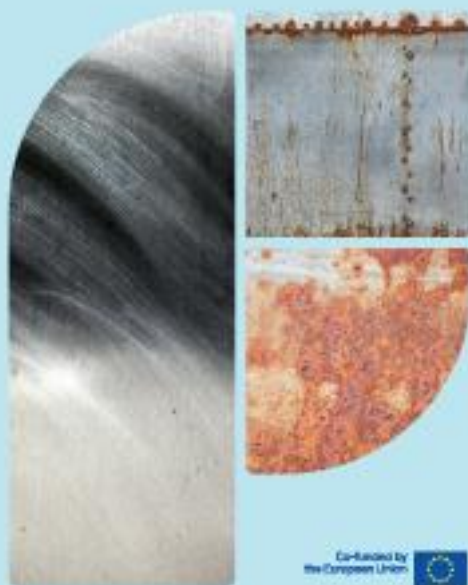


Industrial Heritage in Belgrade, Rijeka and Trbovlje

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About FASI H

The FASI H project focuses on the interdisciplinary art and science research of the industrial and cultural heritage by detecting, exploring and evaluating architectural achievements and intangible processes that have marked modern history of Belgrade, Rijeka and Trbovlje. FASI H is a regional cooperation that, in conjunction with scientific research and new media, seeks to connect contemporary models of revalorisation and revitalisation of the industrial heritage. Using IT and novel technological tools, the project aims to provide new approaches to promoting the value of the cultural, scientific and industrial heritage of the region, shared in the context of a global, sustainable European future.

Executive Summary

Short overview of the status and perspectives of the Industrial heritage in Belgrade, Rijeka and Trbovlje

Keywords

Industrial heritage; Factory; Industry; Power plant

1. Concept of Industrial Heritage in Europe

The concept of industrial heritage has been introduced in England in the twentieth century. Coined in reference to the buildings and landscapes of the industrial era, up until now the term has moved much further in the past, but also much closer to the present. [1] Industrial heritage belongs to a historical period that begins with the Industrial Revolution in the 18th century and spans all the way to modern times, but the research unavoidably also touches on its preindustrial and protoindustrial roots and relies on the aspects of the human labour phenomenon that are the subject of the history of industry. Industrial heritage consists of buildings and machines, workshops, facilities and factories, mines and ore processing plants, warehouses and storages, plants for production, transmission and use of power, transportation and all accompanying infrastructure, as well as places intended for all social activities connected to industry, such as residential or educational. The value of such material remains can be multiple, from historical, scientific, social and technical to architectural, and often aesthetical. [2] At the beginning of twenty-first century, TICCIH¹, the world organisation for industrial heritage originated the Nizhny Tagil Charter. The Charter gives the context and the definition of industrial heritage as well as its values.

From the Middle Ages, innovations in Europe in the use of energy and in trade and commerce led to a change towards the end of the 18th century with the developments in the social, technical and economic circumstances of manufacturing sufficiently rapid and profound to be called a revolution. The Industrial Revolution was the historic phenomenon that has affected an ever-greater part of the human population, as well as other forms of life on our planet, and that continues to the present day. The material evidence of these changes is of universal human value and the importance of the study and the conservation of this evidence must be recognised.

Industrial heritage consists of the remains of industrial culture, which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education.

Industrial archaeology is an interdisciplinary method of studying all the evidence, material and immaterial, of documents, artefacts, stratigraphy and structures, human settlements, natural, and urban landscapes, created

¹ The International Committee for the Conservation of the Industrial Heritage, available at: <https://ticcih.org/>

for or by the industrial process. It makes use of those methods of investing action that are most suitable to increase understanding of the industrial past and present.

Further on the Charter defines the values of industrial heritage stating that it “is the evidence of activities which had and continue to have profound historical consequences. The motives for protecting the industrial heritage are based on the universal value of this evidence, rather than on the singularity of unique sites. The industrial heritage is of social value as part of the record of the lives of ordinary men and women, and as such, it provides an important sense of identity. It is of technological and scientific value in the history of manufacturing, engineering, construction, and it may have considerable aesthetic value for the quality of its architecture, design or planning. These values are intrinsic to the site itself, its fabric, components, machinery and setting, in the industrial landscape, in written documentation and in the intangible recordings of industry contained in human memories and customs. Rarity, in terms of the survival of particular process, site typologies or landscapes, adds particular value and should be carefully assessed. Early or pioneering examples are of special value.” [3] The Charter also stresses the importance of identification, recording and research of the industrial remains as well as its protection, maintenance, conservation and interpretation.

2. Industrial Heritage in the Balkans and South-East Europe

Industrialisation in the Balkan countries started later, slower, and in different sectors compared with the rest of Europe. At the end of the 19th and the dawn of the 20th century, in Croatia, Slovenia, Serbia, Montenegro, and Bosnia and Herzegovina, 85% of the population lived off agriculture, while only 10% earned their living in industry, craftsmanship, and trade, with the rest engaged in various professions. Rapid industrial development did not occur until the 1930s, and the transition to high industrialisation took place only after 1945. Several structural factors contributed to this: underdeveloped transportation infrastructure that hindered the creation of cross-regional markets, chronic capital shortage, low educational levels, and strong competition from developed regions of the Habsburg Monarchy. [4]

2.1 Industry in Serbia

Industry in Serbia, as well as in other European countries, had its origins mainly in the developed branches of manual craftsmanship. On the long journey from craftsmanship to factory production, the production process went through various forms of craftsmanship, cooperation, and division of labour in manufacturing, until the introduction of technological advancements reached the level of machine production. This technological

revolution transformed social labour and means of production, revolutionising the outdated technical foundation of production, the very work method, and the role of workers in the process. In this way, the transition from manual craftsmanship to a factory production system took place. This process occurred in Serbia in the second half of the 19th century, with a significant delay compared to a similar process in Western European countries. [5]

During the 19th century, Serbia was an agricultural country in an early phase of the development of industry, which was trying to create an economic system, institutions and direction of the economic policy. There were numerous reasons for the low level of the economic development, but the economic heritage of the Ottoman Empire and (semi)dependent character of the state were crucial. Gaining political independence in 1878 was a “great turning point” for Serbia in many ways, allowing the industry to begin to develop more strongly with a more freedom in the sphere of economy.

Until the World War I, textile, food, cement, brick, chemical, metal, leather, timber industry, etc., were among produced goods. Mills were constructed going through all the phases of industrialisation, from water power, turbines and steam, to petroleum and electric drive. Until the start of the war, the foundations of the industry on the territory of Serbia had been set, several decades had passed from the primitive workshops to modern factories, with the created industrial centres that have remained during the 20th century as well.[6]



Figure 1: Rječina valley with paper factories, Rijeka, Croatia (19th century drawing)

2.2 Industry in Croatia

Industrial development in Croatia was influenced by its position as a part of the Austro-Hungarian Empire. The Habsburgs introduced modern infrastructure, including railways, which connected Croatian cities to the rest of Europe. The railway lines connected major cities in Croatia, such as Zagreb, Rijeka, Osijek, and Zadar, to other parts of the empire. This facilitated the transportation of goods and raw materials, stimulating industrial activities. Zagreb, the capital city, emerged as an industrial centre with textile mills, breweries, and printing houses. The port city of Rijeka became an important maritime and industrial hub.

Croatia has a long tradition of mining and metallurgical activities. Notably, the Sisak region was known for iron and steel production, contributing to Croatia's industrial growth. Other mining centres were found in areas such as Labin, where coal mining and the extraction of other minerals took place.

The country's coastline, particularly cities like Rijeka, Split, and Pula, has a rich shipbuilding heritage. Shipyards in these locations played a significant role in the development of naval and commercial shipbuilding. Rijeka's 3. Maj Shipyard and Brodosplit in Split are notable examples of shipbuilding facilities with a longstanding history.

Overall, the industrial development in Croatia before World War I was characterised by the expansion of sectors such as textiles, mining, agriculture-related industries, and metalworking. The region's resources, transportation infrastructure, and integration into the Austro-Hungarian Empire's economy were key factors that contributed to the industrialisation process during that period.

2.3 Industry in Slovenia

The Slovenian territory, within the Habsburg Monarchy, was considered a backward area in terms of the economy, with limited economic initiative. The primary centre of economic activity was Trieste, which served as the most important port of the monarchy, extending its influence into the Slovenian hinterland. The process of industrialisation in Slovenia was marked by a lag compared to the more developed regions of the monarchy, a trend noticeable from the early 19th century.

The iron industry was the most advanced sector, while coal mining gained importance during the 18th and early 19th centuries. In 1835, the first steam engine was installed in a sugar refinery in Ljubljana. During the 1860s and 1870s, the first joint-stock companies were established. The Creina Industrial Company, founded in 1869, brought together various ironworks, while the Trbovlje Coalmining Company (TPD), founded in Vienna in 1873, achieved notable success.

From the 1890s onwards, industries in Slovenian regions experienced significant progress, but the gap between Slovenia and the most developed countries, particularly Austria and the Czech Republic, continued to widen. The majority of companies remained small in scale. The iron industry underwent modernisation, coal production nearly doubled by the start of World War I, and the chemical industry made significant advancements, including the establishment of glass factories and paper and pulp mills. With industry's growing demands for energy, steam and water remained dominant sources of power, while the first power plants emerged, gradually becoming the primary energy source for industrial activities.

The progress of the industrial sector led to a revival in railway construction, which had declined after the major economic crisis of 1873. Railways were extended towards Kočevje and Nova Mesto, and in 1906, the second rail connection between Vienna and Trieste was completed, passing through Beljak, Jesenice, and the Soča Valley.

2.4 Yugoslavia between two World Wars

Although industrialisation in the 1920s accelerated, we still could not speak of a developed modern society with all its characteristics: growth of the secondary and tertiary sectors, expansion of urban lifestyles, and independent development of science and technology. However, the industry did make progress. [7]

After World War I, the circumstances for industry in the newly created Kingdom of Serbs, Croats and Slovenes (1918-1929) / Yugoslavia (1929-1941) have changed. New borders created new market within which the old industry of different countries was supposed to adjust and integrate. Characteristics of the pre-Yugoslav space have conditioned the economy of the country being on different levels of development in various regions, with weak integration of the market, which also reflected on the development of the industry.

Agriculture has remained dominant economic sector, on which industrialisation, urbanisation and modernisation of the economy depended. Transportation network continued to expand, while the population growth was sufficient to secure enough work force, but the industrial sector still comprised only a small part of the economy. General characteristics of the industrial sector were: insufficient and outdated machines, incompleteness of economic laws, lack of capital, customs protection, fiscal burdening of industry, unqualified work force, retarded agriculture, small demand and offer of industrial products, etc.



**Figure 2: Power Plant Power and Light around 1930s, Belgrade, Serbia
(from the photo collection of Miloš Jurišić)**

In spite all the difficulties, industrial development was obvious. Between 1919 and 1938 Yugoslavia had 2,193 factories, most of which were in Slovenia and Croatia. Textile and food industry required lower investments and qualifications, and therefore were more developed. In the period between two wars, part of the pre-war companies managed to reconstruct and integrate on the new market continuing their development by investing in modern technologies and products. Apart from them, new factories were also established and they've left an important mark in the interbellum period.[8]

2.5 Yugoslavia after WWII

The next turning point in the development of Yugoslav industry was caused by the changes brought on by World War II. The rise to the power of the Communist party in Yugoslavia marked the comprehensive change of state, social and economic system. In accordance with the establishment of a new ideological system,

directed planned economy was introduced, while centralism and state ownership were the basis of the economic policy of the Communist Party of Yugoslavia. [9] Two years after the end of the war, the economy was largely reconstructed, and the creation of long-term development strategies began. The first five-year plan (1947-1952) envisioned a multiple growth of industrial production. The primary focus was on building capital goods industries such as machinery manufacturing, shipbuilding, and the electrical industry, as well as producing energy, iron, steel, and coal. The most important goal of long-term economic planning was to address regional inequalities. [10]

In the 1950s, a significant economic growth was recorded in Yugoslavia to which foreign investments, copious foreign aid and reconstruction credits as well as indirect transfers from agricultural to agrarian sector contributed. Investment in industry, electrification and infrastructure was the primary task of the state. Forced modernisation, industrialisation and urbanisation during the 1960s, have created economic problems which centralism, planned economy and economic reforms could not resolve. Socialist market economy with self-government system, increasingly more evident regional differences and growing occurrence of export competition between the republics, have led to further federalisation and decentralisation of the country, which also reflected on the industry. The 1970s, despite the increase in investments and mass consumption, were marked by further weakening of economic and industrial growth, increasing unemployment, indebtedness of the state, inflation, increased deficit in the trading balance, etc. In the decade before the break-up of Yugoslavia, a crisis followed by inflation, decline of economic growth, decreased demand and offer, large state debts, unemployment, etc., struck the economy and the declining industrial sector could not respond to the competition and the quality required by the market.

3. Industrial Heritage: FASIH Case Studies

3.1 Belgrade: Power Plant “Power and Light”

The “Power and Light” power plant (Serbian: *Snaga i svetlost*) complex was built between 1930 and 1932 on the right bank of the Danube. The location was chosen primarily because of the necessary amount of water for cooling and the possibility of transporting coal by water. In 1929, the Swiss Society for Electrification and Traffic from Basel received a concession for the supply of electricity in Belgrade for a period of 25 years and they were the constructors of the power plant in Belgrade, at that time, the largest building of its kind in Belgrade. The test run of the plant was at the end of 1932, when it took over the function of the first, old municipal power plant which was built in 1892.

The complex consists of the power plant building, a gantry crane with a distributary channel, a pumping station and a filter plant. Within the power plant building, in terms of construction and technology, three units are distinguished: the boiler room hall, the machine room and the command-and-control room. The functional division of the Power Plant is also visible in the structural design of the building. The architecture of the building, as well as the entire complex, reflects modernist concepts, current for the European construction practice of the interwar period. The gantry crane with a distributary channel was built at the same time as the power plant building, as a large bridge-like lattice structure made of steel elements joined with rivets. The gantry crane moves using its own two electric motors along the rails laid by the power plant and in the distributary channel, along the length of the distributary channel from the pumping station to the Danube (140m). The third segment of the power plant consists of a pumping station and a filter plant located at the end of the distributary. The pumping station consists of a reinforced concrete building, a circular base and an internal installation with pumps and pipelines. The filter plant is connected to the pumping station and consists of a rectangular structure that is divided inside into filtration basins.



Figure 3: Power Plant Power and Light, Belgrade, Serbia

With the construction of the “Power and Light” power plant, a low-voltage distribution network for AC power supply was put into use for the first time. As the largest facility of its kind in Belgrade between the two world wars, it represented the foundation for the city's electric power system and contributed to its significant improvement. Due to its cultural-historical and architectural-urbanistic values, it occupies a significant place in the economic, technical, social and architectural past of Belgrade. [11]

The power plant was shut down in 1969 due to its deteriorated condition, and has since been out of use and function. It is located on two parcels of land – the portal crane, pumping station, and filtering facility belong to the Marina Dorćol parcel, where the construction of a residential and commercial complex is set to begin. The investor plans to preserve and restore the crane and these facilities and incorporate them into the new settlement. The power plant building itself is situated on the “Toplane Beograd” parcel and is currently out of use. The entire power plant was declared a cultural monument in 2013. [12]

Currently, there is an initiative to house the Nikola Tesla Museum in the power plant building, although official details have not yet been announced. The contemporary identity of the “Power and Light” power plant lies in the interpretation of its historical value within its modern economic, social, and cultural context. [13] The significant potential of this site is undeniable, but the revitalisation should not be seen merely as the reconstruction of a monument of the past. Instead, it is necessary to create a sustainable urban space that preserves the industrial heritage and is open to both the local population and tourists, utilising the history of this place.

3.2 Rijeka: Paper Factory “Hartera”

The beginnings of the paper factory in Rijeka are linked with Andrija Ljudevit Adamić, who in 1821, bought a mill in the Rječina valley, in Lučice, and converted it into a paper production factory. Production began in 1823 and was mostly manual. Shredding of old rags was done in a colander, a mill powered by a mill wheel. A sieve with a trough was used to pour the slurry from old rags into it, and thus allow the water to drain. After squeezing, a sheet would be created that had to be dried on a flat surface. This was followed by pressing, coating with glue, and drying again, and smoothing with a stone plate. Along with the flow and energy of the Rječina, the quality of the water is an equally important element of the quality of the paper that is produced.

Adamić sells the factory to the English industrialist Walter Crafton Smith and the Frenchman Charles Meynier in 1827, allowing significant investments in expanding the factory which marked the golden age of the factory. "It was also important to use the possibilities of the Rječina to the greatest extent possible, lower flow was regulated, a wooden canal 600 meters long was built with a drop of 8 meters, which achieved a power of

200hp. Water energy, despite all the interventions, was not constant, so the management decided to buy a steam engine in 1833, the first in the Balkans. Quality paper is produced, which, apart from Rijeka, is sold in Zadar, Trieste, Ljubljana, Zagreb, Bratislava, Pest, Klagenfurt, Graz, Prague, Vienna, (...) Many different types of paper were produced at the Paper Factory: fine postal, office, royal, for large and small packages. (...) Cellulose paper is cheaper and of lower quality, so they are used for finer papers – writing, lithographic, cigarette paper. The capacities of the factory grew and by 1835 the factory area consisted of a total of 14 buildings, and in 1878 the factory established its representative offices in Vienna and Budapest. Despite the great floods that partially destroyed the plant in 1852 and 1898, the paper factory continues to work.



Figure 4: Hartera Paper factory, Rijeka, Croatia

After the collapse of Austria-Hungary, ownership of the factory was taken over by “Jela” (paper factory) in 1921, with the headquarters of the factory being moved to Zagreb. The takeover also marked an increase in the production and export of cigarette paper. The Jela company was dissolved in 1925, and the management of the factory was taken over by the “Prva hrvatska štedionica” from Zagreb. In the 1930s, the paper factory occupied 66 buildings and covers an area of 72,185.6 m², in addition to electrification and the purchase of new machines.

During the Second World War, the factory worked with reduced capacity, but after the liberation of Rijeka in May 1945, the factory continued to work. In the meantime, the production also expanded to paraffin matches, while in the 1970s, the factory was living its successful days, employing more than 1,000 workers.

Transition that took place at the beginning of the 1990s caused the paper factory to finally stop working in 1996, and the factory went into bankruptcy, which ended in 2005. Today, the following objects are included in Rijeka's industrial heritage list: Power Building of the Paper Mill (1821), Power Plant of the Paper Mill (1931), and Administration Building of the Paper Mill (1927).

The closure of production resulted in the non-use of the factory complex. The Hartera Festival enlivened the halls and warehouses of the factory with a festival programme in the summer months for about ten years, and after its shutdown, other smaller festivals were occasionally organised.

Equally, since the shutdown of the factory, a dozen ideas for repurposing and reusing the complex have been presented, but without concrete measures. It ranges from accommodation capacities, through studios, restaurants, hostels, landscaping of the park and promenade along the Rječina canyon, in combination with smaller production facilities, business premises and lofts, specific working and living spaces. Some of these ideas were also proposed in the context of the European Capital of Culture (ECOC) – Rijeka 2021: space for creative entrepreneurship, housing and hostel accommodation in the complex of old residential buildings of the factory, centre of performing arts, conference and administration, but without realisation till today.

At the moment, the project of reconstruction and conversion of the Energana, power plant from the 1930s, into an incubator for creative technologies and the IT industry is taking place.

The complex has a significant potential for reuse, and the local community would certainly support the revival of this landmark, but the question is whether it is possible to secure sufficient financial resources for such projects.

3.3 Trbovlje: Power plant “Trbovlje”

After assuming control of the Trbovlje mines, the Trbovlje Coalmining Company (TPD) embarked on a modernisation process, leading to increased coal production and the need for mechanisation in mining operations. At the turn of the 20th century, electricity began to play an increasingly significant role as a power source in industry. In 1906, TPD constructed the first power plant in Trbovlje, located in the heart of the town. This power plant not only provided energy for the mine's machinery but also introduced public lighting, making Trbovlje one of the pioneering towns in Slovenia in this regard.

As demand for electricity grew, the capacity of the original power plant soon proved inadequate. In response, TPD built a new power plant in 1915, situated next to the Sava river. Unlike the reciprocating machines used previously, the new power plant featured turbines, representing a significant innovation in Slovenia at that time. In 1939, the power plant underwent reconstruction to increase its capacity. The upgraded facility incorporated a new firebox, enabling the utilisation of lower-quality coal and sediments from the separation factory for combustion. Furthermore, the power plant was connected to the public electricity grid, offering TPD an additional revenue stream. The power plant became an independent unit within TPD but transitioned into state ownership after World War II. It underwent multiple reconstructions and expansions, with plans even considering the construction of a new building.

Towards the end of the 1960s, a location was selected for a new power plant in close proximity to the existing one. The majority of the equipment for the new unit was imported from Poland, including a 125-megawatt steam turbine. In November 1968, the new power plant was ceremonially commissioned. It became the largest unit in Slovenia and the second-largest in Yugoslavia, producing substantial amounts of ash alongside electricity. This ash was deposited in a landfill, gradually covering the entire valley behind the power plant. However, the operation of the new power plant soon demonstrated negative environmental impacts, such as plant decay and increased air pollution. To address these issues, the decision was made to construct a tall chimney that would release emissions into higher atmospheric levels. Construction of the chimney, under the direction of the Karren Project Biro from Düsseldorf, commenced in 1974. Over the course of two years, workers from the “Vatrostalne” construction company from Zenica erected the new chimney, which boasted a bottom diameter of 27 meters and a top diameter of 7.7 meters, with an unprecedented height of 360 metres. Upon completion, it officially became the tallest chimney in Europe, a distinction it still holds today. The chimney's inauguration emphasised its environmental role, as positive changes were observed in the local surroundings. However, settlements on neighbouring hills experienced the detrimental effects of smoke exposure.



Figure 5: Power Plant Trbovlje, Slovenia

By the end of the 20th century, coal reserves in Trbovlje were depleted, and the environmental consequences of coal as an energy source became increasingly unacceptable. Following Slovenia's independence, authorities made the decision to gradually shut down the Trbovlje mine and abandon the project for constructing a new TET 3 block. In 2013, the coal extraction from the Trbovlje mine ceased, leading to the power plant losing its primary fuel source. Subsequently, in 2015, the power plant itself stopped operations and has since entered the decommissioning phase. However, the chimney, engine room, and control room are slated to be preserved as a technical monument, while the power plant area will be repurposed for other industrial activities.

4. Industrial Heritage in the Context of Musealisation and urban regeneration

Changeable nature of work and especially disappearance of numerous traditional industries have opened the door to memorialisation and interpretation. Deindustrialisation has produced a large number of abandoned industrial complexes, which are frequently becoming the subjects of artistic photographs by urban

photographers and what these photographs communicate is the absence of people – these are no longer workspaces, places of struggle and community. In the absence of people, thoughts come to mind about the material culture and its importance, which raises the question of the role of tangible and material in the memorialisation of crumbling cultures. Things, material objects, memories of working life are important connections to memory. These objects are actually symbols of social connections and the strength of culture. Material culture has a two-fold role in the remembrance of the industrial past. It is a link to creative tangibility, making of things, while at the same time; it is also a connection between people or community and their past.

The same as the photographs of abandoned industrial sites represent modern interest in memory and interpretation of the history of deindustrialisation, that same interest is also continued by the industrial heritage that usually emphasises the importance of the work itself. Certain “places of work” (factories, mines, mills, etc.) have been preserved and turned into museums or they were repurposed and have a dual role. On one hand, they keep and interpret the memory of industrial life for diverse audience, while on the other, they represent a source for scientific analysis of the connection between these material remains and the very culture of work, i.e., practical work.

The last decades of globalisation, industrial relocation, deindustrialisation and economic reconversion, have left a deep mark on the industrial areas all across the world, leaving numerous industrial complexes and buildings outside their original function and, not rarely, without any use. These complexes, usually completely abandoned and neglected, are often seen as unwanted and as a threat, but the fact is that they also carry numerous possibilities for the development of the cities not just because of their position, developed infrastructure and unique configuration, but also because of the fact that these are among the few spaces that offer a possibility of new urban development. Although the main motivation for transformation of these complexes is first of all economic, more and more attention has been given to sustainable development, which includes ecological restoration, conservation of cultural heritage, economic development, as well as the needs of the local community.

Conservation of heritage, whether it is architectural, industrial or immaterial, is immensely important for every country, but on a global level as well, given that it represents an irreplaceable expression of wealth and diversity of joint culture and an entity shared by entire communities of people. Each kind of industrial activity, as well as any material or immaterial element that was created by the industrial society, testifies of an important period in the human history and its transformations, which in the modern society are getting faster and more frequent. Although the answers to the questions why and how to protect the industrial heritage may differ, the need for protection is definitely not questionable, as it has been confirmed by the formal

international documents such as Nizhny Tagil charter and all the other charters and conventions supported by the Council of Europe, ICOMOS and UNESCO². Protection of industrial heritage represents an important cultural goal, not just because of its positive impact on the sense of fellowship, but it also represents a sustainable approach to urbanism encouraging reuse and recycling of the existing industrial buildings that had an important role in the history of the location and testify of the cultural, social and economic development. This social and cultural dimension of the industrial heritage increasingly represents a basis for conservation and restoration of abandoned industrial buildings and complexes, with the purpose of maintaining local identity. Post-industrial complexes and landscapes mostly dominated by common or vernacular architecture preserve and document the passage of time visible in numerous layers of human activities, by which they become an integral part of the identity of a community or a place.

Although the importance of preserving cultural heritage on a global level is increasing, historical units are being more and more targeted by the new buildings, whose influence is noticeable not just in the localities of national importance, but also in local environments where small changes may have a great impact on the destruction of landscape character and local identity. This is particularly visible in Belgrade, but there are also examples of heritage being sacrificed for the benefit of new buildings in other cities as well. Old industrial buildings and complexes which have lost their original function are in great danger because most of these buildings are not perceived as heritage, especially when it comes to buildings and complexes constructed after the World War II. Although a certain number of industrial buildings from late 19th and the first half of 20th century do have formal protection, a small number of them is actually preserved, even less recycled, and only a handful of them have been transformed into places of remembrance, i.e., presentation and interpretation of the development of industry for the public. However, destiny of the majority of industrial facilities and complexes goes in one of two directions – the facilities are either demolished in order to open space for new construction endeavours or they are abandoned and left to crumble on their own.

Conservation of the industrial heritage, as well as its musealisation, represent much more than simply casting an eye towards the past – they represent an important step towards the construction of the future. Post-industrial landscapes, complexes and buildings, as well as the immaterial aspects of the industrial heritage, are not just a connection with the past, but they also establish an important connection with the memory,

² European Charter of Architectural Heritage (1975), Available at: <https://www.icomos.org/en/resources/charters-and-texts/179-articles-en-francais/ressources/charters-and-standards/170-european-charter-of-the-architectural-heritage>; Venice Charter (1964), Available at: <https://www.icomos.org/en/participer/179-articles-en-francais/ressources/charters-and-standards/157-thevenice-charter>; World Heritage Convention (1975), Available at: <https://whc.unesco.org/en/convention/>

which plays an important role in the identity, both personal and collective, as well as the identity of the place.

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