrial heritage in Québec.

In Canada, there is no federal heritage legislation; however, there are laws related to the management of Canadian heritage. Under the Historic Sites and Monuments Act, the federal government may also commemorate a historic site, event, or person. However, these designations are limited to a gesture of recognition, except in the case of sites that it has owned or managed.

Until 2023, the Rideau Canal National Historic Site was the only Canadian industrial site on the World Heritage List. In 2023, the Tr'ondëk-Klondike site in Yukon was added to the list by the World Heritage Committee for the following reasons:

1. It is an outstanding example of an evolving mining landscape.
2. It bears witness to the iconic gold rush of the 19th century.
3. It was of great importance in human history.

There are no industrial sites on the tentative list of World Heritage Sites in Canada, except maybe the cable station at Heart's Content, Newfoundland, and its twin station at Valentia, Ireland, that might be considered as industrial.

The legal protection and promotion of heritage in Canada is a provincial and territorial responsibility, which is reflected in the profile of associations such as the Association québécoise pour le patrimoine industriel, since there is no national or pan-Canadian organization. In Québec, the Cultural Heritage Act is the main law that frames government intervention in the field. Industrial heritage is represented by 116 buildings or complexes protected by classification status, as well as approximately 30 others protected by municipalities, in addition to 15 former industrial buildings included in larger sites. One of the 13 sites with the highest status of heritage recognition in Québec and the last to be granted this status, the former town of Arvida also belongs to the category of industrial heritage.

ACTIVITIES

Building on a strategic plan adopted in 2016, the AQPI decided to prioritize industrial tourism by launching the *Découvrir Québec industriel* (Discovering Industrial Québec) project in 2017. *Découvrir Montréal industriel* (Discovering Industrial Montréal) was the first stage of this larger project, expected to extend to other regions of Québec. In addition to the four urban exploration circuits created in four Montréal neighbourhoods between 2018 and 2022, two others have been added since then, in Centre-Sud and Hochelaga-Maisonneuve.

View of buildings 1 to 6 of the E.B. Eddy factory complex, April 1898 (photo by Topley Studio, LAC, PA-027997)

Tank rooms at the National Historic Site in Shawinigan, the Musée canadien de l'aluminium (photo by Pierre Lahoud)

In the fall of 2023, the AQPI launched *S'approprier l'histoire industrielle de son quartier* (Discovering the industrial history of your neighbourhood). This project is designed to enable the discovery of various industrial sites (still in operation or converted) through the creation of participatory citizen activities.

As part of Action-Climat Québec, the Ecobâtiment group presented a project in 2024 entitled *Valoriser les bâtiments existants III - Patrimoine industriel pour le climat: création de milieux de vie durables et accessibles* (Showcasing existing buildings III - Industrial heritage for the climate: creating sustainable and accessible living environments). The AQPI is one of the project's partners.

Québec also has two other organizations concerned with industrial heritage. These are the *Corporation des gestionnaires de phares de l'estuaire et du golfe Saint-Laurent* (Corporation of lighthouse managers of the St. Lawrence Estuary and Gulf); and the *Association des moulins du Québec* (Association of Québec Mills, or AMQ), which has been promoting the preservation, knowledge, appreciation, and enhancement of water mills and windmills since 2008. In addition, Action Patrimoine (architecture and landscapes of Québec heritage agency) is a national non-profit organization that has been working since 1975 to protect, enhance, and promote the built heritage and cultural landscapes of Québec. Regionally, it should also be mentioned that the *Société d'histoire de la Baie-James* (James Bay Historical Society) is dedicated to preserving and promoting the historical heritage of the towns and localities of James Bay and the Northern Québec region (James Bay, Eeyou Istchee, Nunavik), including an important mining heritage that shaped the history of the region.

ALTERATIONS TO LEGAL PROTECTION

In April 2021, the National Assembly of Québec adopted the recast of the Cultural Heritage Act. Under the revised Act, municipal authorities are required to draw up, adopt, and periodically update an inventory of buildings constructed before 1940 (including industrial facilities). It is hoped that these inventory exercises will promote greater awareness and better conservation of industrial heritage elements that have previously gone unnoticed or remained unknown.

In 2025, the City of Montréal tabled its Cultural Policy, some of whose guiding principles and guidelines will directly or indirectly influence Montréal's industrial heritage.

OUTSTANDING PROJECTS AND NOTABLE CASES

Commemoration

In 2025, two industrial heritage landmarks will be commemorated. The Arvida Aluminum Bridge is celebrating its 75th anniversary, marked by a series of enhancements, thanks to

Arvida Aluminum Bridge (photo by Miles Oglethorpe)

a tripartite collaboration among the municipality, Rio Tinto (owner of the bridge's surroundings and aluminum plants in the region), and the Government of Québec. For its part, the 200th anniversary of the Lachine Canal in Montréal is giving rise to numerous festive and commemorative activities organized by Parks Canada, which manages the Lachine Canal National Historic Site, and various heritage and institutional stakeholders in Montréal.

Reuse

Having reached the end of its service life, the Champlain Bridge, which connects the Island of Montréal to the south shore of the St. Lawrence River, was decommissioned in 2019. Between July 2020 and November 2023, the bridge's deconstruction has enabled the removal of 92 modular reinforcement trusses and the dismantling of 56 spans, 53 piers, and 53 footings. In addition to the program to recover and recycle these 264,000 tons of materials based on the 3RV-E approach, the Champlain Bridge materials reuse contest has aimed to give a second life to steel parts from the bridge while creating benefits for the community as a whole.

Requalification

In December 2024, the redevelopment project for the former Molson brewery site in Montréal was presented to the public. This large-scale project comprises 5,000 housing units, including social, affordable, and family housing, as well as new lots for social housing. It also features a hotel, shops, offices, event venues, a public park, and a site with civic and economic purposes. The construction period, which has already begun with demolition, is scheduled to last for the next 10 years.

In June 2024, the Darling Brothers buildings in Montréal were classified as heritage buildings by the Ministère de la Culture et des Communications du Québec, a designation that applies to both the interior and exterior of the buildings. These structures, constructed as of 1889, were built for the production of industrial hydraulic equipment and serve as significant reminders of Québec's metalworking industry.

Demolition

On May 27, 2025, the heritage Scies Mercier factory, built in Lévis at the turn of the 20th century, was demolished to make way for apartments. The Bennett Fleet factory, specialized in shoe components and constructed in 1918 along the Chambly Canal, was demolished in 2025 to make way for an apartment complex as well.

MUSEUMS AND EXHIBITIONS

Archives

Since August 2019, the Notman Photographic Archives held at the McCord Stewart Museum have been inscribed in UNESCO's Memory of the World Register. Among other things, they document Montréal, the hub of the country's economic development, as well as industrial places in Canada.

New and future museums

At the *Cité de l'énergie* in Shawinigan (see in museums below), the new Canadian aluminum museum is currently being developed and is scheduled to open in 2027 with a permanent exhibition on aluminum, conceived as a historical and cultural phenomenon in Canada, The museum will occupy a building that was once Canada's first aluminum smelter, which is also the Ancienne-aluminerie-de-Shawinigan National Historic Site of Canada.

The future *Musée régional de l'Outaouais* (Outaouais Regional Museum, or MRO) plans to relocate to the former E. B. Eddy industrial complex, which is currently abandoned. Initiated in 2024, a guided tour of one of the site's buildings has enabled visitors to discover the *Allumettières* (match makers), female match workers who left their mark on the history of the Outaouais region.

The *Musée du Patrimoine d'Arvida* (Arvida Heritage Museum) has undertaken a major renovation project to restore the former church, where it will reopen in 2028 with a brand-new permanent exhibition. In the meantime, the museum is particularly active in organizing a variety of heritage activities to mark the 100th anniversary of the City of Arvida in 2026. In the meantime, it presents temporary exhibitions such as the travelling exhibition Identity on the Land: Company Towns in Canada.

New exhibitions

Between 2022 and 2025, several museums and interpretation centres dedicated to industrial heritage renewed their permanent exhibitions or showcased new temporary ones. In Montreal, the *Écomusée du fier monde* (People's Pride Ecomuseum) presented the exhibition *Carrefours et culture: la rue Ontario des Faubourgs* (Crossroads and culture: Ontario Street in the boroughs), and the exhibition *Habilis: le geste, l'esprit et la matière* (Habilis: gesture, spirit, and matter), exploring the workplaces of artisans who continue to practice time-honoured crafts, often in places that have been marked by industry. Pointe-à-Callière, Montréal's archaeology and history complex, although not primarily focused on industrial heritage, featured in 2024-2025 *Saint-Henri, le cœur à l'ouvrage* (Saint-Henri, hard at work), presenting the rise of an artisan village to a prosperous industrial town.

Boréalis, a museum dedicated to the history of industrial paper-making, located in Trois-Rivières, opened its new permanent exhibition, Transformations, in 2024. The exhibition features an immersive circuit that explores the harsh reality of workers in the previous century, as well as the technological and environmental challenges faced by an industry in constant flux.

The *Musée de l'Ingéniosité J. Armand Bombardier* (Ingenuity museum, Valcourt, Estrie) has been offering visitors a narrative focused on the ingenuity of an inventor who transformed snow transportation. The museum has recently hosted several exhibitions, including *Sur toute la ligne – Mémoire ouvrière* (Across the board – Workers' memory, 2024-2025) and Célébrons la puissance Rotax, commemorating the 100th anniversary of the Austrian manufacturer Rotax (2022), to name just two. The museum also offers guided tours of the BRP factory in Valcourt, providing a rare opportunity in Québec and Canada to explore an active industrial site.

In Thetford Mines, the Musée Minéro showcases both the geological and mining history of the city, as well as the discovery of chrysotile asbestos following the closure of the mines. Since 2025, it offers an immersive exploration of the daily lives of miners entitled *Des lumières sous terre* (Lights underground).

Hydro-Québec, Canada's largest electricity producer, has opened 16 sites to the public, including 11 interpretation centres, to provide access to its industrial and technological heritage. Its historical collection also includes more than 4,500 objects that reflect the evolution of electricity and its activities.

Several museums are also dedicated to the industrial history of Quebec's regions or to specific industries. The Musée de Société des Deux-Rives in Salaberry-de-Valleyfield, for example, explores the textile industry. In Shawinigan, the *Cité de l'énergie* (Energy city) includes a 115-metre observation tower (equivalent to 38 stories) built on a former electricity transmission tower and two hydroelectric power plants. In Alma, the *Odyssée des Bâtisseurs* (Builder's odyssey) showcases the power of water in their region, the development of the hydroelectric network, and the challenges of water management. Several other sites in Québec showcase industrial heritage through exhibitions, including Exporail – the Canadian Railway Museum, the Val-Jalbert Historical Village, and the Chicoutimi Pulp Mill.

TRAINING AND EDUCATION INITIATIVES

The Deindustrialization and the Politics of Our Time partnership research group, based in Montréal but bringing together researchers and partners from six American and European countries, has launched the "Heritage and/in Deindustrialization" initiative, which aims to explore the effects, roles, and issues of heritage, particularly industrial heritage, in communities affected by industrial closures. The group's work will conclude in 2027 with a symposium on this theme in Italy.

PUBLICATIONS

In addition to the AQPI newsletters…

- "Industrial Heritage: Living Forces," *Continuité*, Summer 2025, No. 185 (special issue).
- *Passerelle, Étude sur les maisons allumettes*, Gatineau, Passerelle coopérative en patrimoine, 2024.
- *La Société d'histoire de la Baie-James, Chronologie du développement industriel à la Baie-James*, Baie-James, La Société d'histoire de la Baie-James, 2023.

AUTHOR

Alain Gelly (Ph.D.) is a historian with Parks Canada's History and Commemoration Branch. After working for many years in applied history, where he published works on urban, scientific, and heritage history, he began his career at Parks Canada in 1995. Within the agency, he has developed solid expertise in industrial and cultural heritage while producing reports on economic, military, scientific, and social history. His numerous writings, presentations, and exhibitions reflect the diversity of his interests and expertise.

Contact Alain Gelly

UNITED STATES

Ron Petrie, Duncan Hay, Fred Quivik, Steven A. Walton & Christopher Marston

The United States' new administration appears to be hostile toward federal funding of intellectual pursuits. It is likely to reduce available manpower and funding resources for industrial heritage research and preservation. The US is reviewing its UNESCO membership, and appears likely to withdraw as it did during the previous Trump administration. Any significant change in federal spending, employment or obligations requires legislative action, where tempered compromise and practical considerations may surface. In the US, most industrial heritage preservation is in the hands of state, local, and non-governmental agencies, which will try to continue operating as before.

ACTIVITIES

The principal industrial heritage organization in the United States is the Society for Industrial Archeology (SIA), which in 2021 celebrated its fiftieth year dedicated to the study and preservation of industrial heritage in the United States and Canada. SIA is headquartered at Michigan Technological University in Houghton, MI, which offers the only graduate program directly related to industrial heritage in the United States.

In late summer 2021, its annual conference, delayed by two months, was held in Bethlehem, Pennsylvania, with a focus on anthracite coal mining. The 2022 annual conference was held in Portland, Oregon, featuring tours and presentations that focused on the diverse industries of the Pacific Northwest. In 2023, the membership gathered at Grand Rapids, Michigan, historically a center of furniture manufacture in the American Midwest. Last year, the conference was held in Minneapolis, Minnesota, with tours focusing on flour milling and infrastructure along the Mississippi River. SIA membership remains steady at around 800 members, many of whom are also members of one of the ten active regional and local chapters, spanning from New England to the West Coast. Annual conferences draw between 100 and 200 attendees, and fall tours typically have around 50 people.

ALTERATIONS TO LEGAL PROTECTION

National Park Service

The U.S. National Park Service (NPS) administers National Parks, National Historical Parks, the Historic American Engineering Record (HAER), and the federal list of sites: the National Register of Historic Places (NRHP), and the list of sites of greater national significance elevated to National Historic Landmark (NHL) status.

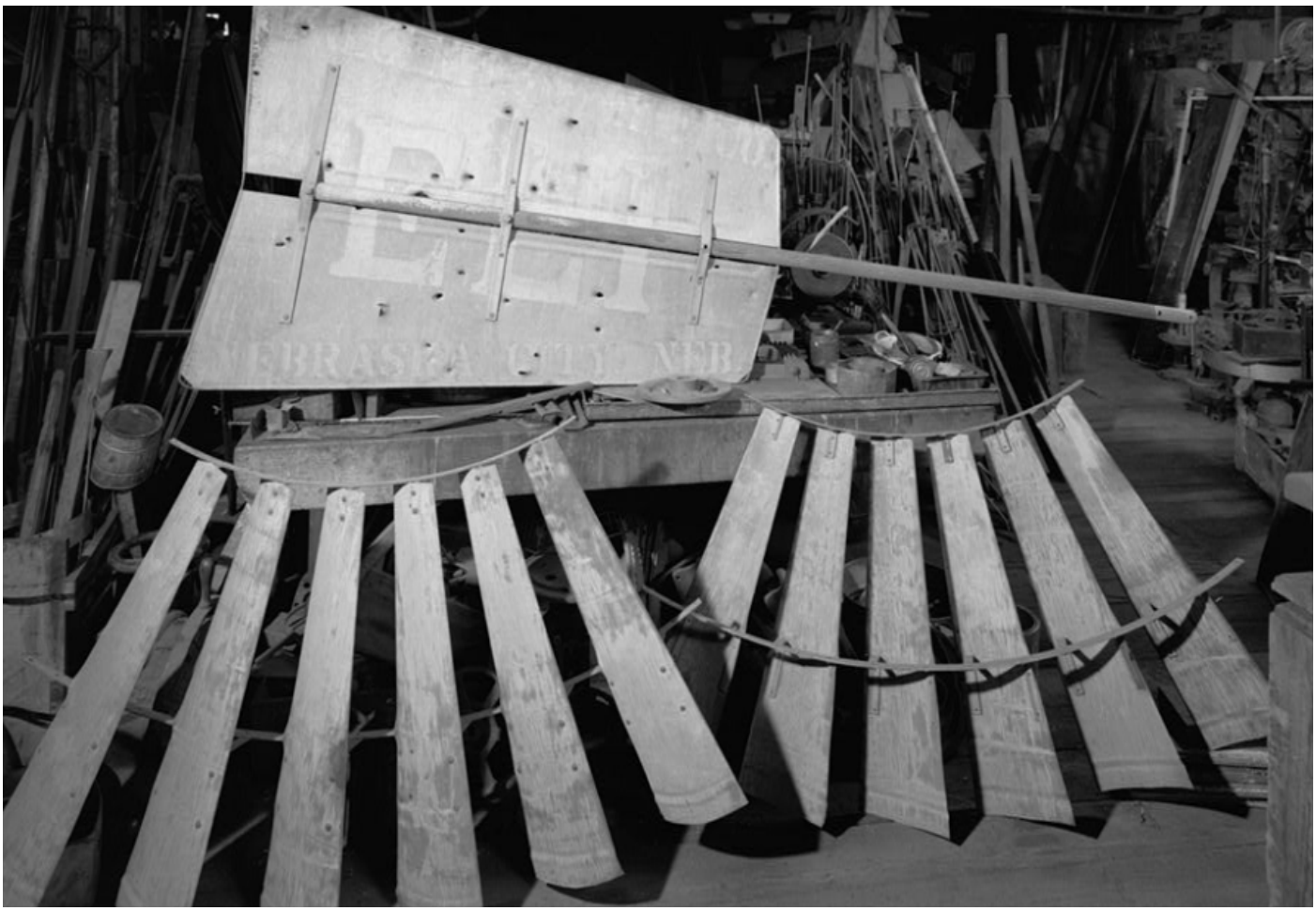
The National Register has listed 215 new sites since 2022, some of which have Areas of Significance that include industry, engineering, and/or transportation. Several industrial heritage sites have National Historic Landmark (NHL) status: the Charleston Cigar Factory in South Carolina, the Kregel Windmill Company Factory in Nebraska, the Mr. Charlie Offshore Oil Rig in Louisiana, and the Reeve REA Power Generating Plant in Iowa.

Windmill vane and blade assembly inside the Kregel Windmill Company Factory, a National Historic Landmark (photo by Jet Lowe, HAER)

Historic American Engineering Record

The Historic American Engineering Record (HAER) is one of three divisions that comprise the U.S. National Park Service's Heritage Documentation Programs. HAER surveys historic sites using the latest terrestrial laser scanners to achieve highly accurate 3D point clouds from which 3D models are created and manipulated into archival architectural drawings.

HAER continues to document a variety of industrial heritage sites, which are transmitted to the Library of Congress. Recent projects include: the 1940s-50s Suitland Parkway (Maryland), the 1913 Van Buren Swing Bridge (Oregon), the 1861 C&O Canal Dam No. 4 (Maryland), and the 1932 Arlington Memorial Bridge (post-rehabilitation, DC). Maritime resources include: 1901 New York State Barge Canal Tugboat *Urger* (New York), 1833 Charlestown Navy Yard Dry Dock 1 (Massachusetts), 1900 Steamboat *Tuscarora* (New York), Chesapeake Bay Workboats (Maryland), 1947-1963 U.S. Coast Guard Lifeboats (Oregon/Washington), and the *Seaweed*, used in the 1969 Indian occupation of Alcatraz (California, moved to Washington).



Windmill vane and blade assembly inside the Kregel Windmill Company Factory, a National Historic Landmark (photo by Jet Lowe, HAER)

Working with the Hagerty Drivers Foundation, historically significant vehicles recorded include: Amelia Earhart's 1937 Cord 812 Convertible Phaeton Sedan (Indiana); 1952 Porsche-type 540 America Roadster (North Carolina); Ed Roth's 1962 Beatnik Bandit (Nevada), which inspired Hot Wheels toys; and the 1965 Dodge Deora concept car/truck.

OUTSTANDING PROJECTS AND NOTABLE CASES

2025 marks the bicentennial of the opening of the Erie Canal across New York. Completed in October 1825, the canal provided the first navigable all-water link between the Atlantic Ocean and the upper Great Lakes. With its western terminus above Niagara Falls, the Erie Canal opened the interior of the North American continent to Euro-American settlement, commercial agriculture and industrialization. It carried products between the U.S. and the Canadian Midwest, as well as the Atlantic, leading to the rapid growth of inland lake ports such as Cleveland, Detroit, Milwaukee, Chicago and Duluth.

Enlarged several times during the 19th and early 20th centuries, the Erie Canal remains operational today, passing commercial tug and barge tows along with multitudes of smaller recreational vessels. The current version of New York's canal system, completed in 1918, was designated a National Historic Landmark district in 2016. The district encompasses 450 miles of channel, 57 locks, fixed and movable dams, freight terminals, water supply reservoirs, state-owned dry docks and repair shops, and hundreds of fixed and movable bridges that date back to the original period of construction.

Celebrations of the two-hundredth year of the waterway that opened the continent, made New York the Empire State, and confirmed New York City's place as an international center for commerce and finance will take place across the region this year.

PUBLICATIONS

North American publications on industrial heritage include Christopher C. Fennell's *The Archaeology of Craft and Industry* (2021) and Carolyn Kitchas' *Pennsylvania in Public Memory: Reclaiming the Industrial Past* (2021). Several books published in 2020 in the US that did not make our previous report include: Paul J. White and Michael S. Nassaney, *The Archaeology of American Mining*, Stefan Berger, *Constructing Industrial Pasts: heritage, historical culture and identity in regions undergoing structural economic transformation*, and John Beck and Ryan Bishop, *Technocrats of the Imagination: Art, Technology, and the Military-Industrial Avant-Garde*.

Recent notable articles include J.P. Delgado, "The Archaeology of the Gold Dredge: The Final Phase of Placer Mining," *Journal of Maritime Archaeology* 18 (2023): 269-295; R. Minor, L.P. Hart, K.A. Toepel, "The Archaeological Potential of Artificial Ground in Postindustrial Landscapes: A Case Study at the "Lowell of the Pacific Coast," Oregon City, Oregon," *Historical Archaeology* 58 (2024): 123-145; Dan Trepal, Don Lafreniere, and Timothy Stone, "Mapping Historical Archaeology and Industrial Heritage: The Historical Spatial Data Infrastructure," *Journal of Computer Applications in Archaeology* 4, no. 1 (2021): 202–213; and a pair of articles from Hayden Stewart, "The Ecological Life of Industrial Waste," *Archeological Papers of the American Anthropological Association* 33 (2022): 91-105; and "Abandonment: The Two Sides of Industrial Decay in Mill Creek Ravine," *International Journal of Historical Archaeology* 28 (2024): 86–100.

Of the various archives in the US, the Industrial Archives & Library in Bethlehem, PA is related to the National Museum of Industrial History, established in 2015, and is centered on the records of Bethlehem Steel but collects other records of national significance. The Hagley Library near Wilmington, DE, established in 1957, is among the largest research libraries on the history of American business and technology. The Linda Hall Library in Kansas City, MO, established in 1946, holds significant industrial records, notably much of the Engineering Societies Library (ASME, ASCE, and IEEE) from New York City.

Regarding engineering societies and heritage, the *History & Heritage* division of the American Society of Civil Engineers (ASCE) continues its Civil Engineering Landmark Program, having designated eight landmarks in the US (and one internationally) over the last five years. The *History and Heritage Committee* of the American Society of Mechanical Engineers (ASME) has only completed four designations since the COVID-19 pandemic, and only two in the US, having been reformed between 2021 and 2023. Their remit remains "To preserve, celebrate, and promote the rich history and heritage of engineers and innovations, and their impact on society" as well as "inspire current and future generations of engineers," but now includes the added charge to ensure

New York State Barge Canal Tugboat Urger passing the Statue of Liberty (photo by Will Van Dorp)

Amelia Earhart's 1937 Cord 812 Convertible Phaeton Sedan (photo by Casey Maxon, Hagerty Drivers Foundation)

"that our historical narrative reflects the diversity of engineers who have contributed to ASME's legacy." The new HHC committee proposes to restart activities in 2025, including "landmarks aligned to ASME's DEI initiatives [and] more consumer product landmarks." The IEEE Milestones Program remains active, though its designated landmarks are often less physical, but are located where computer technology breakthroughs happened. Discover all the landmarks from these three societies.

Michigan Tech has produced seven theses and dissertations since our last report. They have presently begun a multi-year archeology project on a 19th-century copper mining property in the Upper Peninsula of Michigan. The University of Maryland has an Anthracite Heritage Program that includes a summer archaeological field methods course, which examines the coal fields of Pennsylvania. Other universities often produce theses of interest, often emanating from architecture schools and historic preservation programs.

AUTHORS

This report was submitted by the Society for Industrial Archeology, with contributions from Duncan Hay, Fred Quivik, Steven A. Walton & Christopher Marston. Ron Petrie (pictured) is a retired college professor from Cleveland, Ohio, who currently serves as TICCIH Representative of the Society for Industrial Archeology.

Contact the author

Industrial heritage in Mexico is a growing and dynamic field, supported by several dedicated groups across the country. Given Mexico's vast geography and rich industrial past, it is no surprise that multiple initiatives have emerged, each contributing in unique ways. Among the most prominent are TICCIH Mexico, established in 2006; the Mexican Committee for the Conservation of the Industrial Heritage (CMCPI), founded in 1995; and the Interinstitutional Committee on Industrial Heritage of Nuevo León, active in Monterrey since 2014. This report features contributions from the first two organizations, while the third shares insights through the Transnational Reports section on "TICCIH Portuñol." This working group was created after the TICCIH World Congress 2022 in Montréal under the coordination of the then newly elected TICCIH Commissioner for Latin America and the Caribbean and brings together TICCIH members from Spanish and Portuguese-speaking countries on both sides of the Atlantic.

TICCIH MEXICO

Belem Oviedo Gámez

Despite a growing academic interest in recent years, there are still very few projects that focus on site recovery, taking into consideration the diverse elements that are part of industrial heritage. This heritage is much more than just the architecture, and even regarding architecture, significant buildings have more importance; worker houses are often overshadowed, and losing them is not seen as a substantial loss. Machines, equipment and tools are being sold as scrap; the few tools that are conserved are used many times, often as decorative elements, out of context. Dolores Mine in Real del Monte, Hidalgo, restructured as a site museum by the Historical Archive and Mining Museum, A.C. (AHMMAC), is a clear example that it is possible to create integral projects that totally respect their history and role in the community.

Referring to the value and importance of industrial sites and the support they still provide to education, culture, and the communities in which they are located, political and economic interests prevail. Some sites recorded in the World Heritage List, such as the Padre Tembleque Aqueduct, the Renaissance Hydraulic Complex in America, or the Agave Landscape and Ancient Industrial Facilities of Tequila, have not received due attention during the period we are reporting. After ten years, in the first case, a Management Plan has not been implemented, and Tequila, the main town for the second example, is losing its essence as an agro-industrial town.

There have been few advances regarding industrail archives during these years, with exception of the ones generated by railroad companies which are mainly kept in the Railroad

Dolores Mine, "museum in progress", Real del Monte, 2025 (photo by Marco Antonio Hernández Badillo)

Lázaro Cárdenas Las Truchas Steelmaking Plant, 2023 (photo by Marco Antonio Hernández Badillo)

TICCIH Mexico member in Dolores Mine Real del Monte, 2025 (photo by Marco Antonio Hernández Badillo)

Documentation and Research Center of the National Center to Preserve Railroad Cultural Heritage; the Historical Archive of the Real del Monte and Pachuca Mining Company of AHMMAC, inscribed in 2022 by UNESCO in the Memory of the World Mexico List, and the Mary Street Jenkins Foundation, which is organising its archive, with information from the first half of the 20th century, related to the sugar agro-industrial complex that included the ancient sugar mills of Atencingo, Colón, Rijo, Matlala and Raboso, as well as the textile factories El León and La Concepción, in the town of Atlixco, State of Puebla.

In the context of intangible heritage resulting from industrialisation, Frederick Thierry Palafox, a member of TICCIH México, conducted research with railroad workers. As a result, he authored the book *Life Goes on Between Rails and Steam. Rail Workers Labor Everyday Life and the Use of Free Time in México.*

Visiting the *Luchtfabriek* in Zolder, Belgium (photo by Lilia Martínez y Torres)

The cultural and industrial landscape is a topic that has been addressed in several national and international congresses; in 2022, a photographic exhibition about Mexican industrial heritage by Marco A. Hernández Badillo was exhibited in France.

ACTIVITIES

TICCIH México organised the International Congress on Industrialisation in Guadalajara, Jalisco, in 2023. A photography exhibition with the work of Marco A. Hernández Badillo was part of the congress. Photos were taken at the Lázaro Cárdenas *Las Truchas* Steelmaking Plant. Hernandez also supported the defence of the Beringen Coal Washing Plant in Belgium in 2022, a project led by Patrick Viaene.

In 2024, the National Institute of Anthropology and History (INAH) organised its First Ibero-American Molinological Meeting, in which TICCIH México president, María de la Cruz Ríos, participated with the lecture *Industrial Heritage in the Valley of Atlixco: the case of the San Mateo Mill.*

Study trips to diverse regions of Mexico and international trips have been another opportunity to enhance our knowledge of industrial heritage while broadening our current perspective on such heritage. TICCIH México meets twice a year, and as part of these meetings, which are conducted in various parts of the country, technical visits were carried out in the states of Jalisco and Hidalgo.

In 2023, TICCIH Mexico members toured sites in Belgium and the North of France, guided by Patrick Viaene. We have also participated in instructive tours in France, coordinated by Gracia Dorell Ferré and the APIC team.

In April 2023 and 2025, TICCIH organised two academic events in coordination with ICOMOS Mexicano to celebrate International Monuments and Sites Day, with the collaboration of AHMMAC. The secretary of TICCIH México, Nerina K. Aguilar, participated in the creation of a National Atlas of Mexico coordinated by the National Autonomous University of Mexico (UNAM).

In 2023, Laura Pacheco, from TICCIH México, organised with the University of Guadalajara (UdeG) the Industrial Tourism Sessions. TICCIH México collaborated with the Meritorious Autonomous University of Puebla (BUAP) in the Tribute Colloquium: *Leticia Gamboa Ojeda, Thinking About History.* She was a pioneer of industrial heritage studies in the State of Puebla. 2023 was a sad year for TICCIH México, as two members passed away: Leticia Gamboa Ojeda and Juan Antonio Siller. Their obituaries, written by Rios Yane, were published in TICCIH's Bulletin.

TICCIH México also collaborates with the private sector. In 2024, it participated through its president in the book *COPARMEX Puebla 90 years* with the chapter: *500 Years of Talavera Poblana: Identity of a Region.*

The Industrialization Processes in Mexico Seminar (SPIM) continues to have permanent sessions in diverse regions of the country. In 2023, its coordinator, Gustavo Becerril, participated in the discussion group *Challenges to Safeguard Industrial Heritage in Mexico* at the National Centre of Fine Arts Research, Documentation, and Information. One of

Lord of Zelontla, patron saint of miners, visits the Dolores mine in Real del Monte (photo by Marco Antonio Hernández Badillo)

the projects of the Seminar is to "identify and map industrial assets," in which Luis Ibáñez, member of TICCIH México, is collaborating.

The State Committee on Industrial Heritage Conservation of the State of Nuevo León (CECPINL) is constantly active; every year, they organise an International Congress. In 2023, the 10th Latin American Congress on Industrial Heritage Conservation, supported by TICCIH International, took place, with the participation of TICCIH President Miles Ogletorphe and General Secretary Marion Steiner, among others. TICCIH México waived the call for a meeting due to the lack of compliance with the agreements signed with CECPINL and the unresponsiveness of the international leadership.

The Mexican Committee on Industrial Heritage Conservation organised its IX National and V International Congress in 2024, focusing on the topic *New Challenges for Industrial Heritage Conservation and Reuse in Mexico and America in the 21st Century.*

The Group on Industrial Heritage Conservation, Study, and Dissemination (PIMCED) continues to hold meetings every year and promote research among its associates. Its current coordinator is Moisés Gámez of El Colegio de San Luis. The report on their last national meeting, held in 2024, was written by Jaime Sánchez Macedo [see TICCIH Bulletin #105, 2024].

During the last three years, several theses have been submitted related to industrial heritage at diverse universities, including the UNAM, BUAP, UdeG, and the National School of Anthropology and History.

OUTSTANDING PROJECTS AND NOTABLE CASES

In October 2024, after ten years of working on reconverting Dolores Mine into a site museum, AHMMAC decided to open its doors as *a museum in progress*. It is essential to highlight that this is a project led by the only civil society organisation that has established the first Mining Industry Museums Network of Mexico, and which conducts all the work thanks to donations and self-generated income, without receiving any governmental support. The purpose of opening it to the public, even though the project was not yet fully completed, is, on one hand, to continue supporting education and culture, and, on the other hand, to generate income that allows for work continuity.

PUBLICATIONS

- Contreras Delgado Camilo y Nuñez Tapia Francisco Alberto (Coords.) (2022). *Patrimonio industrial: tensiones y expresiones.* México, El Colegio de la Frontera Norte y CLACSO

- Hernández Badillo, Marco. Hacienda de Beneficio de Loreto, ensayo fotográfico; Patrick Viaene (Ed.) 2022. *TRIAGE. De Kolenwasserij van Beringen. Monument voor de Toekomst.* Zolder: vzw Het Vervolg & COALFACE

- Oviedo Gámez, B. (2023). Entre versants et montagnes: les anciennes villes minières du Mexique, en Dorel-Ferré Gracia et al (Dir). *Patrimoines en tensión, les paysages industriels.* Troyes, France.

- Dorel-Ferré G. y Oviedo Gámez, B. (Coords.) (2024). *Comunicaciones, Transportes e Industria: gestión, valoración*

y comunidades. México, TICCIH México, AHMMAC and the Autonomous University of Aguascalientes.

- Oviedo Gámez, B. (2024). *TICCIH México, dieciocho años trabajando por el patrimonio industrial, en Arqueología Industrial, Revista de TICCIH Portugal y del Museu da Indústria Têxtil da Bacia do Ave.*

During these three years, Camilo Contreras Delgado, Alberto Casillas Hernández, Belem Oviedo Gámez, Jaime Sánchez Macedo and Dolores Terán Triyo contributed several articles to TICCIH's bulletin.

AUTHOR

Belem Oviedo Gámez, TICCIH National Representative, Coordinator of the State ICOMOS Committee in Hidalgo, Director of the Historical Archive and Mining Museum, A.C. (AHMMAC).

Contact the author

CMCPI

(Mexican Committee of Conservation of Industrial Heritage)

Humberto Morales Moreno & Sinhué Lucas Landgrave

CMCPI (the Mexican Committee for the Conservation of Industrial Heritage) was the first TICCIH group in Latin America, established in 1995. Founded in Puebla under the testimony and guarantee of Mr. Louis Bergeron, former TICCIH president, and his staff, it has consistently organised nine national and five international meetings on industrial heritage over the last 30 years. In the previous five years, we have organised the following activities.

ACTIVITIES

As a memorial activity during our 2008 V National Congress, we established two memorial distinctions: the Jaime Litvak King and the Ramón Sánchez Flores awards to honour these two outstanding scholars who were precursors of Mexican literature on Industrial Heritage.

We organised the VIII National and IV International Congress of Industrial Heritage in 2019. The primary objective of this meeting was to promote the national inventory of industrial heritage. In 2024, the CMCPI organised the IX National and V International Congress of Industrial Heritage. The primary goal of this meeting was to encourage the revitalisation of deindustrialised heritage in the Americas.

In between these two national and international congresses, we organised the following expositions and meetings:

- Insights and Cinema on the Move of Industrial Heritage in Mexico (2019).
- History of Industrial artefacts. Book presentation (2021). Mayor's Government in Mexico City Hall exhibition.
- Brief history of the Colour TV (Mexican contribution to Technology in the 20th Century) (2021). Mayor's Government in Mexico City Hall exhibition.
- Brief history of personal computers (2022).

In recent years, CMCPI has participated in all INCUNA meetings in Asturies (2020-2025) and TICCIH meetings since 1994. We were co-organisers of the X Latin American Meeting of industrial heritage in Monterrey, Mexico (2023). We organised a special visit to the Sierra Norte of Puebla (Zacatlán), a trip to various heritage sites. In the same year, we presented a paper and participated in a debate on industrial heritage in the Global South as part of the NUDISUR project in Chile.

In 2025, we delivered a brief presentation on the inventory of selected industrial sites in the State of Puebla. We employed our methodology outlined in our theoretical book, *The Industrial Culture of Mexico*. This presentation took place during the XII International Meeting of Industrial Heritage in Monterrey, Mexico.

In 2017, the Autonomous University of Puebla signed an Agreement of academic collaboration with the Master TPTI (Techniques, Patrimoine et Territoires de l'Industrie) managed by the Universities of La Sorbonne (France), Padova (Italy) and Évora (Portugal). As president of the CMCPI, I'm a member of the academic staff of this scholarly exchange until 2027.

As a result of this exciting collaboration, we published a special article dedicated to the Mexican Industrial Eco-museums in the journal *E-phaïstos: History of Techniques*, titled *"Les Ecomusées du Patrimoine Industriel du Mexique"*. The same magazine published a Dossier, *Histoire, techniques, patrimoine de l'industrie au Mexique,* featuring seven academic papers that introduce a broad scope of our work in Mexico over the last 10 years of research.

Our current industrial heritage project is the mise en valeur of the Textile facility of La Constancia Mexicana to launch the

X Latin American Meeting of industrial heritage in Monterrey, Mexico, 2023 (photo by author)

modern National Textile Museum. We are in the first step, and we hope to have the first museography in situ by the end of the year.

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Exposition on the history of personal computers (photo by CMCPI)

Miguel Álvarez Areces (editor), *Criss-Crossing, Patrimonio, Paisajes urbanos, Creación industrial, Culturas contemporáneas.* Incuna, Gijón, Asturias, España, (Colección los ojos de la memoria num. 20) 2018, págs. 385-394.

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- Morales Moreno, Humberto et alii, Necaxa. *Pueblo de Luz,* Ayuntamiento de Juan Galindo, Puebla, CFE, México, 2018, 228 páginas. Presentación, págs. 9-24.
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AUTHORS

Dr. Humberto Morales Moreno, Profesor Investigador, TICCIH BOARD/Scientific Committee, CMCPI/ President, INSTITUTO DE CIENCIAS DE GOBIERNO Y DESARROLLO ESTRATÉGICO, Universidad Autónoma de Puebla.

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VENEZUELA

Lucía Sánchez

The Venezuelan industrial heritage, given the country's deep economic crisis that has endured for over a decade, is at risk of disappearing. In Venezuela, more than during the period of Spanish colonisation between the late 15th century and the early 19th century, it was the oil activity led by foreign concessionaires that played the main role in the founding of cities, population settlements, and territorial communication. All the infrastructure built during the last century was made possible thanks to oil.

Today, the importance of oil for any country and economy determines how nations interact with one another, as well as the relationships between oil-producing countries. In Venezuela, after 100 years of intense oil activity and being certified for two consecutive years as the country with the largest proven oil reserves in the world, oil remains our only major export product. Without oil, as demonstrated during the 2002–2003 oil strike and the ongoing economic crisis, the country comes to a standstill.

In 2015, TICCIH Venezuela was established to initiate conversations about industrial heritage in the country—a term that, until then, was largely unknown, even within academic circles. We have managed to contribute to various publications, organised the first national congress on industrial heritage in 2019, supervised undergraduate theses on the subject, conducted industrial tours, and participated in conferences. However, despite these achievements, it has been challenging to move forward with more ambitious projects, such as a draft heritage law, due to the country's economic situation and the economic situation of its citizens, where heritage is not a priority.

ACTIVITIES

Given the current state of the infrastructure—still in use and owned by the State—and the limited receptiveness toward research and respect for heritage on the part of the government, which is the sole administrator of the industrial infrastructure, we have focused our efforts, from within academia, on participating in conferences, publications, and community activities, including industrial tours, to raise awareness about the current situation of industrial heritage and the importance of its recognition and preservation.

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- Sánchez, L. (2024). *The Venezuelan experience of Oil Industry.* [Conference Presentation]. IV Ciclo de Urbanismo y Territorio "Patrimonio Industrial, Gestión y Reconocimiento: experiencias y casos", Punta Arenas, Chile.
- Sánchez, L. (2024). *Global heritage of oil.* [Course Presentation] Methods and approaches to safeguarding industrial heritage. ICCROM, Saudi Arabia.
- We had several new members between 2023 and 2024.
- We are part of the extended communications commission of TICCIH International.
- We have guided several architecture theses related to industrial heritage at Simón Bolívar University between 2017 and 2025.

Other organisations conduct industrial tours, specifically by two groups: ARQUItours and ARQhistorias. I was part of the former from 2017 to 2019. Initially, the tours focused solely on modern architectural heritage, but I introduced industrial tours centred on themes such as coffee, cocoa, and oil. These groups play a crucial role in the country, as they are composed of professors and heritage scholars who educate the community on the importance of cultural heritage.

The current members leading these initiatives were former members of TICCIH. These tours are fee-based, providing participants with an alternative source of income to supplement the country's inadequate salaries. In this context, it has been difficult to include new members, given that the minimum monthly wage in Venezuela is $10, and even a university professor with a doctorate earns only $50 per month.

PUBLIC POLICIES AND ORGANISATIONS

There are no public policies in the field of industrial heritage; it is only discussed at the academic level, specifically within universities.

ALTERATIONS TO LEGAL PROTECTION

The Law for the Protection and Defence of Cultural Heritage is the central regulation governing cultural heritage in Venezuela. It was enacted in 1993 and establishes the legal framework for the protection, conservation, appreciation, and promotion of the country's cultural assets, both tangible and intangible.

The law defines cultural heritage as all tangible and intangible assets that represent historical, artistic, architectural, archaeological, anthropological, urban, technological, scientific, and traditional values relevant to national identity.

There are two categories:

- Declared assets: Those officially recognised as cultural heritage through a formal resolution.
- Registered assets: Those included in the Inventory of Venezuelan Cultural Heritage, maintained by the Cultural Heritage Institute.

Although industrial heritage is not explicitly mentioned in the legal text, it is protected under the category of tangible cultural assets as defined by the law, particularly in terms of its historical, technological, and social value. This is established in Article 2 of the law:

> *'The cultural heritage of the Nation is understood as the set of tangible and intangible assets, whether movable or*

immovable, which, due to their historical, artistic, scientific, technological, social, spiritual, or aesthetic significance, constitute testimonies with inherent value to the culture.'

OUTSTANDING PROJECTS AND NOTABLE CASES

Oil has been the leading cultural supplier of Venezuela throughout the 20th century up to the present. It came to determine the relationship between the territorial organisation and cultural manifestations and social behaviours of being Venezuelan.

Zumaque 1, the first commercial well, along with the almost immediate San Lorenzo refinery, constitute our original reference points of Venezuelan industrial heritage.

Located in the Mene Grande oil field, on the eastern edge of Lake Maracaibo, and close to the communities that now comprise the Baralt municipality in Zulia state, the San Lorenzo Refinery emerged as a natural consequence of the discovery of the Mene Grande oil field. On August 17, 1917, the first plant began the process of transforming crude oil. Its capacity did not reach 3000 barrels. Within a year, the refinery was already producing gasoline on a scale sufficient to supply the incipient domestic market. The refinery was an up-to-date facility that replicated the efficiencies of those maintained by the Caribbean Petroleum Company and the Venezuelan Oil Concessions on the neighbouring islands of Aruba and Curacao. The expansions of its refining capacity were immediate. In 1926, its capacity reached 10,000 barrels per day. By 1938, its capacity had increased to around 38,000 barrels.

The refinery facilities have been partially dismantled for export as recyclable material, ignoring their status as cultural heritage protected by current legislation, which recognises their cultural value and claims their necessary preservation as a heritage for future generations. The San Lorenzo refinery appears registered under code 1230201001 in the inventory of the Cultural Heritage Institute, the country's governing body in the matter, as an asset of cultural interest to the Venezuelan nation. Beyond the necessary claim to the corresponding institutions, community participation that recognises and assumes the industrial legacy of oil as its own and protects it accordingly cannot be postponed [see TICCIH Bulletin #100, 2023].

MUSEUMS AND EXHIBITIONS

There are no industrial museums.

TRAINING AND EDUCATION INITIATIVES

Since 2015, the study and dissemination of industrial heritage in Venezuela have primarily occurred within the academic sphere, including undergraduate theses at Simón Bolívar University, the inclusion of the topic in heritage courses, conferences, and academic papers. At a more community-oriented level, it has been promoted through industrial tours, also led by university professors specialising in heritage.

SOCIAL AND COMMUNITY-BASED PROJECTS

Social and community-based projects involving industrial heritage include ARQUItours, an organisation with over 10 years of experience conducting architectural tours for everyone, including themed industrial tours related to the heritage of coffee, cocoa, and oil. The Municipality of Chacao, Caracas, Venezuela, sponsors these tours. ARQhistoria is founded in 2024 to conduct heritage tours. It is not affiliated with any municipality and is led by the same members from ARQUItour Chacao.

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AUTHOR

Lucía Sánchez. Architect from the Simón Bolívar University (2007), master's degree in Technique, Heritage and Territories of the Industry of the Paris 1 University (Sorbonne), in consortium with the University of Padova and the University of Évora (2013). She worked for eight years as an Industrial Heritage Architect in the Venezuelan oil industry, specifically at PDVSA. She also worked as a university professor of heritage in Venezuela and Chile for 7 years. Furthermore, she is a member of the Outreach Commission of the Board of TICCIH International and the TICCIH Venezuela Representative.

Contact the author

BRAZIL

The restoration process of Forte Coimbra, located in Corumbá (photo by IPHAN)

Daniela Pistorello (UNESC/SC) & Andrey Martin (UFMS/MS)

The Brazilian representation to TICCIH was created in 2004 and recognised in 2018. By 2025, the organisation had expanded to include almost one hundred members. Throughout its ongoing activities, the entity publishes e-books, including *Novas Investigações* (a collection of academic studies), in collaboration with the São Paulo State University Press Foundation. Over the last three years, three additional volumes have been published, bringing the total to seven volumes to date. In addition, the e-book "Caderno de Campo Paranapiacaba" was published.

International, national, and local events have been held over the last three years to promote conferences with conservation specialists, debates with experts, and the presentation of academic Brazilian Industrial heritage. Highlighted events: IV National Congress for the Conservation of Industrial Heritage & VII Young Researchers Conference (2024); Release of the TICCIH-Brazil Academic Study Award (2023). The entity has also extended its support to social movements advocating for the protection of industrial heritage in various states, in addition to advising on requests for recognition to regional protection bodies. Currently, we have identified 54 industrial assets in Brazil protected by the National Institute for Historic and Artistic Heritage (IPHAN).

ACTIVITIES

We highlight the mobilisation and organisational efforts of a group of representatives of Brazilian industrial museums *(Coletivo de Museus Ferroviário)*, promoted by the management of the São Leopoldo Train Museum, in the state of Rio Grande do Sul. The Train Museum also undertook several initiatives to promote and discuss the operating conditions of museums that care for industrial collections in Brazil. It's worth mentioning that, in recent years, there have been some significant changes in public protection policies, which also impact the protected heritage, resulting from the dismantling that took place between 2019 and 2022.

PUBLIC POLICIES AND ORGANISATIONS

Initiatives aimed at identifying, safeguarding, and valorising Brazil's industrial cultural heritage registered notable institutional advancements, despite prevailing political and economic challenges. IPHAN played a central role in implementing these policies by developing significant procedures for listing industrial heritage sites. Notably, in 2024, the institute initiated the provisional listing process for the area affected by Braskem's mining operations in Maceió, Alagoas, in collaboration with the Federal Public Prosecutor's Office (MPF) and local community organisations.

Between 2024 and 2025, additional official actions recognising industrial heritage sites were implemented. Particularly noteworthy were the initiation of listing procedures for the São João del Rei Railway Complex and the Parahyba Textile Industrial Park. The listing of the Brum Railway Station in Recife, constructed in 1881, was officially concluded in 2025, marking the first industrial heritage site to be formally protected in the State of Pernambuco.

To consolidate methodological guidelines and enhance technical capacity, IPHAN conducted a series of national workshops and technical seminars between 2022 and 2024,

focusing on revising and updating methodologies for identifying industrial heritage. Throughout 2024, the first phase of a national, systematic survey of industrial heritage was completed.

A particularly relevant dimension of heritage policy was the strengthening of socio-participatory initiatives. In Maceió, in 2024, alongside the listing process, participatory inventories were developed in collaboration with local communities to preserve the memory and collective identity of populations affected by Braskem's mining operations. These initiatives were financed through judicial indemnity funds totalling BRL 150 million (approximately USD 27.5 million), secured via mediation by the Federal Public Prosecutor's Office.

In São Paulo, a significant example of inter-institutional collaboration occurred during construction works for the future Praça 14 Bis metro station, where IPHAN acted jointly with the São Paulo Metropolitan Company (Metrô). During the excavation, archaeological remains linked to former quilombo settlements were uncovered, including ceramic and leather fragments that may be associated with Afro-Brazilian religious practices.

Through the New Growth Acceleration Program (Novo PAC), IPHAN selected 105 restoration projects, representing a total investment of BRL 771.8 million (approximately USD 141 million). A considerable portion of the selected initiatives included industrial heritage sites.

OUTSTANDING PROJECTS AND NOTABLE CASES

In 2025, the Brum Railway Station was officially listed by IPHAN, becoming the first railway asset in Pernambuco to be designated as a historic and artistic heritage site. Another action that deserves to be highlighted is the current restoration process of Forte Coimbra, located in Corumbá, Mato Grosso do Sul, on the banks of the Paraguay River, at the border between Brazil and Bolivia. The fort is part of a group of 19 buildings that are competing for the title of World Heritage Site by UNESCO.

We may also highlight the Usina do Gasômetro Power Plant, in Porto Alegre, state of Rio Grande do Sul: a coal-fired thermoelectric plant inaugurated in 1928, which was restored and transformed, reopened in March 2025 as a cultural center; the Gasômetro Complex, in São Paulo, state of São Paulo, underwent restoration between 2006 and 2024, with an investment of BRL 38 million (approximately USD 7 million), incorporating sustainable technologies such as water reuse systems, energy generation from gas, and wastewater treatment.

The Sítio do Físico Ecomuseum, located in São Luís, Maranhão state, features the colonial-era ruins of one of the first industrial complexes in the state, listed by IPHAN in 1980. The site has been revitalised as an ecomuseum.

MUSEUMS AND EXHIBITIONS

The Museu do Cristal, located in Blumenau, Santa Catarina, presents the historical trajectory of the region's crystal manufacturing industry. The SESI Lab, located in Brasília, Federal District, is an interactive museum housed in former industrial facilities, blending science, technology, and culture within a space of industrial cultural heritage. In September 2022, SESI transformed a former bakery located in São Luís, Maranhão state, into a listed cultural centre, supported by SESI and supervised by IPHAN.

The National Museum of Immigration and Colonization, in Joinville, state of Santa Catarina, featured the industrial-themed exhibition *Miradas do Porvir* (Gazes of the Future) and thematises the relationships between immigration, colonisation, and the coffee and textile industries in the southern region of Brazil.

TRAINING AND EDUCATION INITIATIVES

In 2025, IPHAN launched a manual with guidelines on preservation standards for listed properties in urban areas, aiming to expand the collective possibilities for developing Preservation Standards. The proposal seeks to promote social inclusion, address socio-environmental needs in the context of climate change, facilitate historical reparation, and have an educational character.

The Brum Railway Station in Recife (photo by IPHAN)

The International Seminar on Deindustrialization and Refunctionalization (São Paulo, SP, 2023), organised by the São Paulo Heritage Education Network, specifically addressed industrial heritage, discussing policies for conservation, adaptation, and new uses for industrial sites.

The IPHAN+80 Program (2023–2024), implemented in municipalities starting in the state of Minas Gerais, involved training multipliers in heritage education within territories with a strong historical industrial presence (mining, manufacturing), guiding safeguarding methodologies and community actions to protect these spaces.

Recognised with the IBRAM Award for Participatory Inventories (2023), REPEP included an international seminar focused on deindustrialisation and industrial reuse, encouraging community-based and educational research on industrial memory.

Although there are no exclusive undergraduate courses on industrial heritage, extension programs in partnership with IPHAN—such as the "Workers' Memory of Paranapiacaba" conducted by USP (2022–2024)—have created workshops on oral history, community mapping, and heritage education focused on industrial memory.

Several events in Brazil have recently addressed industrial heritage through academic and professional discussions. The 2nd National Forum on Industrial Architectural Heritage, held in 2023, focused on conserving modern and industrial architecture and was organised by Docomomo Brazil. In May 2023, the seminar "Deindustrialization and Refunctionalization of Industrial Heritage" featured interdisciplinary debates on reusing industrial spaces. The 4th National Congress for the Conservation of Industrial Heritage and 7th Young Researchers' Meeting took place in 2024, exploring labour memory and marking TICCIH-Brazil's 20th anniversary. SemPIAS, the 3rd Seminar on Industrial Heritage, Food, and Sustainability, explored the connections between industrial heritage, food, sustainability, and technology in museums. Other highlights include the May 2025 seminar on Brazil's industrial history at the Catavento Museum and the 6th International Interdisciplinary Meeting on Cultural Heritage (ENIPAC), which examined labour, memory, and the environment.

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AUTHORS

Daniela Pistorello holds a postdoctoral degree from the University of the Joinville Region (UNIVILLE) and the Santa Catarina State University (UDESC) and completed a doctoral internship (Sandwich PhD) at the Polytechnic University of Catalonia (ETSAB/Barcelona, Spain). She earned her Ph.D. in History from the State University of Campinas (UNICAMP), a Master's degree in History from the Pontifical Catholic University of Rio Grande do Sul (PUC/RS), and a Bachelor's degree in History from the Federal University of Santa Maria (UFSM). She currently serves as President of the Brazilian Committee for the Conservation of Industrial Heritage (TICCIH-Brazil, 2024–2027). Her research focuses on the "Mundos do Trabalho" fields of Worlds of Work, Cultural Heritage - particularly industrial heritage and cultural inventories, cultural itineraries, the cultural economy, and History teaching. She is a faculty member in the undergraduate History program at the University of the Extreme South of Santa Catarina (UNESC).

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Andrey Martin is a PhD in History from Universidade Estadual Paulista/UNESP, with a research internship/FAPESP at the University of Tennessee, USA. He holds a Master's degree in History from the State University of Maringá (UEM) and a Bachelor's degree in History from the Federal University of Mato Grosso do Sul (UFMS). He is currently a lecturer and coordinator of the History course at the Federal University of Mato Grosso do Sul (UFMS) and a member of the Professional Master's Degree in History Teaching/ProfHistória. He is a member of the National History Association (ANPUH) and the Brazilian Society for the History of Science (SBHC), and vice-president of the Brazilian Committee for the Conservation of Industrial Heritage (TICCIH/Brazil).

Contact Andrey Martin

URUGUAY

Prof. María Julia Burgueño

Our approach is based on local engagement, getting to know and supporting researchers from various regions of Uruguay, both urban and rural. To achieve this, we meet with local Heritage Commissions and individuals who are independently conducting research.

The mining sector, which we incorporated in 2024 and 2025, has been a new area of study in Uruguay. We have focused on extractive industries, including limestone mining and lime kilns, as well as gold extraction.

These activities are located in the departments of Cerro Largo and Rivera, both of which are on the border with Brazil. Regarding lime kilns, we have received support from the private company LUMIN, which owns the land where these structures are located.

International collaborations have also been established, such as the case of the Minas de Cuñapirú Site, where we have agreed on departmental public support (Rivera Municipality), international support (Basque Country Government), and our technical advisory role in developing an inventory of the site.

The agri-food sector, with a particular focus on beef and sheep meat from the historic Saladeros and Frigoríficos, along with dairy production, remains our most developed area of research. Additionally, we have started preliminary studies on the historical significance of the railway sector.

Industrial tourism began last year through a public-private project in the city of Young (Río Negro). This initiative started with a historical and industrial heritage survey of local companies and the design of a cultural-industrial heritage route as a potential tourism product.

As a cross-disciplinary research theme, we have proposed Industrial Heritage from a Gender Perspective, which has been presented at various congresses in Uruguay, Mexico, and the Basque Country.

We are participating personally as Uruguay's national representative in MapaPI, specifically in the Standardisation subgroup.

We have also started academic agreements with other national and international institutions related to heritage, including ICOMOS, CICOP, and the new director of the National Heritage Commission.

The national and departmental elections in our country, which began last year and continued this year, have complicated meetings and agreements at the public level until new authorities take office. Therefore, starting in July this year, we anticipate implementing more concrete actions.

Technical work combined with public and private support will continue to be the operating model for TICCIH Uruguay this year and the next.

AUTHOR

Prof. María Julia Burgueño is TICCIH Uruguay Representative.

Contact the author

CHILE

Jaime Migone, Esperanza Rock, Marion Steiner

Industrial heritage in Chile is a growing, dynamic, and interdisciplinary field, with a variety of academic researchers, community initiatives, and conservation experts working across the country. Beyond its value as a historical document and its potential as a driver for economic development, industrial heritage in Chile is increasingly perceived from a critical and community-centred perspective. In many cases, it is local social movements that put pressure on the State to become active in this field, which is not yet recognised as a category in its own right by national heritage laws.

This report summarises the key activities of the national TICCIH Chile association, established in 1996, as well as those of individual TICCIH members working in Central and Southern Chile. The authors have made a significant effort to produce a collective report and would like to thank Aulikki Pollak, Pamela Fuentes, Boris Cvitanic, and Lucía Sánchez for their valuable contributions. We also hope that in future editions, we will be able to include more contributions from colleagues involved with industrial heritage who were not mentioned here due to the limited time available for coordinating a complete overview.

ACTIVITIES

Regional development program

In 2023 and 2024, financed through the National Fund for Regional Development (FNDR), the Program "Strategies for the Transformation of Industrial Heritage into Regional Assets" was executed in the Biobío Region in Southern Chile. Conceived and articulated for and with local communities by researcher Esperanza Rock, it was a result of a long-term collaborative process that integrated territorial knowledge, participatory diagnostics, and findings from previous research on industrial heritage, social movements, and governance.

The program proposal aimed to foster active dialogue among academia, community actors, and regional governance bodies, with the goal of reimagining industrial heritage as a cultural, social, and economic asset for the future of the Biobío region. The initiative was developed by the international team of the Southern Researchers Network NUDISUR, financed and supported by the Biobío Regional Government, and implemented by the CreaSur Cultural Center in cooperation with a wide range of local and regional partners.

In this framework, the Congress "Industrial Heritage, Social Issues and Challenges for New Governance" was organised – an event of great relevance and local impact that took place in Concepción, Lota, Tomé, and San Rosendo in October 2023. The congress was conceived as the IV International and Interdisciplinary Congress on Cultural Heritage of the NUDISUR network. TICCIH participated as an official international partner, and the success of this collaboration led to the signing of a cooperation agreement between TICCIH and NUDISUR. The congress brought together 20 invited experts from all continents and all Chilean TICCIH members, who, in addition to presenting papers and posters, had the opportunity to visit

Participants of the VI International and Interdisciplinary NUDISUR congress on Industrial Heritage, Social Issues and Challenges for New Governance in Concepción, 19 October 2023 (photo by CreaSur Photographical Archives)

International experts visit the hydropower plant El Sauce in Valparaíso with Suditya Sinha and Moulshri Joshi from India, Humberto Morales from Mexico, and Miguel Álvarez Areces from Spain, 14 October 2023 (photo by ESPI Photographic Archives)

industrial sites, engage with local communities, and experience the regional industrial and cultural landscape.

As complementary components to the congress, the "Arts in Ruins" Festival, where the artistic sphere expressed its narratives in relation to regional industrial heritage, and the Diploma Program in Collaborative Methodologies for Heritage Projects, with a critical focus and aimed at local actors, were carried out. These initiatives aimed to enrich the congress through sensory experiences rooted in regional artistic expressions, while also strengthening heritage management capacities within the local and regional governance network.

You can find more information about these activities in the NUDISUR Transnational Report at the end of this book. Additionally, an open-access bilingual book was published, documenting all the activities of the program, including the numerous oral and poster presentations from the congress *(Rock et al., 2024)*.

Other major international events

Seminars and field trips on the Oil Heritage of the Chilean Patagonia

In March 2023 and March 2024, within the framework of the FONDECYT research project (1200469) directed by architect Boris Cvitanic Díaz, dedicated to the heritage dimension of the oil industry in Chile, two international seminars were held at the University of Magallanes in Punta Arenas with the participation of experts from Spain, Venezuela, Germany, France, and Chile. Both seminars were preceded by three-day field visits to active and abandoned oil heritage sites on both sides of the Magellan Strait, including overnight stays on Tierra del Fuego, some of them offered by Chile's National Petroleum Company, ENAP.

Field visits to the local museum and the hydropower plant El Sauce, Valparaíso

These visits took place in October 2023 and July 2024 in connection with the above-mentioned 2023 congress in Concepción and the 2024 Annual SHOT/ICOHTEC meeting in Viña del Mar. They were financed by Marion Steiner's FONDECYT research project (11230957) and organised jointly with the local community museum Museo Histórico de Placilla, directed by Pamela Fuentes. Thanks to these multilateral collaborations, we were able to take experts from Germany, Spain, Luxembourg, India, Mexico, Colombia, and Chile to the hydropower plant El Sauce, located on the outskirts of the World Heritage city of Valparaíso. As the core of the Hydroelectric Complex El Sauce y La Luz that also includes the water reservoir La Luz and connecting infrastructures, this power plant generated energy for Valparaíso's urban infrastructures and industries from 1906 to 1997 *(Steiner and Fuentes, 2021)*, and despite its extraordinary historical, technological, and social heritage values, any part of the complex to this day counts with any kind of legal heritage protection.

II International Congress on Elevators and Funiculars, Santiago

This congress was organised by Jaime Migone and the TICCIH Chile association in collaboration with the Instituto Italiano de Cultura, the Asociación Cultural Italiana, the University Finis Terrae in Santiago, and the University of Pavía, Italy. Hosted by the Italian Institute for Culture in Santiago, Chile, on 11 and 12 July 2025, a total of 19 papers were presented, including con-

tributions from Greece, Germany, the USA, Portugal, Brazil, as well as Italy and Chile. Attendees were invited to visit the San Cristobal Elevator in Santiago's City centre.

Key research projects

A series of academic research projects related to industrial heritage has been implemented over the past years, funded by the National Ministry of Cultures, Arts and Heritage (FONDART), the National Agency for Research and Development ANID (FONDECYT), or international sources. A selection is named below. These projects enable financing humble salaries, travels, and activities that span multiple disciplines and, in many cases, reveal research-action approaches that bridge academic and community work on the ground.

FONDARTs

"Complejo Hidroeléctrico El Sauce y La Luz. Patrimonio Industrial de Placilla de Peñuelas, Valparaíso"

This project (FONDART Regional, Convocatoria 2020, Folio 551999) was led by the Placilla Cultural Center with the participation of anthropologist Pamela Fuentes, photographer Francisco Rivero, geographer Marion Steiner, architect Rodrigo Puentes, and designer Michael Contreras. It was executed from 2020 to 2022 and culminated in the book "Luz para Valparaíso" (Steiner and Fuentes, 2021) and an exhibition at the local community museum, Museo Histórico de Placilla, in 2022. Read more here.

"Avenida Urmeneta de San Francisco de Limache: Patrimonio arquitectónico, urbanístico e histórico de Chile central. 1857-2021"

This project (FONDART Nacional, Convocatoria 2022, Folio 634774) was led by historian Fernando Venegas from the University of Concepción, featuring architects Fernanda Venegas and Javier Verdugo, journalist Aulikki Pollak, and geographers Andrés Moreira-Muñoz and Marion Steiner as co-researchers. It culminated in the book "Travesía patrimonial" (Venegas et al., 2023). Read more here.

"Trabajadores de la Cía. de Cervecerías Unidas de Limache: historia, memoria y formas de habitar colectivo de la Región de Valparaíso. 1902-1993"

This project (FONDART Regional, Convocatoria 2022, Folio 620730), led by Marion Steiner, was implemented by the same team as the one mentioned earlier and will culminate in a book currently in print about the former workers' settlement of the CCU Brewery in Limache. Read more here.

FONDECYTs

"Light, Power and Progress: German urban electrification of Latin America in its geo-political and cultural context, 1880-1920"

This project (FONDECYT 11230957), directed by Dr. Marion Steiner and hosted by the Department of Historical Sciences of the University of Chile, focusses on the history of electrification of Valparaíso from an international comparative perspective and is executed from March 2023 to March 2026 with the participation of the Bauhaus University Weimar and the Berlin Center for Industrial Heritage in Germany as partner institutions. Read more about the project on Marion's website.

Presentation of the book Magellan Strait. "Industrialization, Collective Habitat and Coastal Border" during the 20th Century, published in 2022, by Daniel Matus at the INCUNA Congress 2023 in Gijón, Spain (photo by Boris Cvitanic)

"Memories of the Transformations of Deindustrialization in the Global North and South"

This project (FONDECYT 11230309), directed by Dr. Esperanza Rock, hosted by the University of Concepción and executed from 2023 to 2025, collects the voices of workers, residents, and local protagonists from the Lota coal mining region, creating the Biobío Oral Archive as an intangible heritage that complements and enriches the official historical record. Thus, the project not only produces academic knowledge but also strengthens a community archive focused on deindustrialization in the Biobío Region, in addition to comparing the findings to realities in the German coal mining region, Ruhrgebiet. Read more here.

The Coya Camp Workers' Settlement near the Sewell World Heritage Site, 2023 (photo by Jaime Migone)

"La industria del petróleo en Chile: territorio, ciudad y arquitectura. Construcción de un patrimonio industrial de dimensión nacional"

This project *(FONDECYT 1200469),* directed by architect Boris Cvitanic Díaz, hosted by the University of Magallanes, and executed from 2020 to 2024, was dedicated to the heritage dimension of the oil industry in Chile and featured a series of international seminars, field trips to Tierra de Fuego, and publications in indexed journals. The book "Strait of Magellan. Industrialization, Collective Habitat and Coastal Border in the 20th Century" *(Matus and Cvitanic, 2022)* was published in connection with that, explaining the emergence of industrialization processes and highlighting different material heritage expressions, with or without official recognition, located around the Strait of Magellan.

International projects

"Circulation of experts and expertise – A historical approach to their mediating role in energy transitions: the Chilean case"

This project was a joint inter-institutional research project between the University of Chile and the Max Planck Institute for the History of Science, Berlin (MPIWG), funded by the German Alexander von Humboldt Foundation and conducted from 2021 to 2023. It was directed by Jürgen Renn and Helge Wendt in Germany and Carlos Sanhueza in Chile, with the participation of co-researchers based in both countries, namely historians Diego Arango, Nelson Arellano, and Tom Thurnbull, civil engineer Cecilia Ibarra, and geographers Enrique Aliste and Marion Steiner. Academic workshops were celebrated in both Berlin and Santiago de Chile. Read more here.

"Berlin's environmental and infrastructure history 1871-2020"

This international research network was led by Timothy Moss, Honorary Professor and Senior Researcher at the Integrative Research Institute on Transformations of Human-Environment Systems (IRI THESys) at Humboldt University Berlin, Germany, from 2020 to 2025. It culminated in the publication of the book "Grounding Berlin" by the University of Pittsburgh Press, to which Marion Steiner contributed the first chapter, providing global perspectives on Berlin's urban and industrial development in the 19th and 20th centuries. Read more here.

PUBLIC POLICIES AND ORGANISATIONS

Regarding new governance and innovative approaches to heritage management, as well as new types of actors involved in industrial heritage in Chile, we would like to highlight the example of the "Plan Lota" in the Biobío Region. Lota, a historic coal mining enclave in southern Chile, is home to key industrial heritage sites that were collectively added to the country's Tentative List for UNESCO World Heritage in 2021 under the title "Lota Mining Complex."

The "Plan Lota: Towards a World Heritage Site" has been promoted by the Ministry of Cultures through the Undersecretariat of Cultural Heritage since 2019. In August 2021, the "Plan Lota Agreement" was signed, bringing together seven state institutions: the Undersecretariat of Cultural Heritage; CORFO; the Ministry of Public Works (MOP); the Ministry of Housing and Urban Development (MINVU); SUBDERE; the National Cultural Heritage Service; and the Municipality of Lota. The initiative also received significant support from

regional universities and grassroots organisations in the Lota community. Among the latter are the Citizen Board for Heritage, Culture, and Tourism; the Fundación CEPAS, which manages Pabellón 83; and several other organisations. A Regional Working Group was later established, comprising government representatives and community members, including academic advisors from NUDISUR, to coordinate joint actions. The Plan defines the boundaries of the proposed World Heritage site and sets forth management guidelines and buffer zones, emphasising public-social collaboration and the integration of academia and local organisations into its vision.

A major achievement under Plan Lota has been the recovery of the ENACAR Archive. The National Coal Company ENACAR administered the coal mines in Lota, Coronel, Curanilahue, and Lebu until its closure in 1997. The archive contains thousands of documents—including employment contracts, management reports, blueprints, meeting minutes, correspondence, and accounting records—generated between 1924 and 2016. For years, these documents were dispersed across various storage locations under inadequate conservation conditions. The archive's recovery has been a crucial aspect of Plan Lota, serving as an unparalleled record of mining operations and their societal impact. Today, the ENACAR Archive stands as a vital resource for industrial and documentary heritage, a fundamental element of the local collective memory.

Closely linked to this initiative, and with strong support from the academic sector, the Biobío Oral Sources Archive is currently under development. Its first collection, Stories of Coal, brings together oral testimonies and life histories of men and women connected to mining, capturing their experiences during the industrial boom and the subsequent deindustrialisation. This archive is being developed as part of the aforementioned FONDECYT research project led by Esperanza Rock.

Since 2024, Fundación CEPAS, headquartered in Pabellón 83—a building declared a National Historic Monument in 2009—has taken the lead in managing the Lota Circuit. Since the industrial closure in 1997, the Lota circuit has been managed by various public and private foundations; however, the current management stands out for its strong community participation. The circuit connects key elements of Lota's industrial heritage, including the Lota Museum, Isidora Cousiño Park, and the Chiflón del Diablo Mine. It plays a catalytic role in heritage promotion through cultural management initiatives, including literary publications and events such as the "Lota Heritage Bicycle Tour."

In parallel, the Citizen Board for Heritage, Culture, and Tourism of Lota serves as a participatory space, comprising local residents, social organisations, and professionals who contribute to the implementation of Plan Lota. Since 2019, this board has coordinated numerous workshops and cultural projects, such as the creation of a "heritage alphabet" through printmaking workshops held at Pabellón 83. Other notable community groups include Discovering Lota on Foot, which promotes heritage walking tours; the Mujer Lotina patchwork collective;

Meeting with the Municipality of San Joaquín and representatives of the Músicos del Mundo - Población Chile neighbourhood, 28 April 2023 (photo by Lucía Sánchez)

and La Compuerta Número 12, among others. Several tourist routes explore historical landmarks, including Chambeque, Lota Park, and the Chiflón del Diablo Mine.

These civic networks play a crucial role in ensuring that the nomination of Lota as a World Heritage Site is developed in an inclusive and participatory manner, rooted in the memories, knowledge, and lived experiences of the community itself. Local organisations collectively generate a dynamic cultural program that keeps social memory alive and promotes the contemporary use of industrial heritage across the coal basin, particularly in Lota and Coronel.

ALTERATIONS TO LEGAL PROTECTION

Heritage legislation in Chile exists at both the municipal and national levels; three industrial sites are currently listed as UNESCO World Heritage sites, and one, as detailed above, has been recently added to the national Tentative List for World Heritage. However, industrial heritage is not recognised by the Chilean heritage legislation as such, which represents great challenges for an adequate protection of sites with specific characteristics and special needs, especially when it comes to large-scale, interconnected, linear elements or industrial complexes that do not align with the traditional heritage definitions focused on monuments and architectural values.

Nonetheless, some heritage initiatives in Chile have succeeded in recent times in making authorities rethink heritage definitions and criteria, insisting on the relevance of technological, social, and cultural values, and thus opening up new perspectives for industrial heritage. The activities in Limache, Placilla, and Lota, supported by leading international networks such as TICCIH and ICOMOS Chile, and explained in some detail throughout this report, are three examples of this. These experiences demonstrate that local communities are key agents in the continuous process of raising public awareness and achieving formal legal recognition of industrial heritage in Chile.

Regarding World Heritage, the three currently listed industrial sites in Chile continue to face significant conservation challenges. In the Seaport City of Valparaíso, inscribed in

2003, a Management Plan for the World Heritage property was finally developed 22 years after its inscription and approved by the City Council in July 2025. Humberstone and Santa Laura Saltpeter Works, inscribed in 2005, were on the List of Endangered Sites from 2005 to 2019. Sewell Mining Town, inscribed in 2006, has been making progress in adding value to its vast industrial heritage.

The Lota Mining Complex, which was added to the Chilean Tentative List for World Heritage in 2021, is being drafted as a serial nomination of four key sites: the Chiflón del Diablo Mine, the Isidora Cousiño Park, the Chivilingo Hydroelectric Plant, and the Chambeque industrial sector. The complex is designated as a national heritage site, holding various national designations, including National Monument status, which was granted to Parque de Lota in 2009 and to Chambeque in 2014, among others.

OUTSTANDING PROJECTS AND NOTABLE CASES

Restoration projects led by Jaime Migone Rettig

Labrar Chimneys. Study and preparation of a structural consolidation project, 2021

South of the city of Freirina in Chile, in the Atacama Desert, lie the remains of the former Labrar copper smelter, which operated until the late 19th century. Today, it consists of three brick masonry structures reinforced with iron rebar, which were part of this industrial complex. It was declared a Historic Monument on October 2, 1980, the highest legal protection in Chile. The importance of this mining technology and the construction design of these three chimneys, which are over 150 years old and located in a highly seismic zone, is highlighted. These chimneys, which have survived to this day without any conservation intervention, have survived. In 2021, an emergency structural consolidation and restoration project for the three chimneys was developed and approved by the Chilean Monuments Council.

Project for the Study and Evaluation of the Cultural Heritage of the Coya Industrial Camp. 2023

The evaluation and collection of information on the current state of the tangible and intangible cultural heritage of CODELCO's El Teniente Division focused specifically on the Central Coya settlement, protected by Law 17,288 on National Monuments and declared a Typical Zone by Decree No. 253 of 2012 and Decree No. 65 of 2017. The primary objective is to provide a comprehensive overview of the current state of conservation of this heritage, with a specific focus on its tangible aspects and the elements that comprise it. Based on this, intangible heritage aspects are referenced and related, which are dependent on the site itself, its history, and the people who worked and inhabited it for many years. Likewise, the other heritage site, Camp Sewell, has already been extensively studied, and the Sewell Foundation has extensive knowledge of its current status.

Detailed records are kept, providing information on each building in particular. This material consists of surveys of information on the past and current state of the existing built heritage at the site. Regarding intangible heritage, the Sewell Foundation also maintains and manages relationships with various groups, associations, and cultural activities comprising individuals and their descendants who inhabited the site during the 20th century and continue to maintain contact today.

The local team at the session of the National Monuments Council, the day when Avenida Urmeneta and Parque Brasil were declared Zona Típica (from left to right): Andrés Moreira, Gastón Soublette, Claudia Arcos, Marion Steiner, and Aulikki Pollak, December 2022 (photo by Aulikki Pollak)

The management and administration of Sewell Camp are already in the hands of the Sewell Foundation, which has a management plan associated with its status as a World Heritage Site. This plan is part of the ongoing efforts, which also involve the National Monuments Council. This means that there is a close and ongoing institutional relationship that guarantees the proper management of the site, especially with regard to heritage conservation. The urgent need, therefore, is to have current and as specific field information as possible that informs us about the current status of the heritage that constitutes the Central Population, specifically, as a Typical Zone.

Cultural Heritage Risk Management at CODELCO's El Teniente Division. 2023

The procedures to be followed are related to the intrinsic characteristics of the cultural asset, its previously defined values, the characteristics of the associated risk, and the changes that the heritage site may undergo, all of which are associated with the threats or events that have occurred at both heritage sites. To manage risks and conserve both sites, four steps or actions must be taken into consideration. These steps must be carried out in a comprehensive and ongoing manner, with documentation of both sites essential for their preservation and enhancement.

1. Document: have all historical and current information on the site;

2. Prevent: foresee possible damage, both natural and human, that may occur at both sites and define the necessary mitigations to avoid them;

3. Emergency management: have planned actions before, during, and after the emergency, in order to maximise the conservation of the site post-emergency; and

4. Enhancement: develop the design of immediate and subsequent actions to recover, to the extent possible, the original figurative image of both heritage sites.

Subsidence Assessment Project for Zone 3 of the American Camp in Chuquicamata. 2023

Zone 3, defined by Decree No. 176 of May 13, 2015, as a Historic Monument, is being affected by ground subsidence and the stockpiling of inert material resulting from mining operations in the area. The transition from an open-pit extraction system to an underground tunnel at the Chuquicamata mine operations, combined with specific geological conditions and the confirmation of the slopes of the original mine cavity, is causing subsidence in the Zone 3 terrain. This phenomenon manifests itself through differential settlements, fissures, and cracks of varying magnitude, both in the ground and in buildings. CODELCO is fully aware of the situation and is being permanently monitored using various methodologies and instruments for its follow-up, as indicated in the CODELCO document "Subsidence Projection for the Years 2021 to 2028, Chuquicamata Mine." The development and growth of subsidence have been theoretically predicted and projected annually, with various implications for the area in question, as well as other points in the Chuquicamata mine.

To obtain more precise and up-to-date information, a visit was made to Zone 3 in March 2022, during which essential data was collected through the preparation of files for each property. These files were applied in person, and data were collected for each building. Carrying out a comparative analysis between the time the Chuquicamata Camp was declared a Historical Monument, specifically in relation to Zone 3 in May 2015, with the visit carried out in March 2022, it is possible to conclude that there has been a significant change in the increase in inert fill in the northeastern area. This can be observed with the naked eye by comparing the planimetry of Decree 176 with the current site situation. It is also notable that significant cracks and fissures, of varying width and depth, have appeared in the terrain, running from north to south, and directly affecting Polygons 2 and 3.

Execution of the Restoration and Improvement Project for the Schwager Gym in Coronel. 2022

The coal industry was one of the main players in transforming the landscape and shaping urban environments in the Biobío region. A vestige of the scope of this urban presence is the former Puchoco Schwager Gym, which served as a recreational area and social centre for the entire community until its abandonment. This research, carried out as part of the restoration of the building, aims to contextualise the history and importance of this emblematic building in the Coronel commune. The project, approved by the Monuments Council, was successfully executed, and its inauguration took place in March 2022. The existing elements were restored, and the missing roof was rebuilt with a laminated wood vault, in keeping with Friederich Zollinger's original structure —a lamella-type structure, which was the objective of the restoration of the original building.

San Bernardo Workshop Restoration and Renovation Project. Renovation work started, 2025

The Armory, Boiler House, Ironworks, and Turntable buildings are part of the complex of facilities belonging to the former San Bernardo Workshop, which belonged to the Chilean State Railways. The complex operated until 1984, when operations ceased due to changes in transportation policies in Chile. It gradually fell into disuse until 1990, when a mass exodus of the company's workers occurred. The workshop finally closed in 1996, leaving the complex in a state of total disrepair. It was declared a Historic Monument in accordance with Law 17,288 in 2010. This entire period, from the 1990s to the present day, marked the widespread deterioration of the building and its contents, which are now missing. The lack of maintenance, combined with the plundering and looting of its machinery, left it in its current state of ruin. Likewise, the effects of the 1985 and 2010 earthquakes had a significant impact on the building, leaving serious structural damage to the upper portion of the roofs and their skylights, as well as to the bases of most of the interior and exterior pillars of the sheds that comprise the complex.

The restoration project aims to recover the buildings' original figurative image to accommodate a new function, differentiating the new architectural and spatial interventions from the existing ones. The project is based on the intended use of this industrial structure, allowing its interior to develop a new function while maintaining its historic industrial image and the spaciousness of a large warehouse, the former metalworking workshop. The damaged skin of the walls and pillars has been restored. The lost windows have been restored, maintaining their original geometry, but with a contemporary solution, as previously mentioned. The project has been approved by the Monuments Council and is in its initial phase of construction.

Outstanding conversion and re-use projects in the Lota area

- Chiflón del Diablo Mine: Restored as a living museum, with former miners serving as guides. Currently managed by Fundación CEPAS (Pabellón 83).
- Isidora Cousiño Park: A restored historic garden declared a National Monument. Currently managed by Fundación CEPAS (Pabellón 83).
- Chivilingo Hydroelectric Plant: Infrastructure stabilisation project underway for the original 1897 electrical facility, led by the Ministry of Public Works (MOP) and the National Cultural Heritage Service (SERPAT).
- Pabellón 83: A restored workers' housing building now functioning as a community cultural centre, managed by Fundación CEPAS.
- Chambeque Sector: A protected industrial site and key component of the Plan Lota project, currently in a state of deterioration.

MUSEUMS AND EXHIBITIONS

The Museo Histórico de Placilla (MUHP) stands out on the national level as one of the few community museums in Chile, and likely the only one that explicitly deals with industrial heritage. With the purpose of disseminating local history, it began in the 2000s, although it did not yet have a building. At the time, temporary exhibitions travelled to schools and churches in Placilla, as well as to other places in Valparaíso, while the objects were kept by the neighbours themselves in their homes. Thanks to the enthusiasm of local residents who gathered in the Placilla Cultural Centre, a museum building was then erected in 2008, thanks to funding from the Neighbourhood Recovery Programme 'Quiero mi Barrio' of the Ministry of Housing and Urban Development. Inaugurated on 28 August 2009 in the heart of Placilla de Peñuelas, the various 'treasures' of the community were brought together here in the first permanent exhibition. Since 2012, the museum has been open to the public on a permanent basis, and since 2023, it has had a team of professionals thanks to funding from the Ministry of Culture, Arts and Heritage.

For 13 years, the museum has been developing research on the local industrial heritage of the town. The first documentary, titled Hidroeléctrica El Sauce: A Forgotten Heritage, was produced in a completely self-managed manner, thanks to the contributions of members from the Cultural Centre and the Museum. In 2018, a series of three additional documentaries was released, resulting from years of research in archives, field visits, and interviews with former workers and local residents. The series covers the three key areas of Placilla's local industrial heritage: The El Sauce Hydroelectric Complex, the Forestry Industry in Placilla de Peñuelas, and the Drinking Water Supply for Valparaíso.

The industrial heritage work carried out by MUHP in Placilla was pioneering, as it uncovered local legacies that were previously widely unknown. Additionally, it was complemented by heritage walks, excursions, presentations of papers at congresses, educational work in schools and universities, talks held in the museum itself, and the development of temporary exhibitions. The work is ongoing, and the local community is eager to achieve legal protection for their local industrial heritage someday, with the support of national and international academic networks, including TICCIH, ICOMOS Chile, and INCUNA.

In the Biobío region, we would like to mention:

- The Chiflón del Diablo Mine works as a living museum-memory with underground tours.
- Centro Cultural Pabellón 83 hosts heritage and artistic exhibitions.
- The Tomé Textile Memory Museum is situated in the former Bellavista Oveja Tomé Textile Factory, which was founded in 1865 and declared a National Monument in 2017. This industrial complex stands as a testament to the town's rich textile heritage and the broader socio-economic transformations in Chile that began in the mid-19th century. The museum presents exhibitions on the history of textile labour, community life, and industrial development in the Biobío region.
- Puchoco-Schwager Mining Museum Complex (Coronel): Situated in the city of Coronel, this historic site preserves the memory of coal mining in the region. The complex exhibits original mining machinery and tools, as well as historical documentation of life in the mining camps. It operates as an open-air museum, offering free admission and guided tours that highlight the significance of the coal industry in shaping local identity.
- Complejo ferroviario San Rosendo. The San Rosendo Railway Complex, built between 1929 and 1934, was declared a National Historic Monument in 2023. Comprising seven key buildings, it played a crucial role in the railway and industrial development of the Biobío region in the 20th century.

TRAINING AND EDUCATION INITIATIVES

University education

While we observe that industrial heritage is of growing interest in Chile's academic spheres, with regard to master's and

doctoral theses as well as to research projects and scientific publications in a growing number of disciplinary fields, there are no specialised studies on industrial heritage in any university in Chile.

The only pre-graduate interdisciplinary university course specifically dedicated to industrial heritage that probably existed in Chile, implemented each semester in collaboration with local heritage communities since 2019 in Valparaíso, was cancelled in 2022. One major outcome of these courses was the "Interactive Map of Industrial Heritage in Valparaíso and its hinterland," which later inspired the TICCIH MapaPI project, as explained in more detail in the TICCIH Portuñol Transnational Report, in the final section of this book.

Professional training

Diploma in "Collaborative Methodologies for Heritage Projects with a critical approach," designed and implemented by OTEC Cultura y Territorio in partnership with the Master's programs in Architectural Heritage at the University of Chile, funded as part of the Biobío Regional Government's program mentioned above. (2023)

Heritage education from the communities

In addition to the education work done by the community museum MUHP mentioned above, which combines heritage education with environmental education and diverse methodologies, within the same Valparaíso Region, the community-based heritage outreach initiative Walks in Limache combines citizen participation, local memory, and the activation of public spaces. The personal energy of their founder, Aulikki Pollak, and their regular heritage education walks through the local urban landscape were key to the formation of a wider movement that succeeded in late 2022 in achieving legal national protection for local heritage in Limache, as detailed below.

SOCIAL AND COMMUNITY-BASED PROJECTS

We utilise this section to provide a brief update on key initiatives from the Biobío, Valparaíso, and Santiago Regions. They all represent critical and/or community-based perspectives on industrial heritage, and include a range of educational activities in the heritage as well as the environmental fields and others that relate to the transcendent nature of industrial heritage as an integrated heritage.

Lota

In the Biobío Region, iconic cases such as the coal mining enclave of Lota have fostered new forms of participatory and collaborative governance, bringing together communities, academic institutions, and the state. This paradigm shift promotes a social and decolonial appreciation of industrial heritage, expressed through various initiatives emerging from and for the territories. Key examples:

- The CEPAS Foundation and its community management at Pabellón 83 in Lota.
- The Lota Citizens' Table on Culture, Heritage, and Tourism coordinates workshops, heritage routes, and popular education projects.
- The Biobío Oral Archive, with the collection "Relatos del Carbón" consisting of testimonies on deindustrialisation and mining life, was initiated by the above-mentioned FONDECYT research project "Memories of the Transformations of Deindustrialization in the Global North and South."
- The Program "Strategies for the Transformation of Industrial Heritage into Regional Assets," designed and implemented by CreaSur and NUDISUR, funded by the Biobío Regional Government, 2023-24.

Placilla

In the Valparaíso Region, the aforementioned local community museum, MUHP, which became stable by 2012, has been increasingly collaborating with the academic world and international industrial heritage networks, providing an important meeting place for researchers and local residents. A series of academic events have been celebrated in the museum over the past years, and the museum's director Pamela Fuentes regularly contributes to national and international congresses, sharing the experiences of the museum's local heritage work and benefitting from the necessary support of researchers for defending the values of industrial heritage, generating growing attention of the local, regional and national authorities to the need to protect this special kind of heritage.

Santiago

Another remarkable case is the activities of Lucía Sánchez in the national capital, Santiago. Since 2022, she has been collaborating with members of the project "Circuito Santiago Industrial y Obrero" (Route of Industrial and Labor Heritage in Santiago), which aims to promote the architectural, urban, social, and cultural heritage value of neighborhoods, while strengthening inter-neighborhood networks and interactions among diverse stakeholders such as neighborhood organizations and traditional merchants. It also involves establishing dialogue with researchers, universities, and emerging cultural managers.

From 2021 to 2024, she worked at Barrio Músicos del Mundo – Población Chile as a Heritage teacher for the Heritage Course at UNIACC, alongside Luis Rolando Rojas, a member of Circuito Santiago Industrial y Obrero. In April 2023, for Heritage Day, they participated in the OH SANTIAGO project, acting as heritage guides on a tour that included the Barrio Músicos del Mundo – Población Chile.

In 2025, the book "Transistor" was published with the sponsorship of TICCIH International *(Rojas and Sánchez, 2025).* It makes available to the community various research summaries, articles, and stories related to industrial heritage and the historical, social, urban, and architectural values of the neighbourhood, as well as a review of the citizen-led heritage process developed in the area. It also addresses topics such

as delimitation, national and local heritage protection instruments, industrial archaeology, company towns, and gentrification. The book was selected by the 2025 Chile Architecture Biennial in the Dissemination category and will be exhibited at the biennial in September.

Limache

Also in the Valparaíso Region but an hour inland by local train, San Francisco de Limache is another hotspot for citizen mobilisation, heritage, and sustainable urban development in Chile. Built in the mid-19th century on the historic train connection between the port city of Valparaíso and the national capital of Santiago, San Francisco de Limache emerged as industrialisation began to penetrate the hinterlands of the port, transforming the landscape and regional interconnectedness. The city itself is thus a testament to industrial heritage.

In recent years, Limache has become a significant case study in citizen-led environmental and heritage protection. A series of community-driven actions have combined legal advocacy, public mobilisation, and heritage research to confront unsustainable urban development and defend local identity and ecology.

A key milestone occurred on May 8, 2024, when the Chilean Supreme Court issued a landmark ruling mandating that all high-impact projects—whether energy-related, mining, or real estate—proposed within municipalities located in the La Campana–Peñuelas Biosphere Reserve must undergo Environmental Impact Assessment (EIA) procedures. This decision was the result of sustained community mobilisation, environmental litigation, and public pressure, and it sets a precedent for environmental justice in Chile's central valleys.

Earlier, on December 21, 2022, after years of civic and academic work, Chile's National Monuments Council declared Avenida Urmeneta and Parque Brasil as a Zona Típica (Heritage Protection Area). This declaration institutionalised the collective effort to preserve one of Limache's most iconic urban and landscape areas, marking a critical success in community-led heritage protection.

These advances are anchored in a broader ecosystem of participatory action and applied research. A key scholarly contribution was the 2021 technical report "Expediente Técnico para una Declaratoria Patrimonial de Limache: Un Territorio Liberal Progresista emblemático de la República de Chile del Siglo XIX," coordinated by Marion Steiner and produced by her ESPI Lab on Critical Industrial Heritage Studies with the support of the Pontificia Universidad Católica de Valparaíso (PUCV). This working paper provided a robust geohistorical analysis of Limache as a paradigmatic 19th-century liberal-progressive territory, informing both the heritage declaration and the ongoing debates on urban memory and planning.

Parallel to this academic foundation, a trilogy of community-led book publications has further reinforced local heritage narratives: The first volume (Venegas 2023) offers an interdisciplinary account of the region's natural and built heritage, the second one (Venegas et al. 2023) retraces the architectural and symbolic history of the city's core, and the third one (Venegas et al., in print) documents the working-class legacy of the local brewery district. These books, supported by Fondart Nacional and the National Heritage Fund, have enhanced the visibility and legitimacy of Limache's cultural landscape in public discourse and policy processes.

Limache's experience demonstrates how local knowledge, social memory, and community mobilisation can align with legal and institutional frameworks to promote a more just and sustainable urban future. It is an illustrative example of participatory heritage governance in Latin America, where small and medium-sized cities increasingly assert their right to shape territorial development in balance with ecological and historical values.

PUBLICATIONS

Chilean colleagues contributed regularly to the international TICCIH Bulletin, with Boris Cvitanic, Esperanza Rock, Marion Steiner, and Pamela Fuentes publishing in nos. 96, 97, and 98 in 2022, 101 and 102 in 2023, and 103 in 2024, often co-authoring each other.

The 100th edition of the German journal *Industriekultur* (3/2022) was dedicated to industrial heritage in Chile. Co-edited by Marion Steiner together with Chief Editor Norbert Tempel, it featured individual contributions by Jaime Migone, Esperanza Rock, Marion Steiner, and others.

Key publications from the regions (in Spanish):

- Luis Rojas and Lucía Sánchez (eds.). *Transistor. Enhancing the industrial heritage of the Músicos del Mundo neighbourhood – Población Chile*. Santiago de Chile: independent production, 2025. (open access).
- Daniel Matus and Boris Cvitanic (eds.). *Magellan Strait. Industrialization, Collective Habitat and Coastal Border during the 20th Century*. Punta Arenas: Universidad de Magallanes, 2022.
- Marion Steiner and Pamela Fuentes. *Light for Valparaíso. The Hydroelectric Complex El Sauce y La Luz: an industrial heritage shared between Placilla de Peñuelas and Elektrópolis Berlin*. Valparaíso: Centro Cultural Placilla, 2021. (open access).
- María Esperanza Rock Nuñez and Daniel Stewart. The great mining basin of Lota before its industrialisation (1550-1830). *Revista Notas Históricas Y Geográficas* (34), 2025, 279–314. (open access).
- María Esperanza Rock Nuñez and María José Bretti López. Artistic narratives of transformation. An approach to sensibility and its memory. *Revista De Geografía Norte Grande* (91), 2025. (open access).
- María Esperanza Rock Nuñez. Reflections on heritage and decolonial perspectives in post-industrial studies in communities in the South. *Revista Gerónimo De Uztariz Aldizkaria* (37), 2023. (open access).

The Limache book trilogy (in Spanish):

- Fernando Venegas (ed.). *Geo-historical, archaeological, and architectural heritage of Central Chile: San Francisco de Limache*. Concepción: Editorial Universidad de Concepción, 2023.
- Fernando Venegas, Fernanda Venegas, and Javier Verdugo (eds.). *Heritage journey: Urmeneta Avenue of San Francisco de Limache, an architectural jewel of Central Chile*. Concepción: Editorial Universidad de Concepción, 2023.
- Fernando Venegas (ed.). *Social history of the CCU industrial neighbourhood: Working-class legacy of the local brewery district*. Concepción: Editorial Universidad de Concepción, in print.

Major contributions to global discussions (in English and bilingual Spanish-English):

- Marion Steiner. Industrial Heritage from the South: Critical Approaches to the Social Construction of Heritage and Preservation Practices. In: *The Routledge International Handbook of Deindustrialization Studies*, edited by Tim Strangleman, Steven High, Sherry Linkon, Stefan Berger, Jackie Clarke, and David Nattleingham. London: Routledge, 2025, pp. 459-483 (open access).
- María Esperanza Rock Núñez, Marion Steiner, Daniel Stewart, and Andrés Torres (eds.), VV.AA. *Initiating transformations. Industrial Heritage as an Asset for Regional Development: Critical Views from and for the Global South.* Concepción: CreaSur Ediciones, 2024. (open access).

AUTHORS

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Contact Lucía Sánchez Figueroa

AFRICAN & ARAB REGION

NIGERIA

The historic Ibadan Railway Station, a crucial hub in Nigeria's railway network. (photo by author)

Sola Akintunde, Taiye Olaniyi, Dr. Adebunmi Akinbo & Oliver Owen

In Nigeria, the concept of industrial heritage is gaining increasing recognition, albeit slowly, within a landscape often prioritising contemporary development over historical preservation. Historically, much of Nigeria's industrial past, particularly that from the colonial and post-colonial eras, has been viewed primarily through a functional lens. There's a growing understanding, however, of the cultural, educational, and economic value inherent in these sites. Attitudes are shifting from viewing disused industrial sites merely as derelict structures to recognising their potential for tourism, education, and even economic regeneration. This change is driven by a small but dedicated community of academics, preservationists, and a few government agencies beginning to appreciate the tangible links these sites provide to Nigeria's economic and social development. However, significant challenges remain in terms of widespread public awareness, funding, and the development of comprehensive policy frameworks.

ACTIVITIES

The national TICCIH group in Nigeria is currently in its early stages of formalisation and expansion, spanning the 2022-2025 period. Efforts have been focused on identifying key stakeholders, academics, and professionals with an interest in industrial archaeology and heritage. While a formal membership drive is yet to reach its full potential, informal networks of researchers, historians, and architects are actively engaged in preliminary documentation and advocacy. Other associations, though not exclusively dedicated to industrial heritage, play crucial roles. The Nigerian Railway Corporation (NRC), through its historical departments, the National Commission for Museums and Monuments (NCMM), and various university departments of history, archaeology, and architecture, are increasingly aware of industrial heritage as a sub-sector of their broader mandates. Collaborative discussions are underway to foster a more robust national TICCIH presence and to streamline efforts among these disparate groups.

CHANGES TO PUBLIC POLICIES AND ORGANISATIONS

Over the last three years (2022-2025), significant, though incremental, shifts in public policy regarding industrial heritage in Nigeria have been observed. There hasn't been a sweeping new policy specifically for industrial heritage; however, existing frameworks are being reinterpreted or applied more broadly. The National Commission for Museums and Monuments (NCMM) remains the primary statutory body responsible for heritage protection. Discussions within the NCMM have begun to explicitly include disused industrial sites as part of national heritage, leading to preliminary surveys of certain railway stations, colonial-era factories, and mining sites. There is also a noticeable, albeit slow, increase in state governments, particularly those with a rich industrial past (e.g., Cross River, due to its Calabar-era industrial sites, and Enugu, due to its coal mining), showing interest in leveraging these sites for tourism and local development. This has led to some ad-hoc, localised initiatives, rather than a top-down, national policy change.

ALTERATIONS TO LEGAL PROTECTION

Between 2022 and 2025, there have been no major alterations to Nigeria's core legal framework for heritage protection that

specifically target industrial heritage. The National Commission for Museums and Monuments Act remains the principal legislation. However, the interpretation and application of existing laws are evolving to encompass industrial sites more explicitly. There has been an increased focus on the potential for listing certain industrial sites under national protection orders, though concrete designations remain limited. Nigeria currently has no industrial World Heritage sites. Efforts are ongoing to document sites that may meet the criteria for future tentative list submissions; however, no formal alterations or new designations have occurred during this reporting period. The primary challenge remains the identification, documentation, and political will to protect these sites formally.

OUTSTANDING PROJECTS AND NOTABLE CASES

While large-scale restoration projects dedicated solely to industrial heritage remain rare, some notable developments have emerged between 2022 and 2025. The most significant ongoing efforts relate to the Nigerian Railway Corporation's modernisation initiatives, which, while focused on new infrastructure, have incidentally drawn attention to older railway stations and workshops. There are nascent discussions, for example, about the adaptive reuse of historical railway facilities in key cities like Lagos and Ibadan for cultural or commercial purposes. However, these are still in early planning stages.

The loss of industrial heritage sites continues, primarily due to urban encroachment, neglect, and the lack of protective measures. Notable losses include the further deterioration or demolition of colonial-era cotton ginneries and some older mining structures due to neglect and redevelopment pressures. A positive, though small-scale, example is the community-led preservation efforts around some disused palm oil processing facilities in the South-East, driven by local historical societies rather than a national mandate.

MUSEUMS AND EXHIBITIONS

Within the 2022-2025 period, no new industrial museums have been established, and there have been no significant changes to existing museum structures dedicated explicitly to industrial heritage. The National Museum system, under the NCMM, holds some industrial artefacts within broader historical collections, but a dedicated industrial museum remains absent. However, there has been a notable increase in temporary exhibitions and scholarly presentations focused on aspects of Nigeria's industrial past. For instance, university history departments have hosted small-scale exhibitions on specific industries, such as coal mining in Enugu or the early textile industry. The Nigerian Railway Corporation has also expressed interest in creating a dedicated railway museum as part of its centenary celebrations, with initial conceptual plans being discussed, but this has not yet materialised into a physical space. There have been no closures of existing industrial museums, as a formal, dedicated institution has not yet been established.

TRAINING AND EDUCATION INITIATIVES

Training and education in industrial heritage within Nigeria remain primarily integrated into broader academic disciplines rather than standalone programs. University departments of Archaeology, History, and Architecture offer courses that

Remnants of a colonial-era ginnery, reflecting Nigeria's agricultural processing history. (photo by author)

A modern freight train on newly laid tracks, symbolizing the ongoing evolution of Nigerian railways. (photo by author)

Community members engaged in an awareness campaign for industrial heritage preservation. (photo by author)

touch upon aspects of industrialisation, technological history, and heritage management. There's a growing academic interest, particularly at the postgraduate level, in dissertations and research projects focused on Nigerian industrial heritage sites, including railway infrastructure, mining complexes, and early manufacturing plants. Occasional workshops and seminars organised by university faculties or the NCMM have featured industrial heritage topics, aimed at raising awareness among students and professionals. However, a structured curriculum or dedicated program in industrial archaeology or industrial heritage conservation has yet to be established at any Nigerian university.

SOCIAL AND COMMUNITY-BASED PROJECTS

Social and community-based projects involving industrial heritage in Nigeria are slowly emerging, driven by local initiatives and a growing sense of community identity tied to these sites. Over the past three years, examples include nascent efforts by local communities in coal-mining towns to document and commemorate their industrial past through oral histories and small-scale clean-up efforts around disused mine shafts. There is also community advocacy for the preservation of historical railway stations, often led by local youth groups or retired railway workers who understand the historical significance. These projects are typically unfunded or minimally funded, relying heavily on volunteer effort and local enthusiasm. They highlight the potential for bottom-up engagement in industrial heritage preservation, often preceding or influencing formal governmental interest.

PUBLICATIONS

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- Okoro, L. M., & Danjuma, F. A. (2024). Industrial Legacies: Case Studies of Colonial Manufacturing Sites in Southern Nigeria. *Journal of Nigerian Heritage Studies,* 15(2), 45-62.
- Eze, P. C. (2022). *Coal City Chronicles: The Industrial History of Enugu*. Coal City Heritage Foundation.
- Olawale, D. (2025). The Adaptive Reuse Potential of Disused Industrial Sites in Lagos. *Built Environment Quarterly,* 10(1), 78-90.
- Bello, A. (2023). *Industrial Archaeology in Nigeria: A Preliminary Survey.* Heritage Preservation Press.

AUTHORS

Sola Akintunde (Trustee), Taiye Olaniyi (President), Dr. Adebunmi Akinbo (Honorary Publicity Secretary) & Oliver Owen (Honorary Research Secretary)

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BENIN

Christella Alihonou

This document presents the first national report on Benin's industrial heritage, providing a comprehensive overview of existing research, initiatives, and challenges in the field. As a tangible legacy of the pre-colonial, colonial, and post-colonial periods, industrial heritage is essential for understanding the country's economic and social development.

Benin's industrial history is shaped by various phases: from pre-colonial artisanal production and regional trade systems, through colonial-era infrastructure such as railways, ports, and processing plants, to modest post-independence industrial initiatives aimed at supporting national economic sovereignty. These layers of industrialisation have left behind valuable, but vulnerable, traces in the built environment and technical landscapes, for example, the so-called Bascule Bridge, a crucial component in the production process of the Ikpinlè factory. It's a unique industrial collection that allows weighing loaded and empty vehicles to determine the net weight of raw materials or finished products.

Despite some sporadic inventories and isolated actions, no coherent national policy has been developed to identify, safeguard, and promote these sites and equipment that bear witness to Benin's industrial activities. As a result, this heritage remains largely unknown and insufficiently protected.

Bascule Bridge at the factory of Ikpinlè, 2023 (photo by author)

ACTIVITIES

As a young researcher and heritage advocate, I must note that I am unable to provide a fully objective or comprehensive view of activities in the field, as I have not yet identified or engaged with other networks or actors in Benin working toward the safeguarding of industrial heritage. However, I am taking steady steps to build my capacities and expand collaborations, to contribute more effectively to this underdeveloped field soon.

Working alone, without a budget or team, and often mocked for my obsession with old scrap metal, the most significant action dedicated to Benin's industrial heritage has been the inventory of colonial-era vestiges in the south of the country. This work involved systematically exploiting administrative and technical archives to identify old factories, railway infrastructure, port facilities, and

Museum container, Autonomous Port of Cotonou, 2025 (photo by Baudelaire Hedagbe)

Showcasing a selection of historical objects, technical instruments, photographs, and archival documents during the Port of Cotonou's 60th anniversary celebration (photo by Baudelaire Hedagbe)

electrical installations. Each site was documented in an inventory sheet, following national technical criteria.

PUBLIC POLICIES AND ORGANISATIONS

The current legal framework, governed by Law 2021-09 of October 22, 2021, on the protection of cultural heritage in the Republic of Benin, defines cultural goods as objects or buildings of historical, artistic, religious, or scientific significance. The law also establishes the principles and scope of heritage protection. Although it references scientific aspects that may pertain to industrial heritage, the absence of a dedicated legal framework and specialised institutional unit remains a significant gap. Developing these is a priority to transform Benin's industrial vestiges into instruments of sustainable development, cultural identity, and international recognition.

MUSEUMS AND EXHIBITIONS

An innovative temporary container museum project at the Autonomous Port of Cotonou showcased a selection of historical objects, technical instruments, photographs, and archival documents to the public during the port's 60th anniversary celebrations. Designed using repurposed shipping containers, the museum provided an accessible and flexible exhibition space that reflected the industrial context of the port itself. This initiative attracted many visitors, demonstrating the public's interest in industrial heritage and highlighting the potential of creative, low-cost solutions for raising awareness of heritage in Benin.

PUBLICATIONS

Alihonou, C. (2024). *Realization of an inventory of industrial heritage from the colonial period in southern Benin.*

AUTHOR

Christella Alihonou has a Bachelor's Degree in cultural heritage management at the African Heritage School. For her bachelor's thesis, she made an inventory of industrial heritage sites from the colonial period in southern Benin.

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SIERRA LEONE

Patrick Massaquoi & Helen Ashby

The conservation of industrial heritage is a relatively new phenomenon in Sierra Leone, where the key focus of the Monuments & Relics Commission has traditionally been on preserving culture and tradition, as well as the country's complex history of slavery and freedom.

Therefore, the only TICCIH members concerned with industrial heritage are the museum's Education & Outreach Officer, Patrick Massaquoi and Helen Ashby OBE BA FMA, Chair of the UK-based Friends of the Sierra Leone National Railway Museum.

ACTIVITIES

In 2005, the Sierra Leone National Railway Museum opened its doors to the public, marking the beginning of industrial heritage preservation in the country, which was only then emerging from a long and civil war.

Nevertheless, the industrial heritage of the Republic of Sierra Leone can be traced far back to the British colonial period in the late 18th and 19th centuries. Interestingly, the establishment of Freetown in 1787 as a settlement for freed slaves marked the beginning of significant industrial activity. The coming of the British colonial administration identified Sierra Leone's potential for agricultural and mineral resources, leading to the establishment of various industries.

Sierra Leone is a country endowed with a wealth of natural resources, including diamonds, bauxite, rutile, gold, and iron ore, among others, which have driven the development of its mining industries. These industries have played a pivotal role in the country's industrial development. The discovery of diamonds in the 1930s spurred the growth of the diamond mining industry, which became a significant source of revenue and employment.

Several extraction companies were established in Sierra Leone. However, the industries have faced significant challenges, including mismanagement and the impact of the decade-long rebel war, which disrupted operations and led to economic instability.

Moreover, following independence in 1961, Sierra Leone sought to diversify its economy and promote industrialisation. Tremendous efforts were made to develop manufacturing sectors, including food processing, textiles and construction materials. Therefore, contemporary industrial heritage can be characterised by a blend of traditional practices and modern initiatives.

ALTERATIONS TO LEGAL PROTECTION

The preservation of Sierra Leone's cultural and industrial heritage is governed by the Monuments and Relics Act and managed under the auspices of the Monuments and Relics Commission, established in 1956 (amended in 1967). Still, it makes little reference to industrial heritage per se. However, the Commission has collaborated with the National Railway Museum to survey and document railway relics along the former railway route, identifying what should be preserved in situ and what should be rescued and brought to the museum for preservation. It has been observed that buildings reused for other purposes have survived well and are adequately maintained. In contrast, the effects of nature and the rebel

Hopper wagons being loaded with stone at Baoma Quarry, 1952 (photo provided by author)

war have left many vacant buildings derelict. Some significant buildings and structures have been demolished to make way for modern infrastructure and building projects.

Unfortunately, the lack of available finance means that the Monuments & Relics Commission is only able to make slow progress with the development of new conservation initiatives and is mainly reliant on external grant funding for the projects it manages.

OUTSTANDING PROJECTS AND NOTABLE CASES

Exhaustive interaction and privileged conversations with community members during the recent motorbike ride from Pendembu to Freetown commemorating various of anniversaries relating to the Sierra Leone Railway revealed that the most notable industries during the colonial era was the exploitation and export of agricultural products such as oil palm, palm kernels, coffee, ginger, cocoa, piassava, etc from the southeastern province of Sierra Leone which were significant commodities. It was mentioned that the extraction of vast quantities of these products kicked off the British mechanised production methods and laid the groundwork for industrial practices in these regions.

The 2025 motorbike ride represented the second phase of a program to collect oral reminiscences from people closely associated with the railway before its closure in 1975. A first phase was carried out at the museum in September 2012, when interviewees included the last General Manager of the Sierra Leone Railway, Richard Norman, the final Chief Mechanical Engineer Ayodele Cole and the first Coordinator of the National Railway Museum Mohamed Momodu Bangura, an apprentice-trained mechanical engineer who served in the National Railway Workshops in Cline Town from the 1950s until closure in 1975. All of these key railwaymen have since passed on, but their legacy is unquestionable and a testament to the importance of collecting their testimonies before it was too late. Now, 50 years since the railway's closure, it is crucial that this programme is continued and that similar programmes are developed for other industries.

Piecing together the history of the Sierra Leone Railway, it is clear that the railway was developed to serve the developing industries in Sierra Leone and Colonial Reports show how the railway connected with the extraction and agricultural sectors, with sidings at Masanki into the oil palm works, at Kenema into a sawmill and timber yard and at Hangha into the chromite mines. The railway museum makes a nod to this industrial heritage only from the perspective of the railway story. Similarly, a small display about the Marampa and Tonkolili mines focuses solely on the story of the 3ft 6 in gauge railway, which was built specifically to transport iron ore from the mines to the coast for export.

Inside the Sierra Leone National Railway Museum (photo by author)

Wagons loaded with sacks of palm kernels, 1928 (photo provided by author)

TRAINING AND EDUCATION INITIATIVES

In 2024 and 2025, funding from the Commonwealth Heritage Forum for training in heritage conservation skills enabled the training of young Sierra Leoneans in the conservation of woodwork, through the preservation of an original Board House, and in cast iron conservation, through the refurbishment of parts of the original Fourah Bay College building. These skills will be invaluable in preserving industrial heritage.

The development of Heritage Clubs in schools throughout the country is an ongoing project, teaching young people to respect and protect their heritage. This is reaping dividends at key railway sites such as Newton Station and Bauya Junction. To date, there are seven proactive School Railway Heritage Clubs, with several more in development. An initiative for 2025 is the development of teaching programmes, internships, and conservation projects in association with the three leading universities in Sierra Leone: the University of Sierra Leone (Fourah Bay College), Limkokwing University and Milton Margai Technical University.

AUTHORS

Helen Ashby OBE BA FMA graduated in Modern Languages (French and Spanish) with a degree in Economics from Bradford University in 1981 and completed the Museums Association Postgraduate Diploma in Museum Studies in 1989. She joined the National Railway Museum in July 1982 as a junior curator, rising to become Head of Knowledge & Collections in 2003, where she managed all collections activities at the museum, overseeing a team divided between collections management and collections access.

Since retiring from the National Railway Museum in 2014, Helen has worked as a freelance heritage consultant and is a Director of The International Railway Heritage Consultancy Ltd. She is a professional Museum Mentor to the Bahamas Locomotive Society and a Trustee of the Welshpool & Llanfair Light Railway.

Having been associated with the Sierra Leone National Railway Museum since it opened in 2005, she is a founding trustee and Chair of the Friends of Sierra Leone National Railway Museum, volunteering at the museum regularly and acting as a professional mentor for the museum staff. She was awarded the OBE for services to railway heritage in the New Year Honours List, 2010.

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Patrick Massaquoi BA studied Soil, Crop and Climate Science at Milton Margai College of Education & Technology and holds a Bachelor's degree in Project Management, Agriculture, Humanitarian Intervention and Human Rights from the College of Theology and Management and Church Training Centre, Affiliate of the University of Sierra Leone.

Patrick spent his career in education and communications in the Sierra Leone Red Cross Society. During the Sierra Leone civil war (1991-2002), he was heavily involved in providing relief and first aid to Liberian refugees and displaced individuals. He is also a security expert, trained in Denmark at the Danish Emergency Management Agency, and served as the Security Focal Point for the Sierra Leone Red Cross for 10 years.

Patrick has been a member of the Sierra Leone Scouts Association since childhood and serves as Commissioner for the organisation, leading on administration, education, and youth leadership training. He is a playwright, actor and theatre director and has been a volunteer at the Sierra Leone National Railway Museum for several years. In 2024, he was appointed as Education and Outreach Officer on a full-time basis.

Contact Patrick Jibao Sinnah-Massaquoi

EGYPT

Dr. Mirhan Damir

This is Egypt's second national report to TICCIH, aiming to share and promote awareness of the country's rich industrial history at both national and global levels. Historical legacies in Egypt are currently recognised either under the Ministry of Tourism and Antiquities (Islamic, Coptic, and Jewish Antiquities Sector) as listed monuments or under the Ministry of Culture (National Organisation for Urban Harmony - NOUH) as designated heritage. Despite several industrial buildings being listed under these ministries, they are not actively promoted as part of the country's industrial heritage. Egypt continues to lack a comprehensive national strategy for documenting, safeguarding, and promoting its industrial heritage as a distinct component of its cultural legacy.

ACTIVITIES

Recent years have seen early efforts to promote industrial heritage in Egypt, often led by non-TICCIH members, even though these sites have not yet been formally designated as industrial heritage. TICCIH currently counts two members in Egypt. Since 2022, they have been working to build a network of scholars, young professionals, and heritage advocates to promote industrial heritage both locally and nationally. This network has also expanded geographically, engaging with other countries where industrial heritage remains underappreciated, such as Jordan, Saudi Arabia, Lebanon, Tunisia, Morocco, Oman, the UAE, Sierra Leone, Nigeria, Benin, and Senegal, among others. This inter- and transcontinental network promotes knowledge exchange and coordinates safeguarding actions. A strategy is now being planned to expand TICCIH membership beyond Egypt, especially in countries with shared industrial heritage narratives.

PUBLIC POLICIES AND ORGANISATIONS

Official awareness of industrial heritage in Egypt remains limited. Compared to Egypt's celebrated pre-modern heritage, industrial sites remain underappreciated. However, the "sporadic initiatives" mentioned in the previous 2022 report are now consolidating into a multidisciplinary network that communicates the value of industrial heritage with ministries, scholars, and professionals at both operating and abandoned sites. This growing network is making slow but steady progress, as evidenced by increased contributions from young scholars and advocates to the TICCIH Bulletin and other publications.

ALTERATIONS TO LEGAL PROTECTION

As of 2022, 17 industrial monuments were listed under the Ministry of Tourism and Antiquities, and 54 buildings were

Bata Shoe Factory before demolition, 2024 (photo by author)

STIA Textile Plant before demolition, 2025 (photo by author)

listed under NOUH. This number has since declined due to delisting and demolitions for development. Protection is fragmented across ministries using inconsistent legal frameworks. Egypt has no industrial sites on the World Heritage List, and legal protections remain weak due to a lack of expertise and a coherent strategy.

OUTSTANDING PROJECTS AND NOTABLE CASES

Egypt's prominence in production activities dates back to ancient times, as illustrated by the 2021 excavation of the world's oldest known brewery at the funerary site of North Abydos (see Fig. 1 in the 2022 National Report). From the early 19th century onward, Egypt became one of the first countries in Africa and the Middle East to embrace modern industrialisation. The implementation of modern technological systems was primarily driven by European entrepreneurs, motivated both by business expansion and colonial interests. Today, Egypt's officially listed industrial buildings date mainly from the 19th and 20th centuries. This section presents selected notable cases—both listed and unlisted—chosen for their visibility and resonance across academic circles and social media platforms. Many additional examples of significant industrial heritage likely remain under-documented and unrecognised across the country.

Former Al Ahram Brewery - Founded in 1897 in Alexandria and later nationalised, Al Ahram Beverages Company reflects Egypt's shifting political and industrial landscape. A parallel adaptive reuse project—Cairo University's Creativity and Entrepreneurship Development Centre—exemplifies the successful transformation of industrial spaces into innovation hubs.

Former Damietta Bridge - Constructed initially in Cairo (1889), this pivoting railway bridge was relocated to Damietta in 1927. Efforts to preserve its movable segment transformed it into a cultural venue. Although the venue was looted and closed in 2011, the bridge remains a significant early steel structure, nicknamed the "Bridge of Civilisation."

Spahi Textile Plant - Once Alexandria's largest textile factory, founded in the 1930s, the Spahi Plant and adjacent villa showcased neo-Islamic architecture. Following neglect, delisting, and failed advocacy efforts, the site was demolished in 2024, erasing an important part of Alexandria's industrial heritage.

Bata Shoe Factory - Bata's factories in Alexandria date to the 1930s, with significant production by the 1950s. Nationalised and later privatised, operations ceased by 2024. Demolition followed, highlighting the vulnerability of industrial heritage amidst urban redevelopment pressures.

STIA Textile Plant - Located near the Mahmoudia Canal, STIA was a central hub for mid-20th-century textiles. Despite its industrial significance, it was demolished in 2025 amid new development projects, reflecting ongoing losses of modern heritage.

INDUSTRIAL MUSEUMS AND EXHIBITIONS

Dust of Time – Alexandria, 2023 - Samar Baioumy's exhibition documented decaying cotton factories in Alexandria using photography, VR, and oral histories. The project connected industrial spaces with memory, creating a multisensory experience that emphasised heritage as lived history.

Exhibition in Marseille, 2024 - Building on her work in Egypt, Baioumy explored Marseille's industrial past through photography and VR, drawing parallels with Alexandria's heritage. Her cross-cultural documentation promotes greater public awareness and calls for preservation.

Film: The Crime (2022) - This psychological thriller, set in Al-Quseir, inadvertently drew attention to the town's neglected industrial architecture. Its popularity sparked media interest, community advocacy, and renewed calls for preserving local industrial heritage.

Key Museums in Egypt include the Egyptian Railway Museum (Cairo), the Cotton Museum (Cairo) and the Nile Museum (Aswan).

TRAINING AND EDUCATION INITIATIVES

COSIMENA Winter School 2025 - This upcoming initiative at Alexandria University will feature Egypt's first 3D documentation of an industrial site. Students will learn photogrammetry and laser scanning techniques, helping bridge digital technology and conservation.

FWF–TU Wien & Alexandria University Collaboration - This project investigates Austro-German industrial projects in Nasserist Egypt (1954–1970), documenting factory complexes and tracing their transformations. It explores Egypt's mid-20th-century industrial planning and advocates for reuse and public engagement.

Iskandrona Exhibition – Raquda Foundation, 2023 - Focusing on Alexandria's transport networks, this multidisciplinary exhibition presented artworks, oral histories, and photography to showcase the role of transit in shaping the city's industrial identity.

International Workshop – Alexandria & Southern France, 2023 - A joint workshop explored the sustainable reuse of industrial materials through digital fabrication. Participants from Egypt and France collaborated on creative approaches to preservation, integrating technology and heritage education.

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Image from the Exhibition "Dust of Time" in Alexandria, 2023 (photo by author)

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AUTHOR

Dr. Mirhan Damir is a Lecturer at Alexandria University and holds a PhD in Monument Preservation from Bauhaus-Universität Weimar. Her work focuses on Egypt's industrial history, architecture, and global industrial networks. She holds degrees from Egypt and TU Berlin, and has professional experience spanning Egypt, Germany, the UAE, Jordan, and Saudi Arabia.

She lectures in the international program *Revitalisation of Historic City Districts* and has participated in international heritage workshops. From 2020–2021, she was a researcher in the MHFL Project, exploring industrial heritage conservation in the Middle East. She co-leads the 2025 Winter School on digital documentation of industrial sites and the FWF-funded project on Austro-German industrial heritage in Nasserist Egypt.

Dr. Damir is an active member of TICCIH and serves on its Board and Communications Team. She is a member of the Egyptian Engineers Syndicate and ICOM Egypt and plays a pivotal role in expanding networks and discourse around Egypt's overlooked industrial past.

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JORDAN

Nedhal Jarrar

This national report presents the progress and current state of industrial heritage documentation in Jordan from 2022 to 2025, with a particular emphasis on oil and gas infrastructure in the Eastern Desert—specifically the remnants of the Trans-Arabian Pipeline (Tapline) and the Iraq Petroleum Company (IPC) pipeline. This marks Jordan's second national report submission to TICCIH, following the 2022 Montreal Congress. The documentation initiatives during this period illustrate a growing academic and institutional interest in the colonial-era industrial legacy, despite ongoing governmental neglect and the absence of formal legal protections.

ACTIVITIES

There is currently no formal TICCIH national group operating in Jordan, and Jordanian membership in TICCIH remains limited. Nevertheless, ICOMOS-Jordan stands as the primary body with an interest in heritage preservation, including industrial heritage, where a scientific committee of Industrial Heritage is expected to be established soon. Individual researchers, particularly in academia and archaeological institutions, have spearheaded notable documentation initiatives.

PUBLIC POLICIES AND ORGANISATIONS

In the past two decades, Jordan has witnessed systematic destruction and neglect of its industrial heritage. Key sites have been demolished or left to decay.

ALTERATIONS TO LEGAL PROTECTION

The legal framework for protecting heritage, including industrial heritage, remains weak. The primary law governing heritage protection is Law No. 5 of 2005 on the Protection of Architectural and Urban Heritage. This law identifies "Heritage" as post-18th-century remains. It places the responsibility for heritage site protection with the Ministry of Tourism and Antiquities (MoTA), which leads the National Committee for the Protection of Architectural and Urban Heritage. The committee is currently working to activate and implement the law in additional cases across the country.

OUTSTANDING PROJECTS AND NOTABLE CASES

In recent years, two major research initiatives have made significant strides in documenting and analysing Jordan's oil and gas-related industrial heritage. These projects focus on the remnants of the Trans-Arabian Pipeline (TAP) and Iraq Petroleum Company (IPC) infrastructure, both located in the arid Eastern Badia. Through field documentation, community engagement, and historical research, these efforts have shed light on neglected aspects of Jordan's modern industrial past, particularly from the British colonial period before independence (1921-1946).

The **Eastern Badia Archaeological Project** (EBAP), directed by archaeologist Dr Alexander Wasse, undertook a comprehensive field survey in 2024 across Jordan's Eastern Desert, focusing primarily on infrastructure linked to the Tapline. The project included photo-documentation and architectural recording, supported by the Department of Antiquities of Jordan (DoA). Key findings of the EBAP survey include: (1) the discovery and mapping of basalt-paved causeways, spillways,

H5 Pump Station in Safawi, part of the IPC pipeline, was constructed in the 1930s using basalt stone (photo by Nader Atieh)

Desert outpost at H5 pumping station in Safawi (photo by Margret Freeman)

pipeline supports, cathodic protection units, and access roads associated with the Tapline infrastructure; (2) detailed documentation of the Qaryatain Pumping Station, an abandoned site that had once featured a boulevard of shade trees, prefabricated buildings, storage tanks, workshops and administrative offices. Although the station is now heavily deteriorated due to scavenging and neglect, its layout offers a glimpse into the mid-20th-century American industrial presence in Arabia. Adjacent to the pumping station, EBAP identified the remains of a local settlement that grew up around the industrial infrastructure. This included foundations of domestic units and a communal bread oven, indicating patterns of daily life and labour in this remote location. This project highlighted the fragility of modern industrial heritage and underscored the urgency of its documentation before it is erased due to environmental degradation or development.

The project has also begun systematic documentation of the British Cairo-Baghdad air routes in Jordan, utilising ground survey and aerial photography. Giant ground arrows marked these historical routes to guide pilots across the desert. Two main routes have been identified: an earlier one established in 1921 along what is now the Abu Rujoom track, passing through Qattafi, Wisad and Anqa, and a later, straighter one connecting Zarqa with Karamah, along which the Baghdad Highway was subsequently constructed.

The **H5 Pumping Station project**, led by the Council for British Research in the Levant (CBRL), centres on one of the main IPC stations on the former Kirkuk–Haifa oil pipeline, located near the modern town of As-Safawi. Conducted between 2022 and 2024, the project aims to explore and reinterpret the colonial-era industrial and architectural legacy of this strategically significant infrastructure. The research involved a photo-archival survey of more than 47 structures within the H5 compound, including Workers' residential quarters, workshops, and a dispensary. Public facilities such as a bakery, a cold storage unit, and a recreational hall. A police post built for the Arab Legion, reflecting the site's dual function as a technical and militarised zone. A review of British Mandate-era maps, contracts, and plans in both Jordanian and UK archives. A dissemination workshop and community roundtable in As-Safawi, involving residents, heritage professionals, and historians. These events aimed to bridge academic research with public memory, fostering awareness of the site's historical significance. The H5 station is particularly notable for its role in the IPC oil logistics network, which once connected Kirkuk (Iraq) to Haifa (Palestine) via Jordan. It's strategic positioning in the British imperial communication grid, linking Cairo, Baghdad, and Amman. Its influence on local settlement patterns. The town of As-Safawi emerged from an initial construction camp, evolving in response to the station's operation. Despite its significance, the H5 site remains unprotected and vulnerable to natural and human-induced damage. The project advocates for its recognition as part of Jordan's modern heritage landscape, with potential for adaptive reuse or open-air interpretation as a public heritage site.

Air route in the Jordanian Desert. The Ground marker arrows used to show the pilots the way (AMM) and Rutba (RUT) in Iraq (photo by Alexander Wasse)

A replica of a pre-industrial site from Jordan displayed at the Jordan Museum in Amman, a Hydraulic Stone Saw Machine (photo by Xavier Cananovas)

INDUSTRIAL MUSEUMS AND EXHIBITIONS

As of this reporting period, Jordan lacks a dedicated industrial heritage museum. Exhibits addressing industrial archaeology are minimal in national museums, as exemplified by the Jordan Museum, as shown in Figure 4. Temporary exhibitions and academic symposia have occasionally addressed related topics; however, institutional support is still in development.

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AUTHOR

Nedhal B. K. Jarrar is a Jordanian Conservation Architect and PhD Candidate in Urban Heritage and Rehabilitation of Existing Buildings at the University of Cantabria, Spain. He is a member of the National Committee for Protection of Architectural and Urban Heritage in Jordan. Nedhal has collaborated with international heritage bodies including UNESCO, ICCROM, and the Heritage Commission of Saudi Arabia.

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SAUDI ARABIA

Adnan Al-Jaber

Between 2022 and 2025, Saudi Arabia has accelerated its efforts in recognising and preserving industrial heritage as a key pillar of cultural identity and national development. Guided by Vision 2030, the Ministry of Culture launched the Industrial Heritage Program in 2019. The program focuses on documentation, awareness, reuse, and strategic planning across a diverse set of industrial sites reflecting the Kingdom's transition into a modern state.

ACTIVITIES

Saudi Arabia has collaborated with:

- TICCIH (International Committee for the Conservation of the Industrial Heritage)
- ICCROM and UNESCO on training programs
- Japan Industrial Heritage Information Centre
- Regional partnerships with NEOM, SABIC, Ma'aden, and Zamil Marine

Workshops and study tours (e.g., in Dhahran and Arar) have provided training for national heritage professionals, with a focus on adaptive reuse, materials conservation, and digital documentation.

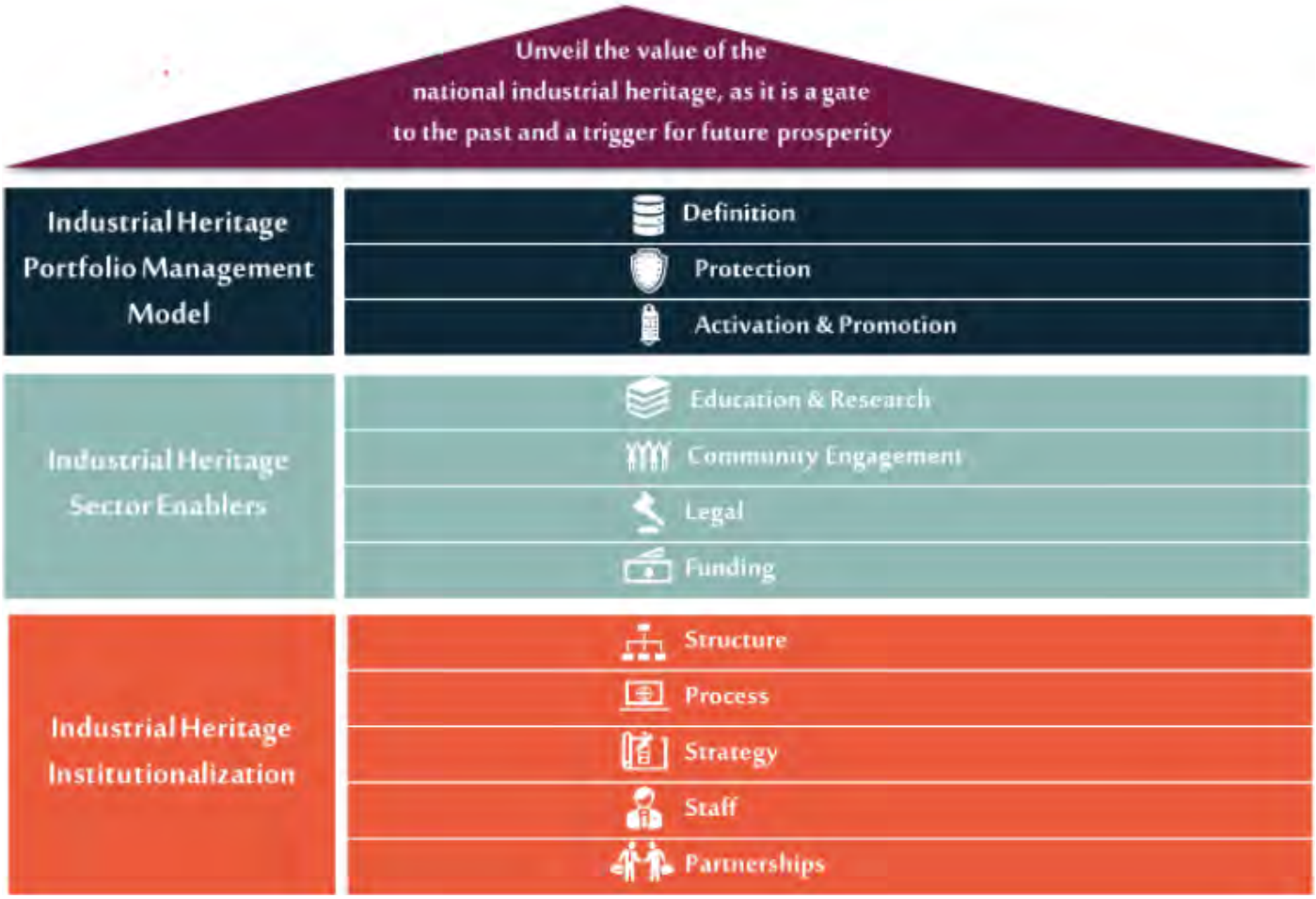
PUBLIC POLICIES AND ORGANISATIONS

Industrial heritage is now explicitly referenced in the updated Antiquities and Museums Law. A new regulatory annexe is under development for industrial sites undergoing privatisation or located in economic zones. Public-private partnership models are being explored for the reuse of sites.

The National Industrial Heritage Strategy (2022–2025) provides the roadmap for the protection and reuse of industrial sites. It includes eight pillars and 33 initiatives that cover governance, legal protection, adaptive reuse, education, tourism, and community engagement.

Key elements include:

- Creation of the National Register for Industrial Heritage (linked to the broader heritage registry).
- Legal amendments that formally include industrial heritage within the national antiquities law.
- Integration of heritage into urban and tourism planning frameworks.



SAUDI ARABIA




The Saudi Industrial Heritage Society, established in 2019, plays a vital role in advocacy and outreach.

OUTSTANDING PROJECTS AND NOTABLE CASES

The Trans-Arabian Pipeline (Tapline) is a flagship case for industrial heritage in Saudi Arabia. Registered in the National Heritage Record in 2020, it includes stations, airports, housing, and support infrastructure across the northern region. Work is underway to develop the Tapline Heritage Centre in Arar, including archives, oral history, and immersive displays.

The abandoned Al-Nazim Cement Plant (Riyadh), previously scheduled for demolition, was reclassified as a heritage site in 2024. A feasibility study for its adaptive reuse as a cultural venue is ongoing.

Several heritage sites in Jubail were surveyed and documented in cooperation with the Royal Commission and Marafiq. These include the original desalination stations, seawater cooling towers, and early worker housing from the 1970s.

In partnership with King Fahd University of Petroleum and Minerals, the Memory of the Mountain Initiative explores industrial remnants in mountainous regions. The 2025 exhibition led to new research and community engagement.

Saudi Arabia has launched a dedicated digital industrial heritage platform, integrating GIS, mobile surveys (Survey123), and archival documentation. The platform connects researchers, municipalities, and the public to mapped and classified industrial heritage sites. More than 70 sites have been surveyed, covering:

- Oil, gas, and energy infrastructure;
- Transport and logistics (airports, depots);
- Manufacturing (cement, desalination, mining);
- Communication networks (radio towers, cables).

MUSEUMS AND EXHIBITIONS

The Tapline Museum (Turaif) features digital twins and VR tours, which are tied to local school curricula.

The Petroleum Museum (Riyadh) is under development; it aims to link Aramco archives with public education.

The Mobile Exhibition Unit has toured seven regions since 2024, collecting oral histories and promoting awareness.

These efforts aim to mainstream industrial heritage in Saudi Arabia's cultural consciousness and contribute to the development of local identity.

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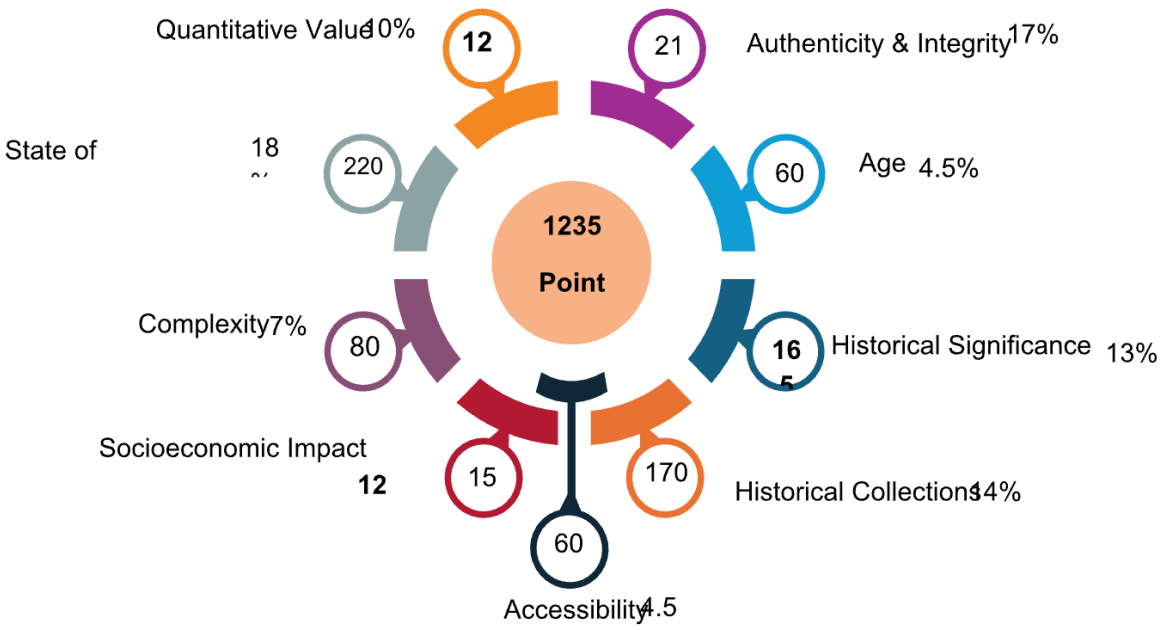
- *"Industrial Heritage in Saudi Arabia: Sites and Strategy"* – Report (2024)

- *"Final Report – International Workshop on Industrial Heritage"* (2025)
- GIS-enabled national industrial heritage map

CONCLUSION

Saudi Arabia's engagement with industrial heritage has evolved from an emerging topic to a structured national strategy with measurable outcomes. Through strategic alignment with *Vision 2030*, cross-sector partnerships, digital innovation, and international cooperation, the Kingdom is establishing a regional model for the conservation of industrial heritage.

AUTHOR

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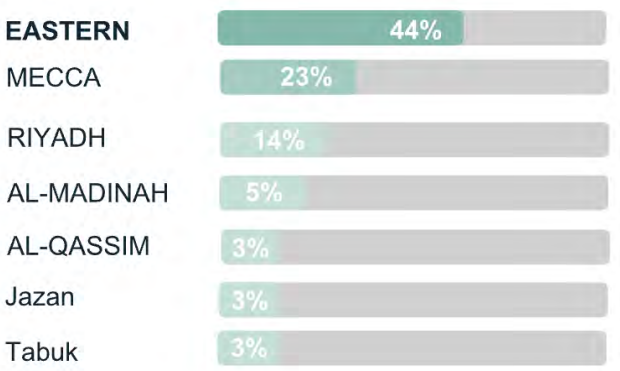

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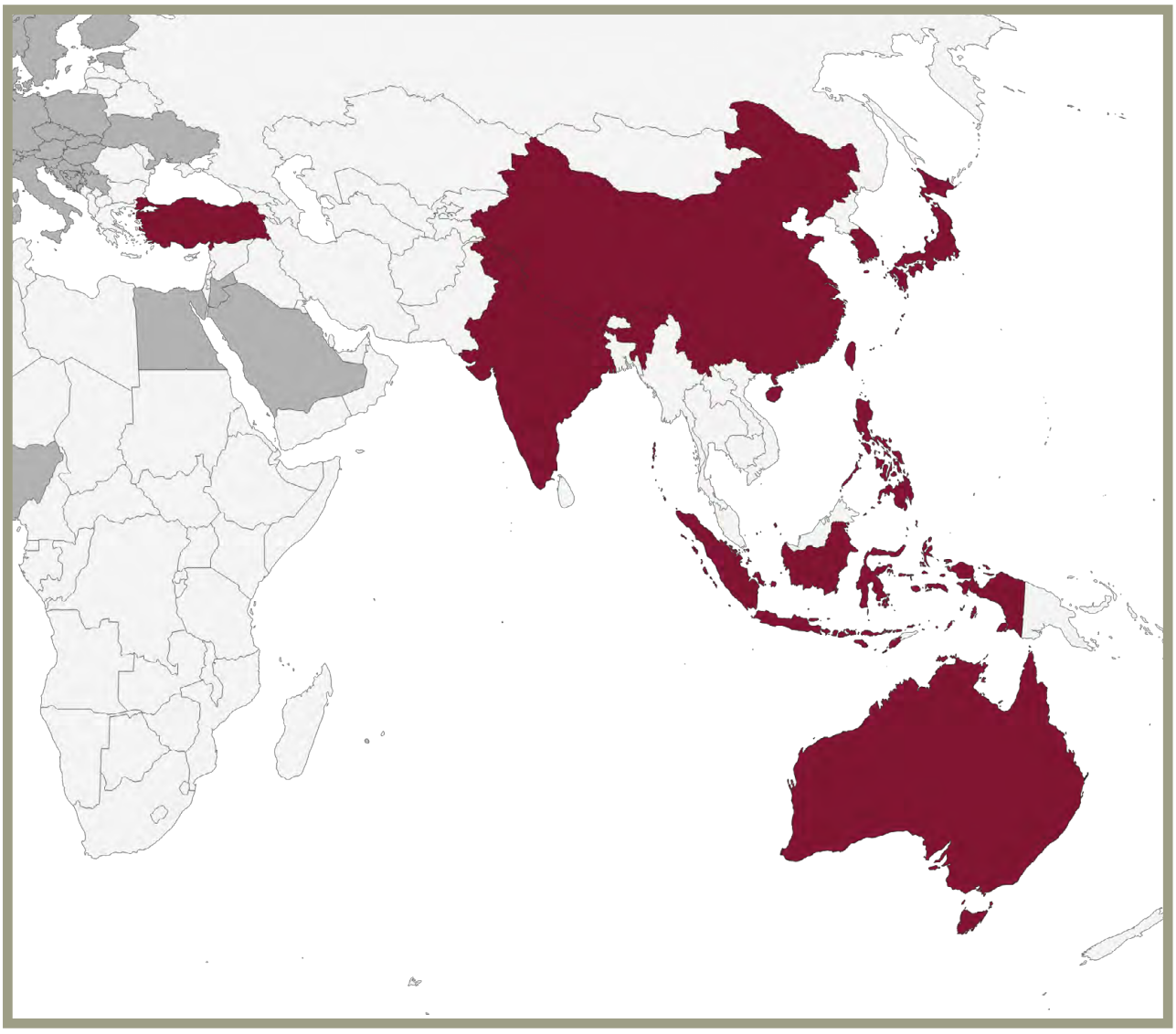

TÜRKIYE

Asst. Prof. Dr. Pelin Gürol Öngören

Industrial heritage constitutes an important yet often backgrounded dimension of Türkiye's rich and diverse cultural landscape, offering significant insights into the country's socio-economic and technological transformation. The concept of conservation of former industrial buildings was introduced in the 1990s. The conservation of specific industrial structures from the pre-Republican period and the Early Republican industrialisation era has increased, especially as these structures have lost their original functions (Saner, 2012).

ACTIVITIES

Since 2022, the Department of Architecture at TOBB University of Economics and Technology has served as the national TICCIH group, supporting the preservation of industrial heritage and promoting scholarly development and public awareness. These aims are advanced through graduate theses and academic publications that investigate industrial heritage from architectural, historical, and socio-cultural perspectives. Ongoing research includes case studies, such as those on Turkish sugar factories, as well as recent analyses focusing on participation, civil initiatives, and community engagement, thereby contributing to an inclusive heritage discourse and recognition within the broader cultural heritage framework.

PUBLIC POLICIES AND ORGANISATIONS

In Türkiye, the responsibility for industrial heritage lies primarily with state institutions such as the Ministry of Culture and Tourism, the Ministry of Environment and Urban Planning, the Higher Council for the Conservation of Cultural and Natural Assets, and regional and local Conservation Boards and Municipalities. In parallel, non-governmental organisations, including ICOMOS Turkey, the Union of Chambers of Turkish Engineers and Architects (TMMOB), the Chamber of Urban Planners, ÇEKÜL Foundation, Europa Nostra Turkey, KORDER, and Docomomo Turkey, play active roles in promoting its recognition and protection.

Industrial heritage falls under the scope of Law No. 2863 on the Conservation of Cultural and Natural Assets (1983). Immovable cultural assets are documented, approved, and registered based on criteria such as age, historical value, and aesthetic significance (a combination of more than one of these). They are categorised into two groups: the first includes monumental and architecturally significant buildings and sites, while the second comprises less qualified ones, such as residential buildings, warehouses, and other modest buildings and sites. Industrial heritage buildings and sites may fall into either category, depending on their characteristics (Mıhçıoğlu, 2022).

ALTERATIONS TO LEGAL PROTECTION

In recent years, notable examples of conservation and adaptive reuse have emerged, alongside public outreach programs, educational initiatives, and community engagement activities. However, industrial heritage remains underrepresented compared to other heritage categories. As of late 2024, only 5,121 of Türkiye's 127,287 registered immovable cultural assets (4.23%) were classified as industrial or commercial buildings. Furthermore, no industrial heritage sites from Türkiye are currently included on or nominated for the UNESCO World Heritage List, with the sole exception being the Ayvalık Industrial Landscape (olive-based historic indus-

Yedikule Gasworks in Fatih, İstanbul (photo by author)

Çubuklu Silos in Beykoz, İstanbul (photo by Mlhxdrnlx, Creative Commons Attribution-Share Alike 4.0 International)

trial and commercial cores with their surrounding residential fabric), added to the Tentative List in 2017.

Nevertheless, gradual progress has been made, particularly in İstanbul, where conservation and adaptive reuse projects in the districts such as the Golden Horn, Kadıköy, Beykoz, and Eyüp have been implemented since the 1990s. Particularly after the late 2010s, these implementations have been realised by multi-stakeholder collaborations, most notably involving the Istanbul Metropolitan Municipality (IMM), its Department of Cultural Heritage (IMM Heritage), academic institutions, and non-governmental organisations. This collective effort has prioritised the preservation of collective memory and historical continuity.

Following a review of official legislation and institutional decisions, an amendment was identified in the period 2022-2025 that directly addresses industrial heritage in Türkiye. According to Additional Article 7-8 (Amended: Law No. 7549, dated May 29, 2025, Articles 17-18), the Presidency sets the rules, outside the Public Procurement Law, for repairs, restoration, landscaping, and expert legal or advisory services for historic sites and objects, which include industrial heritage under the ownership of the Presidency.

No significant progress has been recorded regarding the inclusion of industrial heritage within the scope of the UNESCO World Heritage framework. On the other hand, Türkiye's presence on the European Route of Industrial Heritage (ERIH) is of particular academic interest, with ten sites currently included. Notably, the Zonguldak Mining Museum, which was opened to the public in 2016, was officially included in the ERIH network as a member site in January 2022, further underscoring Türkiye's growing recognition within European industrial heritage frameworks.

OUTSTANDING PROJECTS AND NOTABLE CASES

Çubuklu Silos (Digital Arts Center), İstanbul

The Çubuklu Silos, located in the Çubuklu neighbourhood of Beykoz district, were originally constructed in the 1930s for large-scale grain storage and were subsequently abandoned. Through a restoration and adaptive reuse project led by IMM Heritage, the site was reinterpreted in accordance with conservation principles and transformed into a cultural and arts centre, which was opened to the public in 2024.

Yedikule Gasworks in Fatih, İstanbul

The Yedikule Gasworks, built in 1880 for the modern urban lighting of the historic peninsula primarily as İstanbul's third gasworks by a French company, included coal gas facilities, administrative buildings, and three gasometers over a 52,000 m² area on the southwestern coast of the Bosphorus. Decommissioned in 1993 and registered for preservation in 2019, it is now being reused as a public cultural hub featuring a city museum, an urban memory archive, a digital panorama museum, and an open-air stage

Tobacco Storage No. 4 (Depo No. 4) in Konya (photo by Hacer Bozkurt)

by IMM Heritage. The first phase, completed in 2023, included the restoration of the hangar and the water tower, while the second phase focused on conserving the remaining industrial buildings, structures, and landscape.

Cendere Water Pumping Station (Cendere Art Center) in Sarıyer, İstanbul

The Cendere Water Pumping Station, built in 1902 to address İstanbul's growing water needs, is a key example of the city's industrial heritage. Despite losing its original 33-meter-high chimney and undergoing interior alterations with the shift to electricity, the building preserves much of its historic character. Opened to the public as the Cendere Art Centre on 24 October 2022, it serves as a prominent cultural venue, hosting diverse exhibitions, panels, and performances.

Tekel (Tobacco) Storage No. 4 (Depo No.4), Konya

Initially constructed in 1935, the Tekel (Tobacco) Storage Building in Konya was abandoned in the early 2000s and remained unused until it was registered as a cultural asset in the early 2020s. As a representative example of the Early Republican Architectural Era, the building was adaptively reused in 2023 as "Depo No. 4," an art and exhibition space. Emphasising flexibility and creative engagement, the venue reflects on Konya's urban memory while fostering contemporary cultural production.

Earthquakes and the Loss of Historic Industrial Sites Between 2022 and 2025

The rich olive groves of the Antakya and Gaziantep regions made it economically viable for soap production, leading to the establishment of numerous soap factories. Following the February 2023 regional earthquakes, all eight soap factories in Antakya were either destroyed or severely damaged, leaving a lasting impact on the community. In Gaziantep, although the structural damage was less extensive, seven soap factories in the city were directly affected by the earthquakes in 2023.

MUSEUMS AND EXHIBITIONS

This late 19th-century olive oil factory exemplifies the region's industrial heritage, initially functioning as both an oil mill and a soap house. Constructed with masonry walls and wooden floor beams, the building gained significance after Ayvalık's inclusion on the UNESCO Tentative List as an "Industrial Landscape" in 2017. Reopened in 2024 as the Ayvalık Rahmi M. Koç Museum, it now hosts a curated collection of industrial artefacts, including a 19th-century steam-powered olive oil production machine.

TRAINING AND EDUCATION INITIATIVES

In Türkiye, architects with graduate degrees in restoration or conservation are authorised to work on first-group heritage

sites. In contrast, those with undergraduate degrees are permitted to work on second-group assets. Education in this field is primarily offered through graduate programs in architecture faculties and two-year associate degrees in restoration at vocational schools. Undergraduate programs in the conservation and restoration of cultural property have been introduced at the Faculties of Letters, Science, and Fine Arts in recent years. While there are no dedicated programs on industrial heritage, related topics are integrated into broader curricula on the conservation of immovable heritage, which often includes industrial sites (Mıhçıoğlu, 2022). An increasing number of academic publications and course offerings dedicated to industrial heritage reflect the field's growing institutionalisation within higher education in Türkiye.

Since the 1970s, various national and international organisations, such as the Netherlands Institute in Turkey (NIT), the British Institute at Ankara (BIAA), Koç University Vehbi Koç Ankara Studies Research Centre (VEKAM), and foundations like Çekül, Koç, and Sabancı, have contributed to heritage-related education, research, and awareness in Türkiye, often operating through sponsorships, training, and public programs.

SOCIAL AND COMMUNITY-BASED PROJECTS

The Beykoz Shoe (kundura in Turkish) Factory, located in the coastal part of the Beykoz district in İstanbul, was founded in 1804 and was subsequently incorporated into Sümerbank in 1933. The large industrial complex made a significant contribution to social modernisation by providing workers with educational, cultural, and social facilities. Following its privatisation in 2003, the facility was repurposed for creative industries, with media studios established by 2010. Heritage documentation efforts began in 2015, leading to the founding of Kundura Cinema in 2018 and the Kundura Memory Association in 2021, which aims to preserve and sustain the site's industrial and cultural heritage through national and international collaboration. The association aims to ensure the sustainability of other industrial heritage examples in Türkiye.

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AUTHOR

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INDIA

Moulshri Joshi

Archaeological excavations at Keezhadi (Keeladi), Tamil Nadu, have revealed evidence of a sophisticated urban culture dating back 2,600 years, with indications of advanced iron technology potentially dating to 2400–3000 BCE. If validated through metallurgical and stratigraphic analysis, this would position the Tamil region as the earliest known site of iron smelting globally, representing a literate, urban society engaged in organised industrial production, trade, and commerce. Such a conclusion would significantly reframe global timelines of early metallurgy and urbanisation, challenging long-standing narratives that place the origins of these processes elsewhere in the subcontinent.

Keezhadi is not merely an archaeological discovery but a live case study in how the (industrial) past is constructed and contested in the present. The excavation demonstrates that our understanding of urban and industrial evolution is fluid, subject to revision as new evidence emerges. It also reveals the politicisation of heritage interpretation: state and central authorities have publicly differed over the findings, reflecting underlying regional, linguistic, and ideological divisions. The discourse surrounding Keezhadi illustrates the dual nature of heritage work—it can be an arena for scholarly enrichment and public engagement, yet also a stage for power struggles that influence which histories are legitimised.

For industrial heritage scholarship, Keezhadi offers a rare convergence of material culture, technological history, and socio-political dynamics. It compels researchers to consider not only the technical and chronological aspects of industrial origins but also the institutional, political, and cultural frameworks within which such knowledge is produced, disseminated, and contested.

INTRODUCTION

India's industrial heritage encompasses ancient, premodern, colonial, and post-independence assets. The field has expanded over the last decade, attracting scholars from architecture, archaeology, engineering, planning, arts, and geography. The International Committee for the Conservation of the Industrial Heritage (TICCIH) in India remains small—fewer than 10 paid members and 20 general participants—but active, mainly through the National Scientific Committee on Industrial Heritage (NSC-IH) at ICOMOS India. Members also contribute to the Asian Network of Industrial Heritage (ANIH), which in 2025 prioritised expanding definitions beyond built infrastructure to include intangible labour histories, oral traditions, digital inventories, and community values.

LEGAL AND ADMINISTRATIVE FRAMEWORK

A parliamentary panel survey of 2023 revealed that some 50 of the original 3693 centrally protected monuments were found to be missing. This curious case of how protected monuments can vanish from our midst is to bring to fore the necessity of documentation, acute gaps in protection and legislation and general apathy that mark the field of heritage conservation, where industrial heritage remains an outlier.

Goddess Durga in an indigo-stained avatar as a weaver overpowering the demon of western colonial capitalism- in a suit and hat – referencing the indigenous and global heritage of Bengal's textile industry during the annual Durba Puja celebrations in Kolkata (photo by author)

The NITI Aayog's Improving Heritage Management in India (2020) was one recent policy document to mention 'industrial heritage' explicitly. It frames heritage sites as 'potential revenue-generating hubs through public–private partnerships and adaptive reuse'. While the Ministry of Culture, Archaeological Survey of India (ASI), and National Monuments Authority regulate national heritage, ministries such as Railways, Heavy Industries, Textiles, Shipping, and Coal oversee significant industrial heritage without an integrated policy or even using the parlance 'industrial heritage'. State departments protect listed sites, yet no state has a dedicated industrial heritage conservation policy.

The AMASR Act (1958) protects 'ancient and historical monuments,' but few industrial sites are protected under the act or again, explicitly as 'industrial heritage'. Notable exceptions include Lothal dockyard, Dholavira, UNESCO-listed mountain railways, Chhatrapati Shivaji Terminus, Kolkata Mint, and Mumbai's Ballard Estate. Mumbai and Kolkata stand out for strong public support and advocacy, as well as the number of adaptive reuse projects.

Creative parallels were drawn between Kolkata's tram system—the city's much-loved industrial heritage under threat—and the UNESCO World Heritage site of Sundarbans mangrove ecosystem, both fragile and climate-vulnerable, Sundarban Tramjatra 2025 (photo by Deep Das/Calcutta Tram Users Association)

ACTIVITIES

World Heritage

India's industrial sites on the UNESCO World Heritage List include the Darjeeling Himalayan Railway (1999), Nilgiri Mountain Railway (2005), Kalka–Shimla Railway (2008), and Chhatrapati Shivaji Terminus (2004). Matheran and Kangra Valley railways are on the tentative list. UNESCO has raised concerns over inadequate management plans and encroachments. Events such as the restoration of the 'Baby Sivok' locomotive (2024) and NMR's 'Heritage Steam Voyage' sustain global rail tourism. Indian Railways collaborates with UNESCO, INTACH, and Google Arts & Culture to digitise collections, reach out to the public, and train their officers, while initiatives like 'Hydrogen for Heritage' explore sustainable operations of heritage railways.

Adaptive Reuse

Key recent projects include Ballard Estate warehouse conversion (Mumbai), Raghuvanshi Mills transformation (Mumbai), Dhan Mill Compound (Delhi), Calico Dome restoration (Ahmedabad), Alembic Industrial Heritage (Vadodara), Mumbai's Textile Museum, Tipong Mining Tourism Plan (Assam), Yellow Street (Calicut), and Alappuzha Heritage Project (Kerala). Challenges remain, such as the redevelopment of 256 acres of Mumbai salt pan land without adequate heritage documentation, and threats like the proposed demolition of Assam's 1935 Dikhow steel bridge.

Mining Landscapes

Coal is such an integral part of the Indian environmental, human and economic landscape that a dedicated ministry regulates it. In January 2025, the Ministry of Coal released the Guidelines for Preparation of Mining Plan and Mine Closure Plan for Coal and Lignite Mines, 2025, that mandate a scientific and socially responsible approach to mine closure, moving beyond simple land reclamation to include new, productive uses for the land and infrastructure. Historical or socio-cultural narratives, including heritage, are not mentioned. However, the ambition to reopen the mines as "eco-parks, water sports venues, and recreational spots" and to "not only restore the environment but also generate revenue and provide local employment" under "mining heritage tourism" is a recurring theme in the document.

Recent coal heritage initiatives include eco-parks, tourism circuits in Tipong and Margherita, and the Rs 5,940 crore (USD 677million) Jharia Masterplan. INTACH is advising on heritage tourism in Makum Coalfields, Assam.

Railway Heritage

Indian Railways oversees extensive built and movable heritage through its Heritage Directorate. The National Rail Museum leads 34 regional museums. While inventories are maintained, skills for steam and diesel locomotive maintenance are declining. Tensions persist between heritage preservation and redevelopment priorities. Recently established Gati Shakti Vishwa Vidyalaya (GSV) is the new central University dedi-

cated to transportation and logistics, and is yet to dedicate a course to Railway Heritage.

EDUCATIONAL INITIATIVES

Industrial heritage education is emerging within broader heritage programs: IIM Ahmedabad Archives conducts research and conferences on business and economic history, hosts annual International Conference on Indian Business & Economic History where themes feature labour history, women economic history and Ahmedabad's industrial heritage; SPA Delhi, CEPT Ahmedabad, and Kamla Raheja Vidyanidhi Institute in Mumbai integrate industrial heritage into architectural conservation curricula; INTACH Heritage Academy offers workshops and masterclass.

MUSEUMS, EXHIBITIONS, AND CONFERENCES

Science Gallery Bengaluru stages exhibitions linking industrial, military, and technological history. The Visvesvaraya Industrial & Technological Museum showcases engines, models, and aircraft components with thematic programs on safety and radiation. Godrej Archives has run public programs on corporate and industrial history (2022–25) with annual lectures from scholars.

PUBLICATIONS

Das (2025) on textile industry circularity; Gupta (2023) on challenges in industrial heritage management; Mukherjee & Banerji (2025a, 2025b) on perceptions and restorative landscapes; Mukherjee, Banerji & Chattopadhyay (2024) on sustainable management of Kolkata's brownfield sites; Rozy et al. (2025) on textile heritage inventory; Joshi (2023) On critical view of industrial heritage and legacy of Bhopal Gas Tragedy, The Indigo Factory – A Visual Story (2024).

FILMS

Cinema and OTT series engaging with industrial heritage include Mission Raniganj (2023, Hindi), Khadaan (2024, Bengali), Baghjan (2024, Assamese–Moran), and The Railway Men (2023, Netflix). These works underscore industrial contexts, including mining and chemical disasters in contemporary narratives.

View of the former Union Carbide factory site in Bhopal that has remained inaccessible to the public and contaminated since the industrial disaster in 1984. In June 2025, some of the chemical waste was incinerated amidst public protest and high security (photo by author)

CONCLUSION

Between 2022–25, India's industrial heritage sector advanced in preservation, adaptive reuse, educational integration, and public representation. However, the absence of a unified national policy, uneven state engagement, and redevelopment pressures threaten sustained protection. Collaboration between government agencies, academia, industry, and communities is essential for safeguarding this heritage.

AUTHOR

Moulshri Joshi is an architect and teacher based in New Delhi. She has been a full-time faculty member of architecture at the School of Planning & Architecture, New Delhi and visiting faculty at Norwegian University of Science and Technology (NTNU). She is the National Scientific Committee on Industrial Heritage's coordinator (NSC-IH) at ICOMOS India and a member of the Board at TICCIH International.

Contact the author

NEPAL

Kai Weise

Nepal was never colonised by any industrialised nation and remained largely isolated until the 1950s. A certain level of industrialisation took place when Nepal expanded its territories along the Himalayas in the late 18th and early 19th centuries, which required the manufacturing and distribution of arms and ammunition. This remained a local industry, ingeniously adapted to the rugged terrain and difficult access, linking a stretch of territory 1500 kilometres long, along the foothills of the Himalayas.

The western form of industrialisation only occurred very selectively, as planned by the Rana Prime Ministers who were de facto rulers from 1848 to 1951 and who had good relations with the British in India. Various members of ICOMOS Nepal have begun preparing an inventory of the industrial heritage in Nepal, with the following categories:

- Category I-1: The various forms of industrial production would be included under this category. This would consist of the early factories.
- Category I-2: Industrially manufactured means of transportation as well as related facilities. This would include the railways and the ropeways, as well as the various metal bridges, including early suspension bridges.
- Category I-3: Early facilities of production and distribution of services such as electricity and water. This would include the early hydro power plants, as well as electrical distribution systems. The water supply and hydrant system would also be included here.
- Category I-4: The fourth category includes all industrially produced products as well as miscellaneous items of interest.

ACTIVITIES

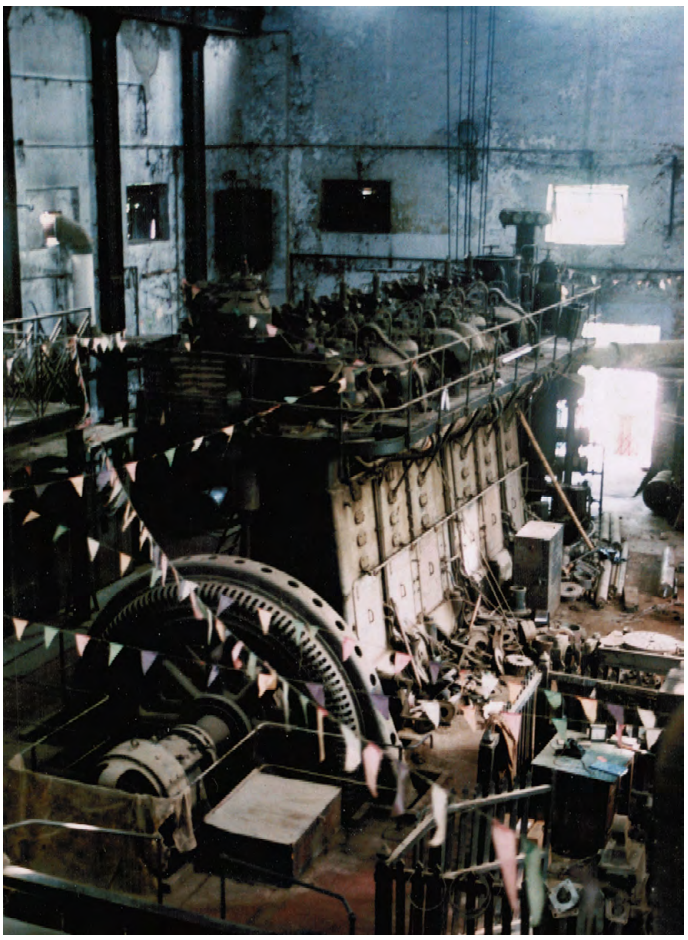
As the sole member of TICCIH who registered in June 2025, there is still much to be done to strengthen national membership and activities. However, several of us from ICOMOS Nepal have been working on documenting industrial heritage and preparing an inventory, which will be described below.

PUBLIC POLICIES AND ORGANISATIONS

There is very little attention being paid to industrial heritage in Nepal. This is something that individual members of ICOMOS Nepal have been investigating. Soon, we can hopefully establish a dedicated TICCIH team to work on this.

ALTERATIONS TO LEGAL PROTECTION

There is no specific legislation protecting industrial heritage. The Ancient Monument Preservation Act 1956 is undergoing its sixth amendment; however, industrial heritage is not explicitly mentioned. The legal provisions do allow for the protection of individual sites and structures, especially when over a hundred years old, if these are specifically designated within the national inventory. There is no such inventory, but ICOMOS Nepal is working on preparing an inventory to be submitted to the Department of Archaeology. A certain level of protection is also provided when industrial sites, structures, or activities are located within World Heritage properties or properties on the World Heritage Tentative List.



Diesel power house, Biratnagar Jute Mills (photo by author)

OUTSTANDING PROJECTS AND NOTABLE CASES

There are no active restoration projects; however, some high-profile cases are being discussed. Some of the cases have been presented in other parts of this report, such as the first Hydro Power Station (1911), the first Fire Brigade (1936), and the World Heritage Tentative List property of Khokana, the vernacular village and its mustard-oil seed industrial heritage. One of the main industrial complexes that is still intermittently operational is the Biratnagar Jute Mill, established in 1936, which holds an important place in the modern history of Nepal. Further research is underway to understand better the significance of the Jute Mills, which is expected to lead to a separate publication [see TICCIH Bulletin #81, 2018].

MUSEUMS AND EXHIBITIONS

The first hydro power station was built between 1907 and 1911 in Pharping, on the edge of the Kathmandu Valley.

Pharping hydro power plant reservoir, Kathmandu (photo by author)

Pharping hydro penstock and power plant turbine house, Kathmandu (photo by author)

The 500 kW plant started supplying electricity on May 22nd, which is still considered National Energy Day. Several years ago, the government developed a plan to operate the now-dysfunctional power station as a museum and research centre, but this has not been implemented yet.

After the 2015 Gorkha Earthquake, the municipality planned to demolish the first fire brigade building built in Nepal in 1936, the Juddha Barun Yantra, even though the structure was still in good condition. The demolition was halted, and a proposal has also been discussed to convert part of the fire brigade building into a museum. The old fire engines are still parked there.

TRAINING AND EDUCATION INITIATIVES

Apart from some individual lectures, there are no educational initiatives in universities or other academic institutions in Nepal.

SOCIAL AND COMMUNITY-BASED PROJECTS

"Khokana, the vernacular village and its mustard-oil seed industrial heritage" is on Nepal's tentative list for World Heritage. Several large infrastructure projects are being planned within the surrounding agricultural fields of the site,

Juddha Barun Yantra fire brigade, Kathmandu (photo by author)

including a highway, a second Kathmandu Valley Ring Road, and main electrical transmission lines and stations. The community of Khokana have been protesting against these projects to save their fields and their famous mustard oil industry. Negotiations are ongoing between the community and the government.

PUBLICATIONS

- ICOMOS Nepal has been working on an inventory of Nepal's industrial heritage; however, this project has not yet been completed. The first volume was on the 19th and 20th century architectural heritage of Nepal.

AUTHOR

Kai Weise is a Nepali national of Swiss origin. He completed his Master's in Architecture from the Swiss Federal Institute of Technology, Zurich and his Doctoral Research from the Department of Archaeology, Durham University. He has facilitated the establishment of management systems for World Heritage and has worked on the Mountain Railways of India. He edited the first Volume of the Nepal Inventory on 19th- and 20th-century architectural and Industrial Heritage. He is also a member of the advisory committee for the Asian Network of Industrial Heritage (ANIH).

Contact the author

CHINA

Grand Canal Hangzhou Steel Plant Park Night View, a project by Jiakun Architects (photo by author)

Yiping Dong

Between 2022 and 2025, China's work on industrial heritage entered a stage of comprehensive institutionalisation and systematisation. This period can be seen as a turning point: while early efforts after 2017 focused mainly on the designation of representative sites by the Ministry of Industry and Information Technology (MIIT), the most recent years have witnessed the consolidation of legal protection mechanisms, the deepening of thematic research, and the broadening of social participation.

ACTIVITIES

IAHAC Annual Conferences were held in Jingdezhen (2023) and Xiamen (2024), both focusing on industrial heritage and urban regeneration.

The National Industrial Heritage Summit Series were organised by MIIT, providing a platform for dialogue among policymakers, academics, and practitioners.

East–West Workshops on Industrial Archaeology continued to be held annually. The 2024 workshop focused on textile heritage, addressing conservation challenges of industrial fabrics and machinery.

Railway Heritage Forum in Harbin (2024) brought together specialists to discuss railway lines, stations, and associated settlements.

The Textile Heritage Symposium in Xi'an (2025) will focus on textile sites and conservation technology, with a special emphasis on material culture and urban regeneration.

PUBLIC POLICIES AND ORGANISATIONS

China's policy framework for industrial heritage between 2022 and 2025 demonstrates a progression from experimental recognition to systematic governance. MIIT's National Industrial Heritage Inventory. The most visible achievement is the continued expansion of the National Industrial Heritage Inventory, initiated in 2017. By 2024, six batches of sites had been announced, totalling around 232 recognised entries. These include mines, factories, transport infrastructure, hydraulic systems, and energy facilities that played critical roles in China's modernisation. Importantly, MIIT introduced re-evaluation procedures for the first time, reviewing early batches whose validity period had expired. This innovation not only ensures dynamic management but also

compels local governments and enterprises to demonstrate long-term commitment to preservation.

2020 Implementation Plan for the Protection and Utilisation of Industrial Heritage in Old Industrial Cities

This policy marked the first national-level attempt to link industrial heritage with urban regeneration strategies directly. It encouraged the creation of industrial heritage databases, the adaptive reuse of redundant sites, and the integration of heritage into cultural parks and tourism initiatives. Cities such as Shenyang, Wuhan, and Chongqing responded with pilot projects, exploring industrial parks that combine exhibition, leisure, and innovation functions.

2021 Industrial Culture Development Plan (2021–2025)

This plan, issued jointly by MIIT and other ministries, emphasised the role of industrial culture as a driver of national identity and creative industries. It proposed the establishment of a national system of industrial museums, the integration of industrial heritage into tourism routes, and the cultivation of public awareness through cultural activities.

2023 Administrative Measures for National Industrial Heritage

This milestone regulation provided a clear legal framework for application, recognition, re-evaluation, and dynamic management of national industrial heritage. For the first time, the designation process was formalised with legal authority, bringing transparency and predictability to the system.

2023 Fourth National Cultural Relics Census

Launched by the State Council, this census represented a watershed moment: for the first time, industrial heritage was explicitly prioritised as a survey category. Mines, factories, power plants, railway stations, and water-supply systems were systematically documented nationwide. The census emphasised digitalisation, encouraging the use of GIS mapping, 3D scanning, and digital archives. Its outcomes will directly feed into protection lists at multiple levels, thus linking survey, recognition, legal protection, and utilisation into a coherent cycle.

2025 Revision of the Cultural Relics Protection Law

This landmark reform elevated industrial heritage to a new level. The law explicitly defined modern industrial sites as cultural relics, established adaptive reuse as a legitimate form of conservation, and provided clearer classifications that distinguish between archaeological industrial sites, standing architecture, and intangible industrial knowledge. This creates a robust legal foundation for future practice.

Taken together, these policies demonstrate how industrial heritage has been mainstreamed into China's national governance framework. From targeted recognition to comprehensive legal protection, the period 2022–2025 marks a maturation of both concept and practice.

Provincial Industrial Heritage Documentation Volumes (photo provided by author)

ALTERATIONS TO LEGAL PROTECTION

China is preparing to strengthen its industrial heritage dimension within the World Heritage framework. The National Cultural Heritage Administration revised the Tentative List in 2025, explicitly incorporating industrial heritage themes. Jingdezhen, Baijiu Brewing heritage, and Wenzhou alum mining sites were reaffirmed or newly listed, demonstrating China's commitment to balancing cultural, natural, and industrial heritage.

OUTSTANDING PROJECTS AND NOTABLE CASES

The years 2022–2025 have witnessed several emblematic regeneration projects.

The Hangzhou Iron & Steel Plant Regeneration

Designed by architect Liu Jiakun, this project is the grand canal steel plant park for public life of the local community, the project exemplifies landscape-oriented regeneration. Instead of fully converting the site into commercial space, the design preserved large-scale industrial structures and integrated them into an ecological park.

Changchun Water Culture Park

Built on the former water-supply facilities, this project demonstrates how infrastructural heritage can be reinterpreted as a cultural and recreational space. Industrial relics such as pumping stations and pipelines have been embedded into landscape design, creating an environment that educates visitors about the history of modern water engineering while offering leisure opportunities.

Shanghai Fuxing Island

Once a major shipbuilding centre, Fuxing Island has been repositioned as a hub for cultural and creative industries. Its regeneration plan emphasises adaptive reuse of industrial buildings, ecological restoration of the waterfront, and integration with Shanghai's innovation economy. By preserving docks, warehouses, and cranes, while inserting new cultural venues and creative offices, the project demonstrates a balanced approach to regeneration.

These cases highlight the diversity of industrial heritage regeneration in China, ranging from ecological landscape integration to creative industry-driven renewal.

MUSEUMS AND EXHIBITIONS

Industrial museums are expanding as the museum industry places renewed emphasis on public education.

China Industrial Museum (Shenyang)

Enhanced its exhibitions and hosted the 2025 national showcase "Imprints of the Republic's Industry – 100 Industrial Witnesses."

Guangzhou Railway Museum

Opened in 2022, focusing on locomotives, rolling stock, and railway-related cultural heritage.

Shanghai Industrial Museum (under construction)

Designed by Kengo Kuma, the museum is based on the historic Jiangnan Manufacturing Bureau site. It is envisioned as a landmark combining heritage conservation with cutting-edge exhibition design, embodying China's ambition to present industrial heritage to international audiences.

TRAINING AND EDUCATION INITIATIVES

Formal education in industrial heritage remains limited at the undergraduate level, where industrial architecture and heritage topics are typically covered within broader curricula. However, at the master's and doctoral levels, industrial heritage has become a vibrant research field. Topics include evaluation frameworks, adaptive design, museological interpretation, and socio-cultural dimensions of industrial sites. This trend reflects both academic interest and professional demand, as more graduates engage in heritage planning, museum work, and urban regeneration projects.

RESEARCH

Academic research has kept pace with policy advances, generating both theoretical and applied knowledge. Three trends stand out among the numerous research conferences.

Theoretical research

Scholars have expanded methodologies for evaluating the historical, social, and technological values of industrial heritage. Documentation techniques, adaptive design strategies, and museological approaches have been refined, with increasing attention to how industrial sites can be reinterpreted for public engagement.

Regional and provincial studies

Supported by national funding, a grand publication project has been launched to document the industrial heritage province by province. The Industrial Heritage Series (Provincial Volumes) has published its first batch of 10 volumes before 2024, covering provinces such as Jiangsu, Sichuan, and Liaoning. Another nine volumes are in preparation. This represents the most comprehensive regional documentation effort in Chinese heritage practice.

Thematic research

Scholars have investigated specific categories, including mining heritage, textile heritage, railway infrastructure, water-supply systems, and socialist-era third-front factories. These studies have highlighted the diversity of China's industrial past and the complexity of its socio-spatial impacts. A range of specialised publications have focused on railway heritage, water-supply infrastructure, and brewing heritage, providing insights into different heritage categories.

PUBLICATIONS

- Xu, S. (Ed.). 2022-2023 *Modern Industrial Heritage Sites in China* (Vols. 1–5). Beijing: China Architecture & Building Press. This five-volume series provides the first systematic framework for classification, evaluation, and conservation of industrial heritage in Chinese cities.

- Zhu, X., et al. 2024. Tianshui Feidu: *Engineering Landscapes and Rural Aqueducts (1958–1983).* Shanghai: Tongji University Press.

- *Industrial Heritage Series: Provincial Volumes (2022–2025).* South China University of Technology Press supports this ongoing series, which represents the largest coordinated documentation project to date. The recent volume includes Beijing, Shanghai, and Guangdong provinces.

SUMMARY

Industrial heritage has also become an essential aspect of China's wider cultural heritage policy. The revised Cultural Relics Protection Law (2025) explicitly incorporated modern and contemporary industrial sites into the legal protection system, elevating them to the same level as archaeological and architectural heritage.

At the same time, the national strategy of urban regeneration shifted from new expansion to the transformation of existing building stock. This has created new opportunities for industrial heritage to serve as both cultural memory and resource

for future-oriented development, particularly in shrinking industrial cities.

Future challenges include balancing regeneration strategies between booming and shrinking cities, deepening scientific archaeology study and research, public participation, and progress in World Heritage nominations.

AUTHOR

Dr. Yiping Dong is an architectural historian, architect, critic, and heritage researcher. She has actively been involved with the growth of the research community in China on Industrial Heritage. Her research investigates the theory and history of industrial spaces in the mechanical ages, the transnational process for modern industries, and the connection to the local context, particularly in the Yangtze Delta region textile industry. She also worked on the adaptive reuse of industrial buildings, the interpretation of industrial heritage sites, and critical heritage studies, particularly heritage valorisation.

Contact the author

INDONESIA

Hasti Tarekat

The state companies of Indonesia, which own most of the industrial heritage assets, are beginning to recognise the historical, cultural, social, and economic values of their assets. Some of them have exploited their assets for social and cultural activities in cooperation with the creative sector. Others still try to find out how to combine the ongoing business with the new trend of adaptive reuse of their old assets.

One of the challenges often faced by the state companies is the exploitation of tangible heritage assets on a large scale. Indonesia doesn't have many examples of this. A specific challenge is the development of a management plan and management body, which often requires the involvement of multiple stakeholders and the ability to envision long-term programs and goals.

The Ombilin Coal Mining Heritage of Sawahlunto (OCMHS), as one of the first industrial heritage sites in Indonesia to be listed as a UNESCO World Heritage site, faces these challenges. The state-owned company of Semen Padang, with its heritage asset of Indarung I, the first cement factory established in Southeast Asia, also faces the same challenge.

A positive development occurs with the effort to nominate the Spice Route to the World Heritage List. Indonesia has sent a delegation to countries with historical ties to the Spice Route to consolidate shared history and interests.

Other positive developments include community-based activities, such as the Indonesian Railway Preservation Society, and the revitalisation of local knowledge in the fields of health and wellness, exemplified by the creation of *jamu* (traditional natural drinks) in cafes and restaurants. These community-based activities grow through social media engagements.

ACTIVITIES

We Are Site Managers International Symposium

The *We Are Site Managers International Symposium* is a Site Managers initiative aimed at promoting an understanding of the functions, responsibilities, challenges, and needs of Site Managers of World Heritage properties among international organisations, state parties, and the broader heritage-related communities. The symposium will be held from August 23 to 27, 2025, in Sawahlunto, Indonesia. One of the themes is Industrial Heritage Management. The Ombilin Coal Mining Heritage of Sawahlunto (OCMHS) is the main organiser.

Rural Cultural Landscape of Koto Gadang

An Adaptation of the Historic Urban Landscape (HUL) Approach in the Rural Area of Koto Gadang, West Sumatra, Indonesia from August 18 to 22, 2025. Inspired by the Recommendation on the Historic Urban Landscape (HUL), we aim to adapt the recommendation to a rural area, with Koto Gadang serving as a showcase. Many

Presentation of Indonesia represented by Hasti Tarekat during the Official Side Event UN Water Conference, Water and Heritage: Connecting Past, Present and Future, 2023, New York, New York (photo by author)

rural areas face economic, social, cultural, and environmental challenges. They face problems of unemployment, disengagement, depopulation, and marginalisation or loss of cultural, biological, and landscape diversity. On the other hand, there are numerous best practices on how tangible and intangible heritage could potentially become engines of development.

One of the workshop activities is identifying local craftsmanship (intangible heritage) as a source of income. Koto Gadang is renowned for its weaving traditions and silversmithing crafts. We aim to incorporate this local craftsmanship into a heritage-led rural development plan as part of the village revitalisation program, following the workshop.

2024 EVENTS

Revisiting the industrial heritage of Indonesia

The *Revisiting the Industrial Heritage of Indonesia* symposium took place in November 2024, in Padang, West Sumatra. The seminar aimed to promote the potential of Indonesia's industrial heritage and commemorate the archives of two important industrial heritage sectors in Indonesia, namely the sugar and cement industries, as part of the 2024 Memory of the World Regional Register of UNESCO Asia Pacific. Moreover, the symposium shared lessons learned from industrial heritage conservation efforts in Indonesia and planted the seeds for the institutionalisation of a national industrial heritage organisation.

Balancing Dream and Reality: the cultural landscape of sugar industrial heritage

An International Symposium, Exhibition, field visits, and workshops focusing on the cultural landscape of sugar industrial heritage took place in Tainan, Taiwan, in August 2024. Tangible heritage was addressed with case studies related to the adaptive reuse of sugar refinery, while intangible heritage covered heritage resources of the sugar industry; colonial sugar industrial heritage; tourism, adaptive reuse, and sugar industrial heritage; citizen participation, adaptive reuse, and sugar industrial heritage; information technology, adaptive reuse, and sugar industrial heritage; sugar culture; sugar trading & history; creative industry & sugar industrial heritage.

Balancing Dream and Reality: Cultural landscape of sugar industrial heritage. International Symposium, Exhibition, Field Visits & Workshops. Tainan, Taiwan, 2024 (photo by author)

Asia Network for Industrial Heritage (ANIH) International Correspondents and Emerging Professional Working Group (EPWG) Meeting

ICOMOS Philippines and ICOMOS Indonesia representatives shared their missions to actively promote World Heritage conservation, as well as to foster global connectivity and cooperation, during the meeting in Taichung City, Taiwan, on August 16, 2024.

The ICOMOS Emerging Professionals Empowerment Program is a key strategy for cultivating the next generation of cultural heritage leaders, which will benefit not only individual professionals but also enhance the overall strength of the cultural heritage field in their nation.

2023 EVENTS

The IV International and Interdisciplinary Cultural Heritage Congress

Indonesia sent Rahmat Gino Sea Games from the Municipality of Sawahlunto as a representative to the IV International and Interdisciplinary Cultural Heritage Congress in the City of Concepcion, Biobio Region, Chile, in October 2023. The congress focused on *Industrial Heritage, Social Development and Governance*. Rahmat Gino Sea Games delivered a presentation about the Ombilin Coal Mining Heritage of Sawahlunto.

Water and Heritage: Connecting Past, Present and Future

This dialogue between water professionals and culture and heritage professionals was an official side event of the UN Water Conference, held on March 20, 2023, in New York. The event, titled *Water and Heritage: Connecting Past, Present, and Future,* brought together a diverse and interdisciplinary group to discuss concepts, methodologies, and case studies. Hasti Tarekat represented Indonesia and delivered reflections and updates on water and heritage.

Spice Route

Cultural diplomacy visits of Indonesia in the form of intercultural exchange through non-arts collaboration based on shared history, 2023, represented by Negeri Rempah Foundation, Indonesia. The Spice Route, a vitally crucial cultural route, has great potential to be inscribed on the UNESCO World Heritage List by Indonesia, in collaboration with friendly countries. This joint nomination requires support from other countries with which the Spice Route shares a common heritage, including links and connections.

The crucial first step is to register the Spice Route on the Tentative List in 2024. Cultural diplomacy is essential to spearhead and drive joint nominations for the Spice Route, both domestically and internationally. Identifying evidence of connections between regions in Indonesia and friendly countries will strengthen Indonesia's cultural diplomacy efforts in support of UNESCO recognition. In the Indian Ocean and Asia-Pacific region, India, China, Sri Lanka, Madagascar,

Symposium Revisiting the industrial heritage of Indonesia. Padang, West Sumatra, 2024 (photo by author)

the United Arab Emirates, and South Africa were identified as essential partners. In contrast, the Netherlands and the United Kingdom were identified as diplomatic area priorities in Europe.

OUTPUT

1. Joint publication of a series of books, focusing on:

Maritime Culture (cooperation between Indonesia, China and the UK),

Traditional Medicine (cooperation between Indonesia, China, India and the Netherlands),

Human Migration (cooperation between Indonesia and Madagascar),

Food Traditions (cooperation between Indonesia, China, India, Netherlands); And,

Spread of Islam (cooperation between Indonesia and South Africa)

Heritage for the Public (cooperation with all countries)

2. Digital uploads of a documentary video on the Cultural Diplomacy team research trip and interviews.

Java Industrial Archaeology: Sugar Mill Mutual Heritage, History, and Development by Dr. Krisprantono, 2024 (photo by author)

PUBLICATION

- *Java Industrial Archaeology: Sugar Mill Mutual Heritage, History, and Development* by Dr. Krisprantono (2024), during the Symposium of Indonesian Industrial Heritage in Padang, 16 November 2024, organised by PT Semen Padang, ICOMOS Indonesia, and Pan-Sumatra Network for Heritage Conservation (Pansumnet).

AUTHOR

Hasti Tarekat, Representative of Indonesia for TICCIH and Vice Chairperson of the Advisory Board of the Asia Network for Industrial Heritage (ANIH), Co-Founder of the Sumatra Heritage Trust, and Director of Heritage Hands On.

Contact the author

PHILIPPINES

Ivan Anthony S. Henares

The state of industrial heritage in the Philippines is generally vulnerable and inadequately protected, despite the country having a rich history of industrial development dating back to its Spanish colonial period and intensifying during the American and postwar periods. However, there is significant potential for preservation, education, and cultural tourism if there is heightened training and capacity-building among the government and private sector, building bridges between industrial heritage scholars, NGOs, local governments, and international organisations like TICCIH.

ACTIVITIES

Since its creation in 2020, TICCIH Philippines has maintained the Philippine Industrial Heritage Inventory, an online catalogue detailing various types of industrial heritage and sites across the country.

TICCIH Philippines also made contributions to the UNESCO Tentative List entry for the Sugar Cultural Landscape of Negros and Panay Islands, highlighting the significance of these remnants as a legacy of the Philippine sugar industry's industrial revolution era. It also continues to advocate for adaptive reuse, legal recognition, and community stewardship of industrial heritage sites nationwide.

ALTERATIONS TO LEGAL PROTECTION

In 2023, the Philippines enacted Republic Act No. 11961, amending Republic Act No. 10066, the National Cultural Heritage Act of 2009. This was followed by the revision of the Implementing Rules and Regulations (IRR) of RA No. 10066 in 2024. Section 9 of the 2024 IRR included the Nizhny Tagil Charter for the Industrial Heritage (2003) and any future charters issued by TICCIH as source guidelines for conservation standards in the Philippines. The 2024 IRR can be found here.

OUTSTANDING PROJECTS AND NOTABLE CASES

The Sugar Cultural Landscape of Negros and Panay Islands was included in the Tentative List of the Philippines for World Heritage inscription in February 2024, making it the first potential industrial nomination for the Philippines.

The Sugar Cultural Landscape of Negros and Panay Islands showcases the legacy of the sugar industry, brought about by the industrialisation of sugar production in the late 18th century, including mills, factories, plantations, buildings, and mansions that reflect the social and economic dynamics of the late Spanish-colonial and American-colonial eras. The mills of the Hawaiian-Philippine Company and Victorias are still in existence and represent the industrialisation of sugar production, including the communities established therein. Hacienda Rosalia is exceptional as an example of a working hacienda and its mansion, while the houses of the Historic Centre of Silay, including the Aniceto Lacson Ancestral Mansion and Balay ni Tana Dicang, capture in an urban setting the wealth and history of the region. While these sites on Negros represent the cultivation and production of sugar, the Historic Centre of Iloilo, on the other hand, embodies the trade and commerce generated by the crop.

Hawaiian-Philippine Company in Silay City (photo by author)

Ma-ao Sugar Central before demolition (photo by author)

WESTERN VISAYAS SUGAR HERITAGE TRAIL FEASIBILITY STUDY

In 2023, the Western Visayas Sugar Heritage Trail Feasibility Study for the Department of Tourism- Region VI was prepared by TwoEco, Inc. The Western Visayas Sugar Heritage Trail is envisioned to advance a new, innovative approach to harness the sugar industry of the Western Visayas region for inclusive growth. This feasibility study was a crucial step towards advancing new and innovative techniques in the development of tourism products, harnessing the sugar industry of the Western Visayas region for inclusive growth.

To properly realise this vision, TwoEco examined the state of the region's sugar and tourism industry, the sugar industry's historical background and cultural influences on the area, as well as the state of its existing and potential sugar heritage attractions and other tourism products related to sugar. Their key findings include:

1. Western Visayas has a very rich sugar heritage, as evidenced by the many surviving sites that can serve as a platform for its heritage narrative, with an estimated (over) 200 existing and potential sugar heritage sites in the region, which include houses, sugar centrals and mills, and museums;

2. There are outstanding projects and notable cases for the restoration, conversion, reuse, and loss of historic industrial sites.

3. The Sugar Heritage Trail can meet the requirements for nomination to the UNESCO World Heritage List under Criteria ii, iv, and v. However, in pursuing UNESCO nomination, there should be a greater commitment to preserving industrial sites, company towns, and historic communities associated with sugar; and

4. The sugar industry has been struggling to become more competitive due to climate disasters, labor shortage, and land concerns, with tourism potentially providing an alternative source of income for the local community, as long as there is ample support for site conservation measures, infrastructure development, skills training, and product development and marketing.

SOCIAL AND COMMUNITY-BASED PROJECTS

Negros Occidental Properties

On August 23, 2024, the Negros Occidental properties for the World Heritage bid of the Sugar Cultural Landscape of Negros and Panay Islands were launched in a formal ceremony in Bacolod City. You can watch a feature of the site. Cultural markers were also unveiled for the Balay ni Tana Dicang (August 28, 2023) and Yulo's Park (August 23, 2024), two historic mansions that are part of the Sugar Heritage Trail.

General Aniceto Lacson Ancestral House

On November 5, 2024, the deed of donation of the historic

General Aniceto Lacson Ancestral House in Talisay City, Negros Occidental, to the National Museum of the Philippines (NMP) was signed by the descendants of Gen. Lacson, coinciding with the 126th anniversary of *Cinco de Noviembre*. Built in 1880, it served as the seat of the Cantonal Republic of Negros, which was established after Spanish forces surrendered to Negros revolutionaries. It is one of the properties on the Tentative List. The Philippine Government will be funding a multi-year restoration of the historic structure through the NMP.

To date, the NMP has completed the urgent repairs component already. The following elements comprise the Detailed Architectural and Engineering Studies (DAES), the Conservation Management Plan (CMP), and the development of the master plan to be presented to the Stakeholders Council in November 2025. These will serve as the blueprint for the restoration phase.

Rodriguez-Infante House

The restoration of the Rodriguez-Infante House, a family-led initiative, reclaims the former glory of this historic house constructed within a former sugar mill at Hacienda del Carmen, a sugar plantation overlooking the Paguiruan River in Floridablanca, Pampanga. According to Banal, "Locally known as Bale Kastila, this bahay na bato—featuring elements of Victorian and Art Nouveau architecture—is believed to have been built in 1873 by sugar planters Don Ramón Rodríguez Infante and Doña Rafaela Lim-Ongco."

Tabacalera de Currimao

The Tabacalera de Currimao once served as the central depository of tobacco in the Ilocos region. The historic structure is currently undergoing restoration and adaptive reuse. Constructed in 1896, the structure was part of an extensive complex that showcased the architectural and functional ingenuity of the era. The complex includes a pair of miradors or bastions, a cuartel, the aduana (customs house), a wooden pier, and a brick lighthouse.

Naga's Almacenes del Reina

The Almacenes del Reina in Naga City functioned as a royal warehouse, storing essential supplies and commodities that sustained both civil governance and local trade. The site is undergoing careful restoration and preservation. Once completed, the revitalised structures will form a central part of the proposed Nueva Caceres Heritage District—a cultural and historical zone aimed at celebrating and preserving Naga City's rich colonial legacy.

Borongan's Almacén

Although often referred to as a Tabacalera, there is no direct evidence that the mid-19th-century building functioned as a tobacco processing facility. Instead, it more likely served as an almacen or storehouse, used for storing a range of supplies. The Borongan local government is restoring it to house the Museyo Han Borongan.

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The development of industrial heritage in Taiwan has centred around two key concepts: Re-interpretation and Re-presentation. These ideas have evolved along two main directions:

1. STRATEGIC POLICY INITIATIVES FOR CULTURAL LANDSCAPES

Since 2015, Taiwan has integrated industrial heritage into its broader cultural landscape policies. Notable examples include the designation of the Alishan Important Cultural Landscape in 2019 and the Chuhuangkeng Cultural Landscape under the Cultural Heritage Preservation Act in 2008. Both of them will continue their preservation until 2025 with various developments.

The Alishan Forest Railway has been designated as one of Taiwan's official Cultural Routes, featuring curated paths that tell the diverse stories of this historic railway and its surrounding settlements. This initiative has also attracted tourism operators, such as the Alishan Forest Railway Steam Locomotive Fusen Special Train, which combines the appeal of industrial heritage with the natural beauty of the park.

The Chuhuangkeng Cultural Landscape preserves a complete oil industry town, including oil derricks, cable tramways, storage tanks, refineries, factories, a Japanese-style office, a clinic, workers' housing, and private residences. Many of these historic buildings have been restored and are now being outsourced for adaptive reuse. Over the past three years, the site has hosted a series of publications and cultural events.

The legacy of Taiwan's oil industry also includes two major refineries in Hsinchu and Kaohsiung. The Kaohsiung Refinery, formerly operated by CPC Corporation, has become a key site for Taiwan Semiconductor Manufacturing Company (TSMC). While part of the site is now used for offices, many original accommodations have been preserved as heritage buildings. These oil industrial structures represent a significant chapter in Taiwan's industrial development. The Refinery stopped its production in 2015 and now serves as a venue for environmental education and public outreach.

Meanwhile, the Hsinchu Sixth Naphtha Cracking Plant has adopted a different approach, focusing on community participation and adaptive reuse. Together, Chuhuangkeng and these refineries illustrate the whole production cycle of Taiwan's oil industry.

2. IMPLEMENTATION OF CULTURAL ROUTES: FROM EUROPE TO TAIWAN

The concept of Cultural Routes, inspired by European models, was introduced to Taiwan in 2016 and has gained momentum over the past three years. These routes integrate cultural asset preservation, community engagement, and heritage management, while also establishing infrastructure to support diverse interpretations and cultural exchange.

From 2019 to 2023, the project titled "Cultural Routes of

Website of Taiwan Culture Route with rich information and guide maps (photo provided by the author)

Heito 1914 Park is a reused sugar factory site, 2022 (photo by Nai-Chung Chen)

Taiwan to Promote Social Development" focused on five themes: Multi-ethnic Culture, Sugar Industry, Mining Industry, Forestry, and Water Culture. These themes encouraged the public to explore Taiwan's cultural heritage from multiple perspectives. Individuals and organisations involved in these routes acted as bridges across time, connecting cultural domains, mobilising social resources, and strengthening local networks. Their work has deepened public engagement with historical sites and laid the groundwork for sustainable heritage development.

Four of these routes are directly related to industrial heritage:

Sugar Industry Route: Spanning Taipei, Taichung, Changhua, Yunlin, Chiayi, Tainan, Kaohsiung, Pingtung, Hualien, and Taitung, this route links sugar factories, railways, and residential quarters, showcasing the socio-economic impact of Taiwan's once-thriving sugar industry. The Yunlin and Chiayi Sugar Industry Culture Route is establishing a local route network, facilitating cultural exchange, and promoting community development.

Mining Industry Route: Covering Keelung, Taipei, New Taipei, Taoyuan, Hsinchu, and Miaoli, this route connects coal mines, transport systems, and mining settlements to reflect the evolution of Taiwan's extractive industries. By establishing local organisations and activities, the Northern Taiwan Coal Mining Culture Route fosters consensus and collaboration to advance the sustainable development of the mining industry's cultural heritage.

Forestry Industry Route: Centred in Chiayi, this route highlights historic forestry railways, lumber mills, and forest villages, illustrating the importance of forestry in Taiwan's early industrialisation. Alishan Forestry Culture Route has been promoted for tourism.

Water Culture Route: Spanning Yunlin, Chiayi, and Tainan, this route links irrigation systems, waterworks, and agricultural communities to tell the story of Taiwan's water management and its role in rural life. This route focused on the Chianan Irrigation Channel Culture Route by connecting the Choshui River and Zengwen River.

To support these efforts, the Taiwan Cultural Routes Platform Project and its stakeholders have developed operational guidelines, including:

1. Policy Framework and Strategic Mechanisms: Emphasising cross-sector collaboration and community participation to revitalise cultural heritage and promote sustainability.

2. Establishment of Four Industrial Cultural Routes: These pilot routes are based on decades of local

surveys and resource mapping, integrating networks of diverse organisations and communities.

3. Public Exhibitions and Outreach: To raise awareness and encourage participation, the project has launched websites, publications, workshops, and exhibitions.

Additionally, the Taiwan Power Company is planning a Hydropower Cultural Route, demonstrating how cultural heritage can also serve corporate branding and identity purposes. It also generates an operational tourism program.

OUTSTANDING PROJECTS AND NOTABLE CASES

Between 2022 and 2025, Taiwan significantly expanded its approach to industrial heritage conservation through the Ministry of Culture's Regeneration of Historic Sites Projects. These initiatives often involve complex systems that integrate historical, technological, social, architectural, and scientific dimensions with urban planning. Several projects of industrial significance have emerged, including the Chuhuangkeng Oil Field, the Former Japanese Navy's Sixth Fuel Factory in Hsinchu, the Rui-San Coal Handling Plant in New Taipei City's Rueifang District, the Beigang and Suantou Sugar Factories, the Taichung and Pingtung Tobacco Factories, and the Chung Hsing Paper Factory and Gold Museum. Among these, several projects stand out for their innovative design and representation of industrial heritage:

1. Heito 1914 Park

Originally a sugar factory and later a paper mill, this site was transformed into a civic park and opened in 2022. The design by Chen Nai-Chung preserved rust-streaked walls and industrial structures, integrating them into a vibrant, multifunctional landscape. Rediscovered industrial remnants along the riverbank inspired a design that blends history with contemporary aesthetics.

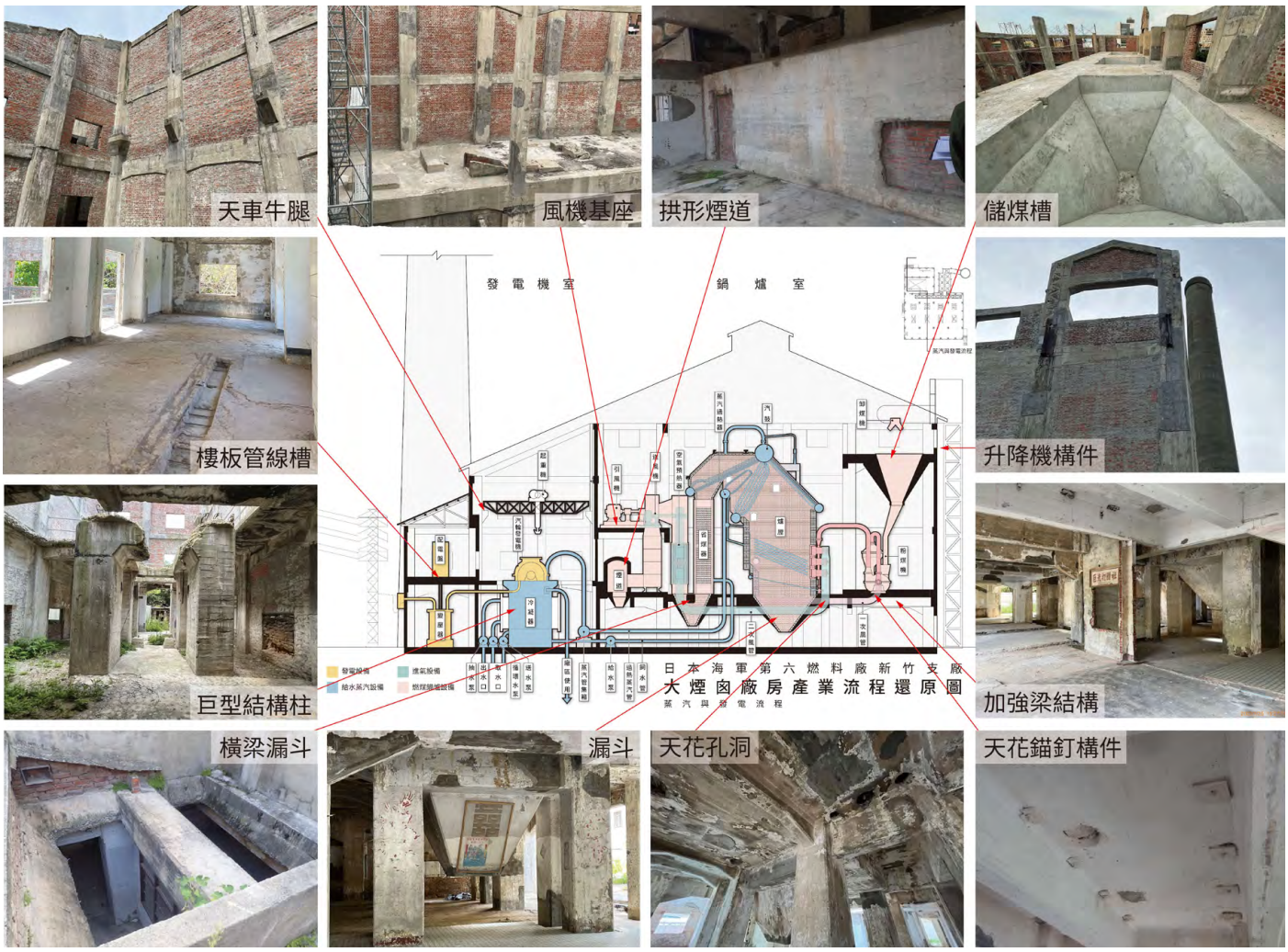
Heito 1914 Park won the Platinum Award in the 2021 MUSE Design Awards (Landscape Design category) in the USA. As sugar played a vital role in Taiwan's economic history, many former sugar factories have been regenerated for exhibition, retail, and residential use. Heito 1914 Park exemplifies how industrial heritage can be imaginatively revitalised into a cultural and social landmark.

2. Sandiaoling Eco-friendly Tunnel

Once a coal transport railway, the Sandiaoling Tunnel was abandoned for over 30 years before reopening in June 2022 as a walking and cycling route connecting Sandiaoling (Houtong) and Mudan. Now known as the Dark Line, it has become a key tourism attraction, emphasising industrial heritage and ecological preservation.

The 3.19 km tunnel is home to bat colonies and a diverse

Sandiaoling Eco-friendly Tunnel, 2023 (photo by Monham Wu)



Design analysis of the Sixth Fuel Factory by Y.P.LIN Architects, 2023 (photo by Y.P.LIN Architects)

array of aquatic life, including fish, shrimp, and insect larvae. The design incorporates a reflective pond at the entrance, creating a mirror-like effect that echoes the surrounding mountains. This project won the LILA 2023 Project of the Year (Landezine International Landscape Award).

3. Hsinchu Sixth Fuel Factory

Built in 1943 to support the Japanese Navy during WWII, the Sixth Fuel Factory was heavily bombed and later repurposed as housing for military dependents. By the 2010s, the site was depopulated, revealing a unique arrangement of homes built within the factory ruins. It was designated a historic site and remains under renovation as of 2025.

The "Hsinchu Living Museum", launched by National Chiao Tung University (NCTU) in 2018, reimagines the site through artistic production and social intervention. Supported by the Ministry of Education's Higher Education Sprout Project, it examines the site's wartime legacy and its contribution to Taiwan's technological development. The Sixth Fuel Documenta exhibitions (2022 and 2025) highlight its evolving cultural significance. The current redesign by Y.P.LIN Architects is expected to open to the public soon.

MUSEUMS AND EXHIBITIONS

Taiwan has also integrated industrial heritage into museums and cultural venues. The Pingtung Tobacco Factory, now operating as the Pingtung 1936 Tobacco Culture Base, won the 2022 Red Dot Award for its exhibition design, Tobacco Factory and Smoked Memories. The museum incorporates original machinery into its displays, offering immersive historical narratives. In addition, the Taiwan Cultural Route Exhibition in 2025 is also expected to generate significant public awareness for further work.

ASIAN NETWORK OF INDUSTRIAL HERITAGE (ANIH)

The Asian Network of Industrial Heritage (ANIH) has grown steadily, promoting youth empowerment through online seminars, international meetings, and forums. As of June 2025, ANIH includes 31 international correspondents from across the Asia-Pacific region. From 2023 to 2025, ANIH hosted several key events:

- 2024 International Forum on Cultural Heritage Sustainability and Resilience: Focused on heritage in the context of conflict, disaster, and climate change, featuring speakers from six countries, including Dr. Marion Steiner (TICCIH Secretary).

- 2024 Water Heritage and Sustainability Online Seminar: Explored traditional hydraulic systems and their role in sustainable cultural landscapes.

- 2023 Brewery and Food Industry Heritage Seminar: Titled Roaming Through Time and Space, this seminar combined archival research with on-site interpretation of Taiwan's Merry Brewery.

- A notable milestone was the 2024 meeting on Sugar Industrial Heritage, hosted in Taiwan and organised by Indonesian colleagues, reflecting ANIH's growing regional influence.

Additionally, the exchange research and conference with Korea will be generated by the project "Research Project on Cross-Domain Systematic Preservation Mechanisms for Industrial Heritage" in 2025. It leads to an Industrial Heritage Exchange Forum and Fieldwork at DongA University, Korea in May and will host a field trip in Taiwan in July 2005.

CONCLUSION

Between 2022 and 2025, Taiwan has made remarkable progress in integrating industrial heritage conservation with cultural routes, adaptive reuse planning and international research exchange. With two key concepts —re-interpretation and re-presentation —the engagement and efforts not only preserve key industrial legacies but also breathe new life into local communities and foster deeper cultural connections.

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Hsiao-Wei Lin is an associate professor in the Department of Architecture at the Chung Yuan Christian University, Taiwan. She holds an MLA and a PhD from the University of Edinburgh, UK. Her research focuses on the reuse of cultural heritage, industrial cultural landscapes, and landscape planning. She has been involved with many practical conservation works based on research projects, community participation, as well as heritage education and la ocal culture museum. She teaches the subjects of Reuse of Industrial Heritage, Cultural Heritage Seminars, Cultural Landscape of Cities, Site Planning and Design Studio.

She is a Board Member of the International Committee for the Conservation of Industrial Heritage (TICCIH) and the chairperson of the Advisory Board Committee of the Asia Network of Industrial Heritage (ANIH). ANIH aims to establish a cross-country information platform for the conservation of industrial heritage in Asia and worldwide.

She has written, edited, and co-authored numerous books and papers on the conservation of cultural heritage in both Chinese and English. These include the first English publication on the preservation of industrial heritage in Taiwan, entitled The Introduction of Taiwan's Industrial Heritage in Taiwan, in 2011, and "Conservation and Community Consciousness" in Industrial Heritage Re-tooled: The TICCIH Guide to Industrial Heritage Conservation published in 2012; and Finding Ways: The First Episode of Taiwan's Route of Industrial Heritage (覓境) in Chinese in 2021. For 2022~2025, she worked on the project, which is the platform for establishing the Taiwan Cultural Route and published Cultural routes: Practical experiences in integrated cultural heritage preservation in 202

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KOREA

Seonyudo Park (2002) in Seoul, Korea's first example of industrial heritage reuse (photo by Dong-Jin Kang, 2005)

Dong-Jin Kang & Sung-Yong Kim

In the early to mid-20th century, Korea underwent a period of controversial modernisation during the Japanese colonial period and the Korean War. Although economic development was achieved during this time, critical perspectives on the modern industrial era, particularly regarding ideological conflicts and environmental issues, also emerged among the public.

Nevertheless, over the past two decades, industrial heritage researchers have been conducting research within various disciplines, including architecture, urban planning, cultural heritage studies, urban sociology, geography, landscape studies, world heritage studies, and the arts and culture. Recently, there has been a growing recognition of industrial facilities as heritage, and cases of their preservation and reuse have increased. Korea's accession to TICCIH serves as evidence of this.

ACTIVITIES

Korean industrial heritage researchers established the National Scientific Committee (NSC) on Industrial Heritage of ICOMOS Korea in March 2023. With around 30 members, the NSC has organised a variety of seminars and field trips. Through online seminars, it aims to expand its outreach and foster interest in the field by encouraging participation not only from ICOMOS Korea members but also from professionals and students across various disciplines.

In particular, Korea's accession to TICCIH in April 2025 marked a turning point in the discourse on Korean industrial heritage. In addition to the ongoing activities of the NSC on the Industrial Heritage of ICOMOS Korea, TICCIH Korea is expected to play a significant role in strengthening networks and facilitating research exchanges on industrial heritage at both the domestic and international levels.

PUBLIC POLICIES AND ORGANISATIONS

In Korea, the Registered Cultural Heritage System was introduced in 2001 to preserve modern cultural heritage, leading to the inclusion of industrial facilities among designated cultural properties. However, the concept of industrial heritage currently applied in Korea remains relatively narrow, focusing primarily on physical industrial facilities. It emphasises *preservation* (a cultural heritage approach) and *utilisation* (a spatial resource approach) as historical cultural resources, despite the absence of a relevant institution or comprehensive system specifically for industrial heritage.

Korea's industrial heritage is either protected as cultural property under the "Registered Cultural Heritage System"

managed by the Cultural Heritage Administration (CHA), which focuses on preserving original structures, or utilised through "urban regeneration projects" led by the Ministry of Land, Infrastructure and Transport (MOLIT) and "cultural regeneration projects" promoted by the Ministry of Culture, Sports and Tourism (hereinafter MCST), which emphasise revitalising unused spaces by transforming them into local cultural facilities.

Without a dedicated ministry and given the political sensitivities surrounding Korea's industrial history, industrial heritage remains narrowly defined. Ongoing dialogue is needed to clarify its concept and guide preservation and reuse efforts.

ALTERATIONS TO LEGAL PROTECTION

The first institutional initiative for industrial heritage in Korea was the "Regional Modern Industrial Heritage Culture and Art Creative Belt Development Project," launched by the Ministry of Culture, Sports, and Tourism (MCST) in 2009. In 2014, the project evolved into the "Culture Regeneration Business in Industrial Complexes and Abandoned Industrial Facilities" and has been followed by other attempts to combine industrial heritage with regional regeneration.

The enactment of an ordinance by Gyeongsangbuk-do Province in 2013 marked the first institutional initiative by a local government to protect industrial heritage. As a result, 19 industrial heritage sites were designated, preserved, and revitalised. The "K-Industrial Heritage Trail Project," which highlights a series of industrial heritage sites dating back to the 1970s, is currently underway.

Since 2013, the "Urban Regeneration and Assistance Act" has been implemented as a public policy by selecting sites for regeneration projects. About 70 industrial heritage sites have been selected. In 2024, the government initiated a revision of the legal definition of "Cultural Property" to encompass the broader concept of "Cultural Heritage," emphasising transmission and heritage beyond mere preservation. Notably, the "Act on the Conservation and Utilisation of Modern and Contemporary Cultural Heritage" was enacted in 2024, and the Modern and Contemporary Cultural Heritage District system was implemented, establishing a foundation for the conservation and utilisation of various types of industrial heritage.

OUTSTANDING PROJECTS AND NOTABLE CASES

Seonyudo Park (2002) in Seoul, Korea's first example of industrial heritage reuse, was transformed from an old water treatment plant. The Incheon Art Platform (2009) is a city-led project that converted 13 industrial sites and early modern buildings into a cultural complex. Recent examples include Busan Citizens Park (2014, a former military base); Oil Tank Culture Park (2017, a former oil tank); Bucheon Art Bunker B39 (2018, a former incineration plant); Samrye Culture Art Village (2018, a former rice warehouse); and F1963 (2021, a former wire factory).

Oil Tank Culture Park (2017) in Seoul, the Mapo Oil Reserve Base, constructed in 1973, was closed in 2002 due to safety concerns and remained abandoned for over a decade before being reused as a culture park in 2013 (photo by Dong-Jin Kang, 2022)

MUSEUMS AND EXHIBITIONS

The POSCO Museum (2003) in Pohang is a private industrial museum that presents the corporate history of the steel company POSCO and offers an overview of the steel industry in Korea since the mid-20th century. The Kim Chung-up Architecture Museum (2014) in Anyang is the first architecture-specialised public industrial museum in Korea. The Museum G (2021) is an industrial museum that showcases the history of the Guro Industrial Complex, spanning from the 1960s to the present-day G-Valley in the 21st century. The Ansan Industrial History Museum (2022) presents the whole history of Korea's industrial development in conjunction with the Banwol and Sihwa National Industrial Complexes.

TRAINING AND EDUCATION INITIATIVES

Since 2020, the MOLIT has designated six universities as "Urban Regeneration Hub Universities" to cultivate specialised professionals in urban regeneration. The core educational theme is the reuse of underutilised urban spaces. In the future, the program plans to collaborate

F1963(2021) in Busan, the first factory site of Kiswire Ltd. wire factory since 1963, the predecessor of F1963 (photo by Dong-Jin Kang, 2020)

with organisations to offer special education programs focused on the regeneration of industrial heritage and underutilised spaces.

SOCIAL AND COMMUNITY-BASED PROJECTS

The utilisation of industrial heritage in Korea has primarily focused on large-scale industrial facilities. In contrast, private-sector projects have also focused on conserving small-scale industrial facilities and the people involved in the industry, including workers and local communities. A notable example is the Cheonggyecheon Machinery Tool Complex in Seoul, a small-scale industrial complex that emerged organically in the 1960s within the city's historic downtown area. Currently, large-scale demolition is underway. To conserve the site, community activities, surveys, and documentation are being carried out.

In another example, with the support of the Busan Port Authority, a survey of Busan Port, Korea's first modern pier, began in 2012. It led to the practical preservation of Pier 1, the grain warehouse (silo) at the grain pier, the government vessel pier, and Korea's first cranes, comprising three units.

Furthermore, these preservation efforts resulted in Pier 1 being included as a component site within the "Sites of the Busan Wartime Capital," which is currently under consideration for UNESCO World Heritage designation.

Additionally, the Match Factory in Uiseong and the Shipbuilding Complex in Geoje are examples of heritage reuse that focus not only on the history of individual industries but also on the relationship between local communities and industries, particularly from the perspective of their labourers.

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F1963 (2021) in Busan, Seokcheon Hall, currently used as an exhibition hall. The building was remodelled into a cultural complex in 2021 (photo by Dong-Jin Kang, 2020)

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JAPAN

Ph.D. Toshitaka Matsuura

Japan's manufacturing industry has been in decline in recent years due to the rise of emerging countries and the relocation of domestic factories overseas. As a result, large-scale factories for home electrical appliances, shipbuilding, automobiles, metal refining, heavy chemicals, etc. are frequently closed or demolished. With this movement, there is a risk that historical buildings and equipment in factories, or mechanical heritage preserved by companies, will be destroyed and disappear without being investigated.

Public interest in industrial heritage has been fading rapidly since peaking about ten years ago, when Japan's industrial heritage was registered as a World Heritage Site for two consecutive years. In my opinion, this is because industrial heritage is already socially recognised as an ordinary cultural property in Japan, and daily conservation activities are carried out by local communities, local governments, related companies, etc., so the era in which simply being called industrial heritage would attract cultural and social interest has passed.

Despite this social background, the registration of Sado Gold Mine (Niigata Prefecture) as a World Heritage Site in the summer of 2024 once again attracted nationwide attention to industrial heritage. However, in 2022, the issue of preserving the remains of an early railway in central Tokyo (the Takanawa Railway Embankment), which attracted much attention, was resolved in an extremely unfortunate manner, with most of the ruins being destroyed. Then, in the spring of 2023, the issue of preserving the remains of a 19th century railway in Kyushu (the remains of Moji-kou Station) arose, and although ICOMOS International and TICCIH requested that it be maintained, the preservation movement did not even spread locally, and the ruins have already been dismantled and removed.

However, last year and this year mark the 10th anniversary of the registration of two industrial heritage sites, the Tomioka Silk Mill and Related Sites and the Sites of Japan's Meiji Industrial Revolution, as World Heritage sites. For this reason, various commemorative events have been held, and efforts have begun to explore new perspectives on the future protection and utilisation of industrial heritage sites.

Sado Island Gold Mine: People mine ore, resulting in the mountain being split (photo by author)

Tsujunkyo Bridge: Testing water overflow (photo by Totti, Wikimedia)

ACTIVITIES

New research on industrial heritage, industrial history, economy, and society appears to be in decline. In particular, several important reports and studies are related to the investigation and protection of unknown industrial heritage and emerging fields. In addition, researchers themselves are less likely to investigate and study actual industrial heritage sites on-site. On the other hand, so-called desk-based research is prominent, including introductions and critiques of industrial heritage, typification and generalisation, and research exploring the conceptual and social significance of industrial heritage. For this reason, the number of members in industrial heritage-related academic societies, which were primarily composed of researchers with experience in on-site investigations and industrial practice, is decreasing year by year. As a result, some academic societies are unable to maintain their activities and have disbanded or suspended, while others are facing serious internal conflicts over revitalisation measures, leading to a stagnation of research activities in the industrial heritage field as a whole.

ALTERATIONS TO LEGAL PROTECTION

Sado Gold Mine to be registered as a World Heritage Site

The Sado Island Gold Mine (Niigata Prefecture) was designated as a World Heritage Site at the 46th UNESCO World Heritage Committee meeting on July 27, 2024. At the time of registration, OUV stated that it was "a cultural heritage that shows the final stage of traditional handicraft gold production in the Edo period." The Sado and other gold mines were listed on the Tentative List in 2010; however, for a long time, they were industrial heritage sites with numerous academic and diplomatic issues, including the scope of the ruins and Korea's opposition to registration due to forced labour during the war. For this reason, it was finally decided to limit the scope of the ruins to three locations from the Edo period:

- Nishimikawa Gold Mine: gold dust mining ruins,
- Aikawa Gold and Silver Mine: the centre of gold and silver mining,
- Tsurushi Silver Mine: silver mining site.

The Lake Biwa canal facility (photo by Nobu3withfoxy, Wikimedia)

In 2022, the nomination was submitted. Discussions continued with UNESCO on its contents. UNESCO finally accepted the nomination in January 2024, and the review process began, with the decision to register the site being made in July 2024.

Registration of Industrial Heritage as National Treasures

In Japan's cultural property protection system, significant ruins among the country's important cultural properties are designated as "national treasures." Under this system, the aqueduct bridge "Tsujunkyo Bridge" in Kumamoto Prefecture, built in 1854, was designated in 2023. This bridge is a rare stone arch bridge in Japan, measuring approximately 80 meters in length, 21 meters in height, and 6.6 meters in width, and is used as an irrigation channel. In addition, in 2025, five parts of the approximately 20 kilometres canal called the "The lake Biwa Canal Facility", including an underground aqueduct built in the 1880s, were designated as "national treasures." This facility is a multi-purpose canal built between 1888 and 1914, and a total of 24 facilities, including waterworks, hydroelectric power plants, and boat transport facilities, were designated as important cultural properties of the country.

OUTSTANDING PROJECTS AND NOTABLE CASES

Preservation issues surrounding railway heritage

As mentioned above, the issue surrounding the Takanawa Embankment, an early railway relic in central Tokyo, which began around 2021, was demolished and removed by JR East Railway, leaving only a small portion, despite requests from TICCIH and ICOMOS to preserve it. It is also estimated that there are similar railway relics in areas where future construction is planned, but JR East Railway has not revealed its future investigation and preservation policy.

A similar problem arose in Moji City, Kyushu, with the implementation of a local government redevelopment project. Old Moji Station was a port railway station built from the 1890s, and is old for railways in the Kyushu region. What was excavated was the foundation of a small engine shed, which was scheduled to be destroyed after the investigation. However, some archaeological researchers have called for its preservation as an important relic, and TICCIH and ICOMOS have recommended that the local government preserve it. However, this preservation movement did not gain sympathy from residents and the general public, and it was destroyed immediately after ICOMOS issued a heritage alert.

Tomioka Silk Mill and Related Sites

To commemorate the 10th anniversary of the registration of the World Heritage "Tomioka Silk Mill and Related Sites," a commemorative symposium was held in Takasaki, Gunma Prefecture, in January 2025 by Gunma Prefecture and ICOMOS Japan. This symposium aimed to reconsider heritage from the perspective of the "Heritage Ecosystem," a concept

recently advocated by members of ICOMOS International. The Tomioka Silk Mill and Related Sites, a group of heritage sites with the central theme of the raw silk industry, are considered to be the ideal heritage site for thinking about this "Heritage Ecosystem," and more than 80 participants from 29 countries around the world participated in the discussion. Furthermore, at the end of the conference, the "Gunma Declaration" was adopted, which encourages the global spread of the Heritage Ecosystem and the practice of preserving and utilising ruins. It was also agreed that efforts would be made to incorporate this movement into the activities of ICOMOS International in the future. In my opinion, the "Heritage Ecosystem" approach is a concept that aims for sustainable preservation and utilisation by emphasising the mutual relationship between heritage, local communities, and industrial activities, and will be extremely useful, especially for industrial heritage sites.

AUTHOR

Toshitaka Matsuura is TICCIH Japan's National Representative and holds a Ph.D. in History. His research interests are: Modern History of Japan, History of Modernisation, Industrial Heritage Research and Reuse and World Heritage.

Contact the author

AUSTRALIA

Ascot Kilns, Perth, WA (photo by Western Australian Gov, Department of Planning, Lands and Heritage)

Phil Bennett

TICCIH Australia and the Australian National ICOMOS Industrial Heritage Scientific Committee have joined forces. Members of each committee are aligned, sharing professional interests and common causes, all of whom want the recognition and conservation of Australia's industrial heritage. Currently, the ICOMOS Industrial Heritage NSC + TICCIH (Australia) has approximately 20 members, including one from New Zealand, who meet between two and four times a year.

Following the Dublin Principles, the committee is working to identify and record industrial items across the country. The committee has also drafted a Practice Note to guide its actions and align with the Dublin Principles and the Australian Burra Charter.

TICCIH Australia was present and contributed to the 2023 ICOMOS General Assembly and Scientific Symposium in Sydney. Arranging tours of Sydney's Upper Nepean Water Supply Scheme, Darling Harbour and providing a presentation in the exposition hall.

Members have arranged site visits, gaining access to otherwise off-limits locations. Providing both educational and enjoyable networking outcomes.

PUBLIC POLICIES AND ORGANISATIONS

Within Australia, there are three tiers of government: national, state and local. Heritage protection is most effective at the state level. Many important and significant industrial heritage items are listed on the state heritage registers and are afforded protection under various heritage acts.

State government heritage agencies have guidelines and policies specifically designed for the management of industrial heritage. Almost all significant industrial heritage items are in state government ownership. The local governments, particularly those in rural regions, also own and manage industrial facilities. Local councils often take on former state-owned assets for the local community. The National Trust and the Institution of Engineers continue to identify and advocate for industrial heritage. Members of TICCIH Australia also sit on the National Trust and Engineers Australia's industrial heritage committees.

State heritage listing facilitates access to state government funding and grants. Other forms of financing are available, including from the national government. The White Bay Power Station in Sydney, listed at the state level, recently received state government funding for its conservation and re-use. The station will remain in state government ownership. State-listed industrial heritage items are often located within, and part of, operational infrastructure. Pol-

White Bay power station (photo by Place Making, NSW government)

icies and guidelines issued by the heritage agencies to keep items in use help overcome the conflict between conservation and continued operation.

ALTERATIONS TO LEGAL PROTECTION

In 2025, the Victorian Goldfields (in the southern state of Victoria) will be nominated for world heritage listing. These goldfields were established in the early 1850s and significantly contributed to Australia's development. Attracting many immigrants and leaving a rich legacy of industrial archaeology, structures, landscapes and more. The study area covers fifteen regional council areas. Recognising and listing these important places and landscapes will aid their conservation while stimulating regional tourism. The Victorian Goldfields nomination is primarily an industrial heritage listing. If successful, it will be the first of its kind in Australia.

In July 2019, the Budj Bim Cultural Landscape in Victoria's south-west region was added to the World Heritage List. Being recognised as a unique place with universal heritage values, demonstrating how Gunditjmara people worked with natural resources and the environment to establish a permanent place of human society over the past 30,000 years and beyond. It includes the archaeology of extensive fish aquaculture.

OUTSTANDING PROJECTS AND NOTABLE CASES

White Bay Power Station in Sydney opened to the public following extensive conservation works. It has become a heritage-related focal point for the area's commercial and residential revitalisation. Built between 1912 and 1917, this coal-powered station was constructed to provide electricity to Sydney's extensive tram network. It was expanded to electrify the suburban rail network and further expanded in the 1950s to supplement the three city power stations' general grid. White Bay closed in 1983.

In 1996, the station was identified as an item of state heritage significance and was fully decommissioned, with representative machinery preserved for interpretation purposes, along with most of its structures. In 2022-3, the New South Wales government, the site's owner, funded A$100 million of conservation works to open the building and its machinery to the public as an arts and cultural facility. Since opening in 2024, the former power station has hosted the Sydney Biennale art festival, music festivals, and corporate and community functions. In its first year, it attracted over 200,000 visitors.

The Ascot (Bristile) Kilns, located in Belmont, WA, a landmark in Perth, have been stabilised and conserved with a state government grant. These 1920-50 brick kilns, chimney stacks and tunnels are Australia's largest group of downdraught kilns and chimneys. Following years of neglect and community pressure,

the kilns were eventually listed as state heritage in 2023, and the works were completed in 2024. These works will provide public access and opportunities for arts events.

MUSEUMS AND EXHIBITIONS

In 1988, the Ultimo (Sydney) Powerhouse Museum was established in a decommissioned power station. This power station, built around 1899, was adapted and reused to house a collection of technological and industrial-related objects. The museum has recently closed, and its collection is being relocated to a new, larger, custom-built museum in Parramatta, approximately 25 kilometres from the city centre and the location of the Powerhouse Museum. The move raised some controversy within the heritage profession, both for leaving the former powerhouse vulnerable and for missing the chance to adapt another idle industrial building.

TRAINING AND EDUCATION INITIATIVES

In 2021, the University of Canberra established two short courses: Contexts for Heritage Engineering and Materials for Heritage Engineering. The University of Canberra is responsible for the highly successful Big Stuff conferences and is considering introducing a degree course in rare trades.

AUTHOR

Phil Bennett is currently the Convenor of TICCIH Australia.

Contact the author

TRANSNATIONAL REPORTS

TICCIH PORTUÑOL

Camilo Contreras Delgado

TICCIH Portuñol was established in Montreal in 2022 to enhance TICCIH's presence and connections throughout Latin America and the Caribbean. As a transcontinental working group, it brings together Spanish and Portuguese speaking TICCIH members from both sides of the Atlantic Ocean. Three strategies have been characterizing the work of TICCIH Portuñol over the last three years: holding international colloquia, promoting transnational projects and in-person work in countries of the region where we observe low participation in TICCIH.

ACTIVITIES

International colloquia

From October 24 to 27, 2023, The Committee for the Conservation of the Industrial Heritage of Nuevo León hosted the 10th Latin American Colloquium for the Conservation of Industrial Heritage, titled *Challenges and Collaboration Networks*, in Monterrey, Nuevo León, Mexico. The Monterrey Inter-institutional Committee served as the host and local organiser, with the assistance of TICCIH International. CMPCI was in charge of the Post-congress tours to Zacatlán and Necaxa. It is essential to highlight the concurrence of financial resources from academic, social, and governmental entities, thus demonstrating that industrial heritage is a matter of general interest and requires associative strategies. TICCIH Mexico abstained from participating in the organization of this event because it is preparing to act with greater openness and democracy.

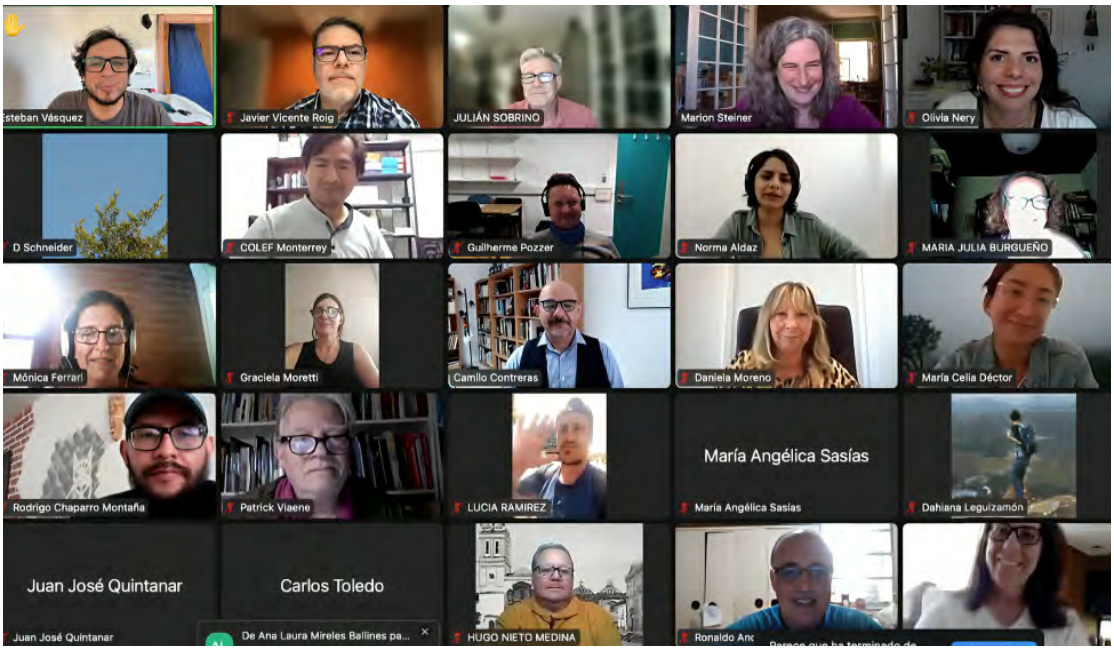
The Colloquium attracted exhibitors from countries in the Americas and Europe, who presented a total of 60 papers. It has been traditional to enrich the colloquia with discussion panels, roundtables with the participation of former workers, tours of heritage sites, film screenings and photography directly related to the industry.

The closing panels highlighted the need to place greater emphasis on governance, gender perspectives, and sustainability in the studies and management of industrial heritage at these events. An engaging post-colloquium took place in Zacatlán de las Manzanas, Puebla. The visit to the Necaxa hydroelectric plant left us with an unforgettable experience.

At the 10th Latin American Colloquium, the MapaPI Project, a Collaborative Map of Industrial Heritage in Latin America and the Caribbean, was presented to the public for the first

Visit to a former textile plant in Santiago, Nuevo León, Mexico, during the 10th Latin American Colloquium for the Conservation of Industrial Heritage, 2023 (photo by author)

Visit to the historic Necaxa hydroelectric plant in the state of Puebla, Mexico, during the 10th Latin American Colloquium for the Conservation of Industrial Heritage, 2023 (photo by author)



Second MapaPI online workshop, 2024 (photo by author)

time and will be described in the following section. Another product of the X Colloquium will be a book that is currently under review [see TICCIH Bulletin #102, 2023].

MapaPI, Collaborative Map of Industrial Heritage in Latin America and the Caribbean

MapaPI is part of the second strategy to strengthen TICCIH's presence and facilitate the visibility of industrial heritage in various regions. This is an exceptional case where a school geography exercise in Chilean classrooms has evolved into a project supported by a transnational and interdisciplinary team. In this way, we can mark February 3, 2023, as the birth and first stage of the project initiated by TICCIH Portuñol.

Rarely is the phrase "collaborative project" so genuine and powerful as in this activity. While the TICCIH Portuñol group took the first step, it now has an Editorial Committee composed of highly committed specialists. Another feature of this team is the presence of people with extensive experience in registration and cartography, as well as young professionals who contribute innovative and creative techniques.

MapaPI is based on two elements: a registration form and the geolocation of the heritage asset (tangible or intangible), and is framed within the context of Digital Humanities. Between February 2023 and May 2025, two online workshops were conducted to explain the project and guide users through the platform. The first workshop was held on October 4th, which constitutes the second phase of the project.

The first entries in MapaPI, contributed by fellow users from

Visit to the On-Site Museum in a former textile factory in Cusco, Peru. From left to right: Stefan Berger (TICCIH Germany), Miguel Eduardo Velarde Oliart (museum owner), Camilo Contreras (Commissioner for Latin America and the Caribbean), April 2025.

various countries, were presented in a hybrid session at the Xth Latin American Colloquium in Monterrey (described above), held on October 24, 2023. This is what we consider the third stage of the project. In this session, in addition to interacting with the project's collaborators and co-creators, we also noted the widespread enthusiasm and commitment.

The second online workshop held on March 13, 2024 (fourth phase) led to the formation of the Editorial Committee, which has been decisive in defining the structure and organization of the project's work. A theoretical and methodological framework was designed at the same time.

The fifth phase has involved intensive work so far in 2025, primarily in the review and systematisation of the information received in the registration forms, a task carried out by the Standardization Working Group. The other Editorial Committee Working Groups are Management, Representation, Category Review, Scientific Communication, and Scientific Dissemination. The project is under the General Coordination of the project.

The Editorial Committee was formed through an open call based on criteria of speciality, interdisciplinarity, gender representation, and geographic representation of the Latin American and Caribbean region. The initial Editorial Committee, which has been expanded, can be found on the TICCIH website, as well as the members of TICCIH Portuñol.

The project was recently presented in its entirety: its origin, structure, and functions of the Editorial Committee through its Working Groups, as well as the status and progress of the review of the information received through the registration forms. This presentation took place at the 10th International Congress on Industrial Heritage, Challenges and Opportunities in Management with Governance, on May 14, 2025, in Monterrey, Mexico.

MapaPI can be characterized as a collective, collaborative, plural, and evolving project based on scientific foundations. Every step has been carefully considered, so the path forward is clear. For now, the platform is closed. The work of the Standardization Group will guide us in the coming months for reopening and the receipt of new registrations.

The work on the design, the ongoing construction of the project, and the review of the information received, already represent a connection between different countries in the region and even in Europe. Once the platform reopens, we will have greater coordination, as well as a scientifically high-quality product that will strengthen ties between the countries of Latin America and the Caribbean, and certainly beyond the continent.

Face-to-face work

The third strategy underway to strengthen TICCIH's ties in Latin America and the Caribbean is face-to-face work in those countries that have had little participation and visibility in forums in the region or the dissemination of their activities, such as publications, museumizations, networking, among others. The author of this article is conducting an academic stay in Colombia throughout 2025, which is characterizing the state of the art in countries such as Peru, Ecuador, Bolivia, and Colombia itself. Initial results show academic production and management activities in recent years, but the pace has slowed. A lack of internal links has also been identified, as well as a deficiency in

the dissemination of research and management activities related to industrial heritage. By the end of 2025, a more complete overview of the subregion, as mentioned above, will be available, which allows us to design and implement more specific strategies for the purposes set by TICCIH Portuñol.

The TICCIH Portuñol group is demonstrating a renewed and vibrant vision for effective engagement in Latin America and the Caribbean. The organization of events and the execution of transnational projects, as well as its direct in-person work in the region, have not only opened up new expectations and ways of working but also demonstrated a clear path forward.

AUTHOR

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The Asian Network of Industrial Heritage (ANIH) was established in 2018 and was located in Taichung Cultural Heritage Park (photo by BOCH)

Chen Chi-Ming

The Asian Network of Industrial Heritage (ANIH) was established in 2018 with the support of Taiwan's Bureau of Cultural Heritage (BOCH) within the Ministry of Culture. The platform focuses on integrating industrial heritage with sustainable development, exploring how industrial sites can be transformed into resources for community revitalisation and cultural innovation. As a key network in its field in Asia, ANIH actively promotes international cooperation and the exchange of transnational experiences to safeguard the region's shared industrial heritage collectively.

In recent years, Taiwan has shown a growing appreciation for the value of industrial heritage. This shift is reflected in national cultural policies and local initiatives that treat industrial sites not just as historical remnants but as assets for education, identity, and sustainability. The increasing frequency of natural disasters has also placed a new emphasis on cultural resilience, incorporating industrial heritage into broader frameworks of disaster risk reduction, climate change adaptation, and community development. A key development has been the integration of industrial heritage into climate action strategies and the Sustainable Development Goals (SDGs). Collaborations between public institutions and NGOs are fostering new ways to preserve, revitalise, and interpret these sites, ensuring their continued relevance.

NETWORK EXPANSION AND DEEPENING EXCHANGE

The Asian Network of Industrial Heritage (ANIH) has continued to grow in both scope and influence. As of June 2025, ANIH includes 31 international correspondents, comprising emerging experts and scholars from across the Asia-Pacific region and beyond. Regular online meetings and annual exchange gatherings ensure strong communication and a shared sense of mission among members.

From 2023 to 2025, ANIH hosted numerous events that brought together correspondents, youth talents, and professionals. These included the ANIH International Correspondents and Youth Talents Meeting (2023), the ANIH & EPWG Professionals Meeting (2024), and the ANIH International Correspondents Meeting (2025). Such gatherings are instrumental in strengthening networks, exchanging ideas, and building capacity for the conservation of industrial heritage. An influential outcome was the meeting "Cultural Landscape of Sugar Industrial Heritage: Balancing Dream and Reality," organised by Indonesian colleagues and hosted in Taiwan in August 2024.

POLICY INTEGRATION AND CROSS-SECTOR COLLABORATION

The Bureau of Cultural Heritage (BOCH) has actively incorporated industrial heritage into national policy, with an increasing emphasis on integrating cultural resilience into conservation. This includes adopting new technologies for risk assessment and emergency preparedness, promoting heritage resilience against climate threats, and developing relevant cultural routes focused on sugar, forestry, water, and mining heritage. Furthermore, heritage policy now more clearly acknowledges the interrelationship between tangible and intangible heritage, leading to the development of cross-sectoral initiatives.

BOCH continues to provide strategic and financial support to encourage adaptive reuse and community-based revitalisation. For example, ANIH collaborated with the Sumatra Heritage Trust and Heritage Hands-on to promote the industrial heritage of sugar and coal mining in Taiwan. ANIH's global reach has also expanded significantly, with the organisation aiming to strengthen connections between online and offline activities to foster collaboration across diverse heritage communities.

The ANIH International Correspondents Meeting (2025) was a hyper meeting with 12 international participants (photo by ANIH)

PROFESSIONAL DEVELOPMENT AND YOUTH EMPOWERMENT

ANIH has prioritised professional development and education through youth-focused exchange meetings and workshops. The annual International Correspondents and Youth Talents meetings have facilitated mentorship and interdisciplinary learning. Youth engagement was a key focus of the 2023 and 2024 meetings, where emerging professionals collaborated with local communities on conservation strategies and public outreach.

Several significant events between 2023 and 2024 highlight ANIH's work in connecting Asian countries on industrial heritage conservation:

2024 International Forum on Cultural Heritage Sustainability and Resilience: Held on April 18, this forum echoed the ICOMOS theme "Disasters and Conflicts through the Lens of the Venice Charter." Organised by BOCH, ANIH, and the Taiwan Heritage Society, the event featured global scholars, including Prof. Chao-Ching Fu, Sujeong Lee (UNESCO WHIPIC), Cornelius Holtorf (UNESCO Chair), and Marion Steiner (TICCIH Secretary), who addressed conflicts, disasters, and climate change.

2024 Water Heritage and Sustainability Online Seminar: Titled "Diverse Cultural Vessels of Sustainable Water Heritage from Asia," this seminar explored traditional hydraulic systems and their role in sustainable cultural landscapes.

The 2023 Brewery and Food Industry Heritage Online Seminar, titled "Roaming through Time and Space," presented a rich narrative on the Merry Brewery and industrial food production in Taiwan, combining archival research with on-site interpretation.

Looking to 2025, ANIH will hold an International Workshop on the Alishan Forestry and Railway Cultural Landscape. It will highlight cross-disciplinary preservation approaches and provide training on the World Heritage application process, fostering technical skills in heritage documentation, nomination dossier preparation, and community engagement.

The Alishan Forest Railway and Cultural Landscape is the focus of ANIH's International Workshop site (photo by ANIH)

CONCLUSION

Taiwan has continued to strengthen its commitment to preserving, revitalising, and promoting industrial heritage through interdisciplinary collaboration, international exchange, and community engagement. With strong support from Taiwan's Bureau of Cultural Heritage, the Asian Network of Industrial Heritage (ANIH) has played a pivotal role in connecting local practices with global perspectives and building a reputation for industrial heritage conservation across Asian nations.

Looking ahead, this commitment will be further solidified through a forthcoming Memorandum of Understanding (MOU) between ANIH/BOCH and The International Committee for the Conservation of the Industrial Heritage (TICCIH). This agreement will establish a long-term cooperative framework to advance preservation, capacity-building, and network development across the Asia-Pacific region. By integrating industrial heritage into broader conversations on sustainability, disaster preparedness, and youth empowerment, Taiwan affirms its dedication to safeguarding its industrial legacy for future generations.

AUTHOR

Chen Chi-Ming is the President of the Asian Network of Industrial Heritage and Director General of the Bureau of Cultural Heritage, Ministry of Culture

Contact the author

BIG STUFF

Group photo during the 2022 Big Stuff conference in Seixal, Portugal

Dr Alison Wain, Chair of Big Stuff Board

Big Stuff is an organisation formed to provide a space for people working to preserve large heritage machinery, including notably operating machinery and the intangible heritage of skills, culture, and sensory experiences that accompany operation. Big Stuff, therefore, aligns strongly with TICCIH, but also encompasses things that are not buildings and are not necessarily connected with industry (at least in the manufacturing or processing sense). In particular, this means that Big Stuff engages strongly with items of heritage transport—cars, boats, aircraft, trucks, military transport, etc.—and the largely private individual owners who preserve and operate these objects. Of course, many of these items are strongly connected to industrial concerns, as they transported raw materials to factories, and then distributed the products of industry over vast areas. Much big machinery is also housed in industrial heritage buildings, some of which are still operational and regularly demonstrated.

In contrast, others are treated more as sculptural motifs in the large spaces of many industrial buildings. Some machinery is so intimately bound up with the building it is housed in that the question of where the machinery ends and the building begins is an issue for philosophers! Sometimes the machinery is so large that it is a building in itself: metallurgical production facilities are a notable example.

ACTIVITIES

Big Stuff holds a conference every 3 years, with the last being held in September 2022 in Seixal, Portugal. The conference was hosted by the Seixal Municipal Ecomuseum at the striking Vale de Milhaços Gunpowder Factory, with a focus on *Working together. Conservation and safeguarding of industrial and technological heritage.* This topic recognised that the safeguarding and conservation of industrial and technological heritage is a multidisciplinary process, involving management institutions as well as other stakeholders.

The 2025 Big Stuff conference, hosted by the Ghent Museum of Industry and its knowledge centre, ETWIE, will take place from October 14 to 17, with the theme Skills and Machines – A Living Partnership. Recognising the environmental and cost pressures on people travelling to a single venue from around the world, the conference has a second hub in Perth, Australia, as well as online participation. To register for any of these options, visit the congress website.

In 2023, Big Stuff also hosted a webinar titled *Climate Systems and Big Stuff: Efficiency in a Big Space*. Engineer Nicola Grahamslaw, a specialist in precision air conditioning for the SS Great Britain ship and museum in Bristol, UK, discussed the importance of fine-tuning air conditioning for both the preservation of machinery heritage and achieving significant financial and energy savings in an increasingly cost- and carbon-conscious world.

Big Stuff is also collaborating with *Operating Heritage Australia* to investigate the potential impacts on operating machinery of the projected reductions in the extraction, production, and distribution of fossil-based fuels and lubricants. Synthetic fuels promise to be a drop-in replacement for the most common fuels. Still, research is needed to determine whether they can provide solutions for niche fuels and lubricants, and whether these solutions will be affordable and accessible in countries like Australia, where distances are significant. The populations of people and machinery are relatively small.

AUTHOR

Dr Alison Wain is Chair of Big Stuff Board. Big Stuff does not have a physical address. It has a website. To contact Big Stuff, please use the "Contact Us" form on our website.

Contact the author

European WORK it OUT dance event at Kulturbrauerei in Berlin, Germany, 2024 (photo by Lea Gleisberg)

Christiane Baum

ERIH, the European Route of Industrial Heritage, celebrated its 25th anniversary in 2024. The tourism information network has more than 400 members in 30 countries. Over 100 member sites are known as Anchor Points, which are sites of exceptional historical significance and high visitor appeal. Currently, 24 regional routes and networks that showcase the industrial history of regions and landscapes shaped by industrialisation are part of ERIH.

The ERIH website features a database of over 2,500 industrial heritage sites across all European countries. All are assigned to one or more European thematic routes. Since 2019, ERIH has been certified as a Cultural Route of the Council of Europe.

PROJECTS

Market research

Since 2018, ERIH has been conducting surveys on the state of industrial heritage in Europe in cooperation with the Ruhr Regional Association. An online questionnaire on the topics of core data, target groups, perspectives and measures was made available for response in a Europe-wide online survey.

The data and responses from the survey, summarised in the 'ERIH Barometer for Industrial Heritage', help ERIH in its work with political decision-makers, the press and the public. They are also used to prioritise activities to ensure the most effective development of the network.

Succession planning

The fundamental question of how industrial heritage can appeal to young people, both as a target group and as employees at the sites, has been occupying ERIH for years. The first generation of industrial heritage creators is retiring, and finding successors at the sites is a challenge.

European Industrial Heritage Summer School

One main project aimed at engaging young people in industrial heritage is the European Industrial Heritage Summer School, organised by HTW Berlin and the Berlin Centre for Industrial Heritage, with the support of ERIH, in 2023 and 2024. Twenty-five international students spent two weeks in Berlin, completing an extensive programme of lectures, workshops, excursions and technical discussions. Lecturers from the ERIH network contributed their practical experience. The students developed projects and ideas on the topic of sustainability. In 2023, the Summer School received the Best Practice Award from the Council of Europe's Cultural Routes.

ERIH Young Professionals (ERIH YPs)

Following an initiative by the Summer School students, a new membership category for young people was established: the

'ERIH Young Professionals Network'. It was approved at the 2023 ERIH General Assembly.

ERIH YPs target young professionals, students, volunteers, and employees at ERIH sites in their first five years of employment. ERIH YPs meet regularly, every 6-8 weeks, for online roundtables. They have a voice on the ERIH board and develop ideas for their projects and workshops as part of the ERIH annual conferences. The ERIH YPs welcome new members.

The seventh edition of the European WORK it OUT dance event

To raise awareness of industrial heritage among young people, ERIH developed the WORK it OUT project in 2018, the European Year of Cultural Heritage. During the event, thousands of children and young people dance simultaneously across Europe to music composed for ERIH and choreography developed by the participants. WORK it OUT took place for the seventh time in 2024.

The dance performance is recorded at each location, and the videos participate in a social media competition for likes. ERIH compiles all the videos submitted by participants. The idea of engaging children and young people in industrial heritage through their interests in dance, music, video, and social media has been highly successful every year. The event will take a break in 2025, and ERIH stakeholders are working on a relaunch. A new format is scheduled to be launched in 2026.

In 2022, ERIH won the Council of Europe's Cultural Routes Best Practice Award for WORK-it-OUT.

ACTIVITIES

ERIH on TOUR exchange programme

ERIH developed the "ERIH on Tour" project to facilitate professional exchange between ERIH members, who can apply for travel grants to enable up to three employees to visit each other at sites throughout Europe.

Participants apply in advance, describing common challenges they face and what transferable ideas they expect to gain from the ERIH network. In 2024, an exchange took place between employees of Stanley Mills in Scotland and the Museum of Work in Norrköping, Sweden.

Applications from Spain, Poland and Germany are currently being prepared. From 2026, the ERIH on Tour programme will be expanded again to offer travel grants for locations in disadvantaged countries and crisis areas, as well as for young people.

ERIH annual conferences

ERIH organises an annual international conference. In 2022, it took place in the European Capital of Culture, Esch-sur-Alzette (Luxembourg). The topic was 'Industrial heritage in the midst of the next industrial revolution – new challenges in storytelling'. Practical examples demonstrated how industrial heritage can be utilised to tell the story of a place and its history in a way that is not backwards-looking, but instead creates connections to the present and the future. At this conference, Dr Miles Oglethorpe, TICCIH President, and Prof. Dr Mein-

At its 2024 General Assembly in Łódź, ERIH elected a new Executive Board as scheduled (photo by Łódź Tourism Board, ERIH)

Participants of the ERIH Annual Conference 2024 in Łódź, Poland (photo by Łódź Tourism Board, ERIH)

rad Maria Grewenig, ERIH President, officially signed the Memorandum of Understanding, which has been in place for several years, in person. This conference will certainly also be remembered for a minor incident involving a stuck lift and the rescue operation by the local fire brigade. A big thank you to Miles for taking excellent care of the participants in the lift

In 2023, the ERIH conference on 'Industrial heritage as an engine for sustainable social and economic community regeneration' took place in Bilbao in the Basque Country. The focus was on practical examples of how the ideas of the 'The New European Bauhaus: Beautiful – Sustainable – Together' are being implemented at industrial heritage sites.

The ERIH Annual Conference 2024 took place in Łódź, Poland, and addressed the topic 'Environmental sustainability – how to come from buzzword to action'. Various sites showed how they meet the requirements of the European Green Deal and solve the diverse challenges of adapting to climate change, often in conflict with monument protection.

The 2025 Annual Conference will once again take place in a European Capital of Culture, this time from 22 to 24 October 2025 in Chemnitz, Germany. The theme is based on the Capital of Culture's motto, 'C the unseen' and will focus on intangible cultural heritage in industrial heritage.

Website development

New content has been added to the ERIH website, including another 300 sites and 70 biographies of personalities who have shaped European industrialisation. New additions to the historical texts section include essays dealing with the 'dark side of the Industrial Revolution': five articles on the topics of 'slavery and colonialism', 'Nazi and other forced labour', 'workers' misery and the labour movement', 'destruction of the environment' and 'industrialised genocide'.

Cultural Route of the Council of Europe

ERIH has been a Cultural Route of the Council of Europe since 2019 and completed the recertification process for this label in 2023. Twice a year, the Training Academy and the Advisory Forum provide opportunities for personal cooperation, exchange of experiences and the development of project ideas with other certified routes.

ERIH internal

The network continues to grow. New regional routes have been added: three in Spain (Asturias, Basque Country, Catalonia), three in Finland and the Po Valley route in Italy.

Creative Europe Network Funding

All activities from 2021 to 2024 have been implemented with

the support of Creative Europe network funding.

In 2024, ERIH once again successfully applied for Creative Europe Network funding with the project 'SHINE4Future - Shaping Europe's Industrial Heritage for a sustainable future'. The project was selected as one of 39 network projects from 98 submissions. Seven work packages will be used to jointly find solutions to current challenges and changing conditions, including the consequences of the pandemic, climate change, digitalisation, changing audiences, generational shifts among stakeholders, and the shortage of skilled workers. The project will run for four years (2025 to 2028), with a funding sum of just under €1.2 million from the EU.

New Executive Board

At its 2024 General Assembly in Łódź, ERIH elected a new Executive Board as scheduled. ERIH's founding president, Prof. Dr. Meinrad Maria Grewenig (DE), did not stand for re-election but remains a full member of the board. His successor is Dr. Walter Hauser (DE), director of the LVR Industrial Museum, who will thus continue his long-standing membership of the board as ERIH president.

The other ERIH board members were confirmed in their positions: Vice-President Dr Adam Hajduga (PL), Treasurer Susanne Röskes (DE), as well as Peter Backes (DE), Hildebrand de Boer (NL), Katharina Hornscheidt (DE), Willi Kulke (DE), Prof. Massimo Preite (I) and Javier Puertas Juez (ES). New to the board are Łucja Zawadzka (PL), head of the development department at the Zabrze Coal Mining Museum, and Isabella Alfken (DE) from the Industrial Heritage Route team at the Ruhr Regional Association.

Two founding members of ERIH, John Rodger (GB) and Rainer Klenner (DE), have stepped down from the board after serving for many years. Both have had a lasting impact on the network and made a unique contribution.

AUTHOR

Christiane Baum studied tourism and economics and works as a self-employed tourism consultant, specialising in cultural tourism. She has been coordinating ERIH since 2003 and has served as secretary general of the ERIH Association of the same name since 2008.

Contact the author

FIVA

Nataša Grom Jerina

From the legendary curves of the Mille Miglia to the deliberative corridors of Brussels, one organisation stands as a guardian of mobile heritage: the Fédération Internationale des Véhicules Anciens—better known as FIVA. Since its founding in 1966, FIVA has led the global effort to preserve the legacy of historic vehicles. In today's rapidly shifting landscape, marked by climate urgency, digital transformation, and evolving mobility policies, FIVA's mission is more vital than ever.

With national federations in over 70 countries, FIVA's reach is as broad as it is deep. Its core mandate is to preserve, protect, and promote historic vehicles—not just as machines, but as cultural artefacts that carry stories, traditions, and technical craftsmanship. Historic vehicles are more than the roar of an engine or the gleam of polished chrome. They embody restoration know-how, artisanal skills, and deeply personal histories. To keep this legacy alive, FIVA operates through five strategic pillars: Legislation, Culture, Technical Affairs, Communication, and Youth.

ACTIVITIES

Perhaps nowhere is FIVA's role more impactful than in the policy arena. As cities and countries adopt Low and Zero Emission Zones (LEZs/ZEZs), consider banning internal combustion engines, and implement new vehicle digital IDs and roadworthiness rules. Historic vehicles risk being left behind—or worse, legislated off the roads.

FIVA's Legislation Commission responds with agility and precision. By maintaining active relationships with EU institutions, national governments, and the European Parliament Historic Vehicle Group, FIVA monitors emerging legislation and provides input into impact assessments. This proactive approach ensures that historic vehicles—typically used sparingly and maintained with care—are fairly represented and appropriately regulated.

FIVA argues convincingly that these vehicles, preserved for cultural reasons, contribute negligibly to environmental harm while offering significant value as dynamic links to our industrial and social past. Accordingly, FIVA lobbies for exemptions and proportionate regulations, advocating for the continued use of these vehicles on public roads.

In tandem with these efforts, FIVA is engaged in discussions on sustainable fuels, collaborating with developers of biofuels and synthetic alternatives. These solutions aim to keep historic vehicles operational without compromising originality—an essential concern for collectors, restorers, and cultural institutions alike.

While legislation helps secure the future of historic vehicles on the road, FIVA's Charter of Turin—a foundational document adopted in 2013—outlines ethical principles for the care, restoration, and responsible use of historic vehicles. It provides essential guidance for owners, collectors, and

Dresden gas station (photo by Tiddo Bresters)

policymakers, helping them understand the appropriate procedures when dealing with historic vehicles. Complementing this document is the new FIVA ID Card system, which leads the technical efforts by ensuring that a vehicle's components and status are clearly described and accurately documented.

To make these principles more accessible, FIVA has released a cartoon adaptation of the Charter, bringing restoration ethics to life through engaging visual storytelling. With multiple translations and a companion booklet, this initiative demonstrates how FIVA is bridging tradition and technology to reach a wider audience.

FIVA's Culture Commission continues to celebrate the rich cultural world surrounding historic vehicles. Beyond engines and engineering, the stories of those who built, maintained, and loved these machines are integral to our collective memory. Recent cultural projects have explored these human narratives, ensuring that the soul of historic vehicles is honoured as much as their mechanics.

One of FIVA's signature programmes in this space is the FIVA Culture Awards—an annual initiative recognising excellence in education, innovation, restoration, and artistic expression. These awards highlight the depth of talent and passion within the historic vehicle community, encompassing master restorers, academic researchers, and creative artists. By encouraging proposals that combine technical, educational, and artistic perspectives, the Awards have become a vibrant forum for innovation and collaboration.

FIVA understands that no heritage movement can thrive without generational renewal. That's why the Youth Working Group, operating under the Culture & Youth Commission, plays a crucial role in building bridges between veteran enthusiasts and young people discovering the world of historic vehicles.

The group launched the FIVA and Youth brochure, showcasing global projects aimed at engaging the next generation. Initiatives such as the Youth Challenge Trophy and FIVA International Youth Day invite young people to participate in events, contribute through photography or artistic creations, and explore the world of heritage vehicles from a modern perspective.

FIVA has also joined the ERIH (European Route of Industrial Heritage) Young Professionals Network and partnered with ESACH (European Students' Association for Cultural Heritage) and UNESCO Youth Liaison.

OUTSTANDING PROJECTS AND NOTABLE CASES

FIVA also recognises the importance of industrial heritage—the sites and facilities that formed the backbone of the automotive age. In partnership with TICCIH (The International Committee for the Conservation of the Industrial Heritage), FIVA launched the Automotive Industrial Heritage Recognition Award. The inaugural recipient is Motorworld, honoured for its exceptional role in preserving historic automotive sites and experiences, and last year's winner, Autoworld in Belgium [see TICCIH Bulletin #107, 2024].

Old Shell petrol pump in Eastern Germany (photo by Tiddo Bresters)

This collaboration, formalised by a Memorandum of Understanding in Paris in 2022, underscores FIVA's holistic approach to heritage, extending beyond vehicles to include the physical and cultural infrastructure of the industry.

FIVA is also fostering international dialogue through its Automotive Historian Conferences, with previous editions held in Mulhouse (2017), The Hague (2019), Turin (2022), and Wolfsburg (2024). These conferences gather scholars, restorers, policymakers, and cultural stakeholders to discuss the future of mobile heritage. Plans are now underway for a South American edition, recognising the region's rich motoring traditions and global significance.

Such efforts reflect FIVA's ambition to nurture a truly global community of enthusiasts and experts, united by their commitment to preserving the vehicles and values that have shaped the history of mobility.

From legislative corridors to museum halls, from historic rallies to digital platforms, FIVA's work is multifaceted yet unified by a clear purpose: to ensure that the history of mobility remains visible, accessible, and vibrant. In advocating for reasonable regulations, developing digital resources, celebrating craftsmanship, and empowering youth, FIVA is not just preserving the past—it is shaping the future.

As we navigate a fast-paced era marked by environmental imperatives and technological innovation, FIVA reminds us of the importance of looking back even as we move forward.

Chimneys of the Volkswagen Plant in Wolfsburg (photo by Tiddo Bresters)

Numerous hairpin bends at Italy's Stelvio Pass (photo by Tiddo Bresters)

Historic vehicles are not relics; they are storytellers on wheels—living witnesses to the ingenuity, artistry, and spirit of their time. By driving heritage forward, FIVA invites us all to be part of a journey where history is not parked in a garage, but carried with us into the future—restored, respected, and ready to roll.

AUTHOR

Nataša Grom Jerina, Vice President FIVA, Culture and Youth. For more information, please visit FIVA.org.

Contact the author

INCUNA

Cristasa is an old glass factory that began operating in 1910 and is currently being reused to host business initiatives by Gijón Impulsa. It is the current headquarters of INCUNA (photo by CRISTASA)

Miguel Angel Alvarez Areces

INCUNA (Industry, Culture, Nature) is a non-profit association established in Asturias in 1998 with an international focus and the aim of studying industrial archaeology and protecting, promoting and enhancing industrial heritage and cultural landscapes. It was declared a public interest entity by the Spanish Government in 2011 in recognition of its social, cultural and development cooperation work. Since its foundation, it has promoted citizen participation and networks among professionals and institutions.

The conservation and sustainable reuse of cultural assets must recognise the material and immaterial value of heritage and reflect a commitment to a living cultural heritage linked to people, working cultures, technologies and productive landscapes.

INCUNA combines research and fieldwork through working groups, training, networks and community projects. It catalyses initiatives that address the industrial past as a key to understanding the social, economic, and cultural processes of the present.

RELATIONS AND COOPERATION NETWORKS

INCUNA played a key role in creating and consolidating TICCIH Spain and maintains close international collaboration through shared conferences and initiatives. Since its inception, INCUNA's events have regularly featured TICCIH representatives, including recent participation by its president, Miles Oglethorpe, secretary general Marion Steiner, and experts from UNESCO, ICOMOS, and OEI.

INCUNA has links with organisations such as Hispania Nostra, the SEDPGYM, the AMCTAIC, and AVPIOP in Catalonia and the Basque Country, as well as the Spanish Cultural Heritage Institute (IPCE). Additionally, INCUNA collaborates with academic institutions, including the University of Oviedo, the University of León, and the Polytechnic University of Madrid (GI+PAI group). At the international level, it cooperates with institutions in Portugal, Greece, Germany, Belgium, Norway, Italy, Brazil, Cuba, Mexico, Chile and Uruguay, among others.

Dialogue with companies, both public and private, including HUNOSA, ArcelorMittal, EDP, Impulso Alternativo, and other organisations such as the Virginia Studio Association and the Gentilini Foundation in northern Italy, to generate synergies between the business world and civil society.

INCUNA has received recognition for its work in defending industrial heritage. In 2008, it received the 'Somos Patrimonio' award from the Andrés Bello Agreement for the best Ibero-American civil society project for its work on 'The Silver Routes in Spain and America'. In 2022, it was awarded the prize for Cultural Action and Promotion in Spain, and in 2023, it received the Peironcely10 prize for its defence of

workers' heritage. In 2024, it received the prestigious Hispania Nostra Prize for its 25-year career and the dissemination and promotion of industrial heritage through its publications.

PUBLIC POLICIES AND ORGANISATIONS

The legal framework governing the protection of cultural heritage in Spain is based on Law 16/1985 on Spanish Historical Heritage, supplemented at the regional level by specific regulations such as Law 1/2001 of the Principality of Asturias. The latter incorporates industrial heritage into the legally recognised categories, which represents a significant step forward in its legal visibility. However, the effective protection of these assets depends on their inclusion in inventories, urban catalogues or their declaration as Assets of Cultural Interest (BIC), which still presents inequalities and regulatory gaps.

In the last three years, several elements have been recognised as BIC in Asturias within the field of industrial heritage, including the former workshops of the Basque-Asturian Railway in Pravia, the Industrial Complex of the Royal Asturian Mining Company in Arnao, and the hydraulic system of the Fábrica de Luz in Proaza. These declarations mark key steps in preserving evidence of regional industrial history and engineering, joining 50 others at the regional level.

The jet mining cultures linked to the "Camino de Santiago" *(The St James Way)* have been declared Intangible Cultural Heritage by INCUNA. Though limited, these advances support institutional recognition of industrial heritage, allowing its value to be recognised as an integral part of the country's cultural, economic and social landscape. We continue to call for a new Industrial Memory Law to expand and update the current Historical Heritage Law in Spain.

OUTSTANDING PROJECTS AND NOTABLE CASES

International recognition has also had a positive impact. In 2024, Asturian cider culture was declared Intangible Cultural Heritage of Humanity by UNESCO, which has reinforced the productive and symbolic identity of Asturias, highlighting the importance of know-how linked to agro-industrial environments.

At the Pozo Sotón (San Martín del Rey Aurelio) mine in HUNOSA (1917-1922), a fascinating experience has been created to preserve the industrial mining heritage, with visits to galleries 800 metres underground, combined with a memorial centre for miners who died in Asturias. Another notable example is the Fondón Mine in Langreo (1905-1917), which has been converted into the headquarters of the Mining History Archive and equipped with sustainable energy facilities (geothermal and biomass) to serve the nearby neighbourhoods.

In Gijón, the Railway Museum has established itself as an educational and restoration centre, with exhibitions, educational activities and the restoration of historic locomotives. The Asturias Mining Museum (MUMI) in El Entrego has embarked on a new phase of museum modernisation.

In the energy sector, strategies for the sustainable conversion of old thermal power plants have been promoted. In Soto de Ribera and Aboño.

Significant losses should also be noted. These include the destruction of the ArcelorMittal blast furnaces in Avilés and the partial demolition of the Sociedad Ibérica del Nitrógeno (Nitrastur) in Langreo (1923), despite citizen campaigns and technical reports calling for their preservation. Similarly, the Oviedo Gas Factory (1858-1920) is still awaiting an urban development project that will reconcile its future uses.

Archive of the Real Compañía Asturiana de Minas, founded in 1833 and dedicated to zinc production. Francesco Antoniol and Roberto Marini from Italy with archivist Alfonso García from INCUNA during a visit by the TICCIH working group (photo by Miguel A. Areces 2023)

Pozo Sotón, (opened in 1919), owned by Hunosa, in the Nalón mining basin (Asturias), with BIC protection status, has a mining memorial with plaques listing those who died in the mines and offers tours of the mine as part of industrial tourism programmes (photo by INCUNA Archive)

The reuse of the former La Vega Arms Factory (Oviedo, 1794) as a public cultural space is a positive example of urban regeneration with historical significance.

SOCIAL AND COMMUNITY-BASED PROJECTS

Throughout its history, INCUNA has prioritised the social dimension of industrial heritage, understood as a process of recovering collective memory, community involvement and citizen empowerment.

One of its most established initiatives is the International Industrial Heritage Conference, which has been held continuously since 1999. This annual forum has hosted over 5,000 people from 56 countries, fostering the exchange of experiences and best practices. The 2023 and 2024 editions were attended by more than 250 people each and addressed topics including hydroelectric heritage, mining cultures, heritage reuse projects, productive landscapes, and industrial tourism routes.

Among the most notable social activities is the programme of trips to old factory sites, mines and railways, in collaboration with educational centres, neighbourhood associations and senior citizens' groups.

Since 2019, INCUNA has organised the INCUNA FilmFest, a film and documentary festival focusing on industrial heritage, workers' memories, the environment, and territorial transformations. More than 150 films from 30 countries have been screened, consolidating its position as a creative space for collective reflection and audiovisual experimentation.

INCUNA's annual photo competitions foster artistic creation and public engagement with industrial heritage. The resulting exhibitions tour schools, libraries, cultural centres and public spaces, strengthening the social appropriation of the industrial legacy.

INCUNA has joined European projects on social innovation and sustainability, such as the Erasmus+ programme 'European Sustainable Environments', in collaboration with partners from Asturias, Germany, and Italy. These initiatives have explored participatory methodologies in the regeneration of post-industrial spaces, involving young people, technicians, and local communities.

From an editorial point of view, INCUNA's publications have had a clear informative vocation. The series *Los Ojos de la Memoria* (The Eyes of Memory) and *La herencia recuperada* (The Recovered Heritage) are particularly noteworthy.

INCUNA has promoted experiences of participatory recovery of industrial movable property, such as tools, plans, archives and disused machinery, integrating them into interpretation centres and travelling exhibitions. The latest preservation project involves the preservation of a historic Mergenthaler Linotype machine in Madrid, in collaboration with Cordon Press and the UCM.

PUBLICATIONS

- *INCUNA. 25 years activating industrial heritage. A future for our past* (Miguel Ángel Álvarez Areces, coord.).
- *Portrait of a legacy. Industrial heritage in Asturias, a panoramic and documented overview of the main industrial complexes in the Principality.*

The Oviedo Gas Factory, which supplied gas to the city since 1918, is a heritage site in danger, pending urban development that reconciles its conservation with new uses (photo by Ángel Sanchis)

- Sociedad Ibérica del Nitrógeno – *Nitrastur (Suárez Antuña and Tielve), a monograph on one of the most emblematic chemical complexes of the 20th century in Asturias.*
- *From Agricultural Farm to Science and Technology Park: La Laboral in Gijón* (Various authors, coordinated by Angel Martín), history, engineering and architecture.
- *Heritage dynamics in post-industrial territories* (2025), a collective work coordinated by Miguel Alvarez Areces with case studies and comparative analyses on the challenges of reusing industrial spaces.
- These can be obtained through the Cicees web platform.

CONCLUSION

From its headquarters in the former Cristasa factory in Gijón, INCUNA has established a network of initiatives that combine research, citizen participation, institutional cooperation, and cultural creation.

In a time of uncertainty, climate crisis and productive transformation, INCUNA's experience offers valuable keys to building more just, cultured and resilient societies. Activating industrial heritage means activating a citizenry that is aware of its history, proud of its legacy, and capable of reinventing its territories from a shared memory and a future vision.

AUTHOR

Miguel Angel Alvarez Areces holds a degree in Economics from the University of Santiago de Compostela. His professional career has been in university teaching, private enterprise and HUNOSA (Hulleras del Norte SA), where he was director of Heritage for this public company in the coal mining sector in Spain. He is a founding member and president of INCUNA in Asturias, and an honorary member of TICCIH Spain.

Contact the author

Dra. María Esperanza Rock Núñez

The South Research Nucleus (NUDISUR) emerged from community activism as a coordinated response between academia and civil society to urgent local challenges, with a clear commitment to international visibility of epistemological issues and mutual understanding.

This network serves as a collaborative platform that integrates knowledge, methodologies, and experiences from and for the territories of the Global South, which are often rendered invisible by hegemonic epistemic narratives from the North.

Its consolidation has been progressive, through the organisation of international congresses, strengthening academic networks, and active participation in heritage management processes.

Various organisations have been key in NUDISUR's development, under an approach that the network itself terms Action-Management-Collaboration. This methodology, inspired by the ecological model of memory (Rock, 2022), promotes the co-design of territorial actions with high community impact.

Foundational and collaborating organisations include:

- Centro Cultural CREASUR: Founded in 2007 in Concepción, Chile, it promotes initiatives that foster appreciation for local heritage, community strengthening, and cultural development. Since 2016, it has actively integrated into NUDISUR, providing a platform for critical reflection, artistic education, and citizen participation.

- Casa Taller Chiguayante: Established in 2014 in the commune of Chiguayante, Biobío Region, this cultural centre fosters creativity, access to culture, and decentralised training, with a strong respect for the environment.

- OTEC Cultura y Territorio: A technical training organisation accredited by the Ministries of Education and Labour of Chile (NCh# 2728), created in 2019. It facilitates learning processes that promote critical thinking, good living, territorial belonging, and creativity.

These entities exemplify how academic knowledge can integrate with community practices, generating innovative models of heritage and cultural management.

Through active work with communities in the Biobío region, the urgent need arose to make visible the processes of transformation and the artists derived from them.

NUDISUR's challenge was not only to work on a particular theme but also to consolidate a way of understanding the world from the perspective of southern communities, to comprehend them, and to learn from them. The network

Final act of the agreement signing ceremony between TICCIH and NUDISUR in 2023. From left to right: María Julia Burgueño (TICCIH Uruguay), Mirhan Damir (TICCIH Board), Lucía Sánchez (TICCIH Venezuela), Elis Barbosa (NUDISUR), Marion Steiner (TICCIH Secretary General), Esperanza Rock (NUDISUR Director), Marina Mantilla (NUDISUR), Andrés Torres (NUDISUR), Daniel Stewart (NUDISUR) and Moulshri Joshi (TICCIH Board) (photo by Sebastián Orellano, Creasur Photographical Archive)

consolidated and internationalised through congresses based on International and Interdisciplinary Heritage.

CONGRESSES

The first edition of the congress in the Biobío region, held in 2016, focused on reflection on *Memory, Orality, and History: Sources for Cultural Heritage*, organised by Dr. María Esperanza Rock Núñez at Universidad San Sebastián. It concluded that the diversity of sources in research is linked to the diversity of perceptions about the past, underpinning cultural heritage management. By using science as a facilitator of processes, its capacity to address challenges is recognised, but also its susceptibility to biases and external agendas. Adopting a critical and decolonial approach seeks to adjust science to understand better its context and the ethical, political, and cultural implications. This approach promotes more pluralistic, sustainable, and free progress in our societies.

Regarding experience in heritage management, it is noteworthy that in 2018, NUDISUR developed the II International and Interdisciplinary Cultural Heritage Congress in Jalisco, titled *Documentary Heritage as a Foundation of Memory and Culture* at CUTonalá, hosted by Dr. Marina Mantilla Trolle. It was concluded that documentary heritage plays a fundamental role in memory and the interpretation of the past from the present, where communities, public services, and institutions must contribute to its conservation and also provide public circulation for its contents.

Following this version, the congress moved to Brazil in 2020, focusing on *Education and Tourism of Cultural Heritage,* with rich and interesting international exchanges, concluding that the critical approach must be present not only in heritage management but also in education and tourism, giving space to critical disruptive narratives by communities that live and preserve heritage from their own culture, from their being, not from their ought to be.

In 2022, a program was designed based on the ecological model of memory, proposing the Action-Management-Collaboration technique to contribute to the challenge undertaken by the Biobío Region in Chile with the inclusion of the Lota industrial complex in the UNESCO World Heritage Tentative List (2021).

In August 2023, the IV International and Interdisciplinary Congress of *Cultural Heritage: Industrial Heritage, Social Question, and Challenges for a New Governance* was held, adapted to regional needs.

ACTIVITIES

Consequently, the program design focused primarily on understanding the Ecological Model of Memory *(Rock, 2022)* and applying the "Action-Research and Collaboration" technique through three interconnected action nodes, which were developed in an articulated manner.

This was based on the theoretical foundation of Communication for Social Behaviour Change, using an innovative ecological model that placed the community's memory—driving industrial heritage management in the Biobío region—at its core.

The main objective was to thoroughly understand which aspects are promoted as heritage, what narratives support the preservation of that legacy, and who the actors involved in the region's heritage development are.

Likewise, the aim was to explore which ideas, experiences, and aspirations emerge from different sectors, to co-create a collective narrative and regional image of industrial heritage in the specific context of Biobío.

Specifically, three activities were created:

1) IV International and Interdisciplinary Congress on Heritage

International initiatives from diverse parts of the world were presented: Mexico, Brazil, Argentina, Cuba, Uruguay, Nigeria, India, Nepal, Egypt, Indonesia, France, Spain, and Germany, as well as significant national and regional projects.

2) Festival of Arts in Ruins

This was a challenging articulation between the artistic sphere and the academic world. A specific curatorial process was developed based on the content of the congress program to open dialogue with craftsmanship, dance, theatre, performance, and music, unveiling diverse narratives on industrial heritage.

3) Diploma in Collaborative Methodologies for Heritage Projects with a Critical Approach

This training was aimed at public service officials, leaders, and grassroots organisers developing heritage projects across the region, inviting all 33 municipalities of the Biobío Region.

The full program design and development can be reviewed in detail in the book: Rock-Núñez, María Esperanza, Marion Steiner, Daniel Stewart, and Andrés Torres (eds.), VV.AA. (2024). *Iniciando transformaciones. El patrimonio industrial como activo para el desarrollo regional: Miradas críticas desde y para el sur global / Initiating Transformations. Industrial Heritage as an Asset for Regional Development: Critical Perspectives from and for the Global South*. CREASUR Ediciones: Concepción-Chile. ISBN: 978-956-08017-0-8.

The program, developed by NUDISUR and collaborating organisations, also attracted significant participation from members of TICCIH International, particularly those from the Global South, specifically Chile. The TICCIH Board, along with the founders and representatives of NUDISUR, agreed to a collaboration agreement, establishing a mutual and horizontal commitment to support future projects.

The agreement between NUDISUR and TICCIH International constitutes a strategic space for the exchange of knowledge, experiences, and methodologies related to industrial heritage

from a critical, situated, and community-engaged perspective. It reaffirms the shared commitment of NUDISUR and TICCIH to a transformative vision of heritage, anchored in social justice, collective memory, and sustainability.

PUBLICATIONS

- Rock Núñez, María Esperanza, and Bretti López, María José (2025). *Narrativas artísticas de la transformación. Una aproximación a la sensibilidad y a su memoria.* Revista De Geografía Norte Grande, (91).
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- Rock Nuñez, María Esperanza (2023). *Reflexiones sobre patrimonio y perspectiva decolonial en estudios postindustriales en comunidades del hemisferio sur.* Revista Gerónimo De Uztariz Aldizkaria, (37).
- Rock Nuñez, María Esperanza, and Marion Steiner (2023). Industrial Heritage, Social Issues and Challenges for a New Governance. *TICCIH Bulletin, (102)*, pp. 5-7.
- Rock Nuñez, María Esperanza (2022). The Industrial Heritage Of The Global South, *TICCIH Bulletin, (97)*, pp. 20-22.

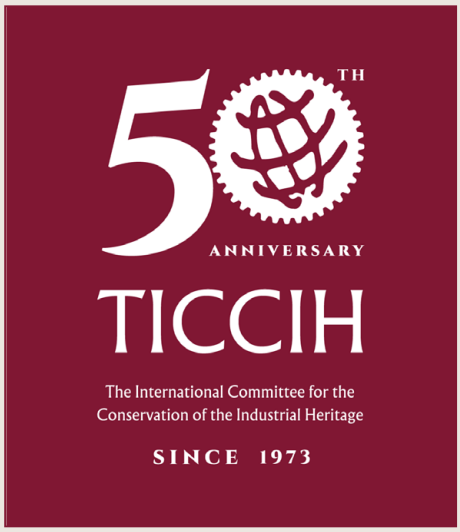
AUTHOR

Dr. María Esperanza Rock Núñez is a Chilean researcher dedicated to the study of ethnohistory, memory, diversity, and the cultural transformations resulting from processes of deindustrialisation, with a decolonial approach aimed at strengthening community capacities. Her research has taken her to the United States and South Africa, where she has explored visual and creative ethnographic methodologies, oral history, and representation. As a visiting professor, she has also shared her expertise in Mexico and Germany. She is a strong advocate for critical thinking and historical interpretation grounded in diverse lived experiences.

With the support of a FONDECYT Initiation Research Grant, she created an oral archive of the Chilean coal basin at the University of Concepción. She was recently awarded the Alexander von Humboldt Research Fellowship, collaborating with the Institute for Social Movements at Ruhr University Bochum, Germany, to study deindustrialisation from a comparative perspective between the Global North and South, analysing how communities perceive and respond to industrial transitions.

In parallel, she has led community-based collaborative projects through organisations such as NUDISUR, CREASUR, CASA TALLER, and OTEC Cultura y Territorio, promoting horizontal knowledge exchange and cultural co-production. These initiatives integrate critical pedagogies, collective memory, and participatory methodologies to advance socially committed heritage practices in post-industrial territories of the Global South.

Contact the author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Conservation of the Industrial Heritage
SINCE 1973