

Just Transition

The post-industrial life of the Łódź EC1 thermal power plant



Photo: ec1-lodz.prowly.com

A brief case presentation of Łódź EC1

There are many examples around the world of entire districts or even towns losing their function and original status when their industry fails to keep up with changes or collapses as a result of a systemic industrial crash. Such is the situation of the capital of Łódź Province. After the collapse of the textile industry as a result of political changes in the early 1990s, the Łódź agglomerate became littered with an extraordinary number of abandoned and derelict former factory sites. Some of them have not acquired new functions to this day. Others were demolished and replaced by new buildings. Some were revitalised to a greater or lesser extent, giving them an impressive new lease on life, as is the case of the Manufaktura and Monopolis complexes.

One of the historically most neglected areas, including its buildings, was the 100-hectare urban area in the vicinity of the former Łódź Fabryczna train station, in the dead centre of the voivodeship's capital. However, all of this has changed, and the entire area has been

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under development for over ten years as part of the New Centre of Łódź programme. The most important architectural landmark of the area is the post-industrial complex of the Łódź Power Plant EC1 East and West. The power station served as a peaking combined heating and power (CHP) plant for the town's inhabitants from 1907 to 2000.

The history of EC1 began in earnest on 25 May 1906, when construction work on the first commercial power station in Łódź started on the plot of land at 1 Targowa Street. On 18 September, electricity flowed for the first time from turbine unit 1 into the city grid. The Machine Hall, built in the Art Nouveau architectural style and now used as an exhibition and concert hall, dates from this period. The rapid development of the power station (machine rated power capacity: 2.1 megawatts (MW) in 1907 and 21.1 MW in 1913) was interrupted by the First World War. In the post-war restored Poland, the Łódź power station, becoming 20 per cent owned by the city, entered a new phase of development.

After the war, in 1948, the concept of building a municipal district heating network was conceived, fed by four CHP plants, including the Łódź Power Station, which was to be adapted for district heating operation. In 1953, the power station began producing steam for the needs of Łódź industry. In 1960 the Łódź Power Plant and the newly built Combined Heat and Power Plant No. 2 were merged into one company – Zespół Elektrociepłowni (CHP Plant Facility). It was then that the name EC1 appeared for the first time, to designate the oldest commercial power plant in Łódź. The opening of EC2 marked the expansion of EC1.

Eventually, in 2000, the entire complex at Targowa 1/3 ended its service and was handed over to the city in 2003. Its next historic milestone was its revitalisation. On 15 May 2008, a City Council resolution established the cultural institution EC1 Łódź – City of Culture in Łódź. This institution, assisted by the Investment Office of the Property Management Department of the Łódź City Council, started revitalisation work on the area of the former combined heat and power plant in 2008.



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1. The here and now – the baseline situation of the EC1 case

The EC1 power station on Targowa Street in Łódź was the first of its kind in the city. The production and transmission of electricity started in 1907, over 115 years ago. The architectural forms of the individual buildings comprising the complex were a combination of Art Nouveau elements with increasingly pronounced modernist aspects. The power station served the citizens of Łódź for almost 95 years, up until 2000. After the plant ceased operations, the infrastructure of the age-old facility began to deteriorate.

The first conceptual attempt to develop the abandoned buildings occupying the vast area in the very centre of the city was the New Centre project idea. It was initiated by representatives of the World Arts Foundation: the co-owner of the Atlas Group, Andrzej Walczak, the American film director David Lynch, and the director of the Camerimage Festival, Marek Żydowicz. In its initial stage, the whole concept was a grand, immersive vision that far transcended the structure itself. Representatives of the Foundation got in touch with Luxembourg architect and urban planner Rob Krier, who decided to 'draw Łódź from scratch'. Thus, the New Centre project, with the revitalised complex of the historic EC1 power station as its focal point, was created. The industrial heritage relics that constituted the unique identity of Łódź's Promised Land, in particular, enchanted and left their mark on the artistic souls of Krier and Lynch. In August 2007 the City Council passed the necessary law, which de facto became the beginning of what its initiators described as the 'open city operation'.

Ultimately, the initiators of the idea were not given the opportunity to implement it. The architectural concepts of EC1 East and EC1 West were created, respectively, by designers from the Home of Houses project studio from Poznań and a consortium from Łódź, formed by the Office of Investment Implementation Fronton and the Mirosław Wiśniewski Urbanistyka i Architektura company. Although the over 100-year-old power station looked very impressive, the state of the historical industrial architecture required extensive conservation work. As part of the project implementation, it was necessary to meet the requirements of modern public spaces, while at the same time preserving the unique atmosphere of an industrial plant from the early 20th century. With this in mind, in addition to the post-industrial architecture itself, it was decided that once integral elements of the on-site equipment also needed to be preserved, such as electric traction poles and piping. As the creators themselves admit, they boldly drew on David Lynch's Dune and George Lucas's Star Wars set designs for inspiration. By dauntlessly combining futuristic forms with the historical structure, they aimed to create a completely new design quality. The result is an impressive complex, housing several important educational and cultural institutions and representing a very attractive location on the tourist map of the city.

2. Where do the actions lead, and to what end?

Design work for the CHP station area revitalisation began in 2008, while the actual renovation, construction work and adaptation were initiated in 2010. As part of the

ongoing activities, several key facilities for the development of municipal culture and education were eventually planned along with service functions:

- the EC1 Science and Technology Centre
- the EC1 Planetarium
- the Łódź Film Commission
- the Foyer of the EC1 Machine Hall
- the EC1 Machine Hall and conference rooms on level 2
- the National Centre for Film Culture (under construction)
- the Comic and Interactive Narration Centre (under construction)
- the Street of the Elements (pl. Ulica Żywiołów).

During the course of the ongoing work and the acquisition of European funds, the following objectives were set:

- revitalising post-industrial facilities of the former combined heat and power plant and introducing new functionality;
- restoring architectural and spatial order to Łódź's city centre;
- restoring areas to public use;
- economic and social revitalisation through the introduction of new cultural and educational functions;
- creating an infrastructural base for new cultural and educational institutions presenting and promoting achievements in science, art and film;
- increasing the city's tourist appeal.

The individual facilities were renovated as part of separate projects, each with their own approved timetable and budget. Most of the costs were covered by European Union programmes coupled with the city's own contribution and funds at the disposal of individual ministries.

3. Who is implementing it and with what funds? What is the adopted action strategy for EC1?

EC1 Łódź – City of Culture in Łódź is a local government cultural institution run by the City of Łódź. Between the years 2008 and 2014, the co-organiser of the newly created institution was a private entity – the World Arts Foundation. Representatives of the Foundation came up with the initiative to create an imaginative, spectacular investment right in the heart of Łódź. Currently, according to its statute (in force since 1 January 2016,

and adopted by a resolution of the City Council of Łódź on 7 October 2016), the institution ECI Łódź – City of Culture is responsible for running three cultural and educational institutions located on the historic complex premises of the CHP station: the National Centre for Film Culture (NCFC), the Centre of Science and Technology (CS&T), and the Centre of Comics and Interactive Narration (CC&IN). Since January 2016, ECI's co-managing entity has been the Minister of Culture and National Heritage.

The total cost of the project's first stage, comprising the redevelopment and reconstruction of its main facilities, amounted to more than PLN 265 million, of which over PLN 82 million came from the European Regional Development Fund. This allowed for the renovation and modernisation of post-industrial buildings and their adaptation for new functions. Conservation and restoration work was undertaken on industrial monuments in order to adapt them for their new roles. Building revitalisation took into account the stature and character of the area, given the historical nature of the buildings. The original layout and building density of the area have been largely restored, and the volume, form and, for the most part, distinctive facades and external features of the buildings have been retained throughout in order to maintain the historical feel of the area.



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Complementary projects were also required, and EU projects implemented as part of the EC1 Łódź – City of Culture complex development include the following:

Project name	Years of implementation	Total project cost
Revitalisation of EC1 and its adaptation for cultural and artistic purposes	2008-2015	PLN 35 204 351
Arrangement and construction of exhibitions and equipment for the Science and Technology Centre in Łódź	2016-2018	PLN 45 564 948
Revitalisation of EC1 South East	2016-2020	PLN 21 700 000
Development of the exhibition and educational functions of the Science and Technology Centre in Łódź with workshop facilities	2016-2020	PLN 21 574 000
Expansion of the cultural and educational offer of the National Centre for Film Culture	2016-2020	PLN 20 000 000
National Centre for Film Culture – development of functions and services offered by EC1 Łódź – City of Culture in Łódź	2016-2023	PLN 37 187 187
Revitalisation of EC1 South East	2017-2023	PLN 35 204 351
Expansion of the cultural and educational offer of the National Centre for Film Culture	2021-2023	PLN 35 341 031

In total, the implementation of all the phases cost several hundred million złoty.

4. How has this been implemented? Key projects, decisions and events

The revitalised and expanded EC1 East complex already fulfils cultural, artistic and social functions. At the same time, it is an integral part of the New Centre of Łódź, combining architectural trends from the beginning of the last century and modern, post-industrial architecture. The resulting space has been opened up to artists from various fields and fully adapted to promote and support individual creativity, workshops and group events, with comprehensive infrastructure set up for this purpose. Institutions organising cultural and educational events can also use the aforementioned space.

At the beginning of October 2015, the first stage of the ongoing investments, EC1 West, was given the go-ahead for the creation of the Science and Technology Centre, a facility dedicated to documenting and commemorating technical thought, both architectural

and energy-related. By preserving some of the old installations and equipment, and combining them with modern exhibit forms at EC1, an unparalleled opportunity to acquire knowledge was created. Three educational paths have been formulated in the Science and Technology Centre. The first of the proposed didactic paths, Energy Conversion, is inspired by the facility's original infrastructure and is devoted to the aspect of electricity generation. The other two paths, Development of Knowledge and Civilisation and Micro-world/Macro-world, present selected concepts, laws, and physical and chemical phenomena. The Science and Technology Centre, as an educational centre, has the task of complementing the state education system by presenting many physical and chemical phenomena applicable in everyday life, science and industry in an attractive and engaging way, with particular emphasis on issues of energy generation, storage and conversion. The content-related accuracy of the expositions and exhibitions is supervised by partners such as the University of Łódź, the Medical University of Łódź and Łódź University of Technology.

In January 2016, the planetarium – the most modern in Poland and one of the most modern in Europe – was launched in the EC1 East building. After only eight months of operation, it had been visited by more than 100,000 people. It was also recognised by the readers of the monthly magazine National Geographic Traveler, taking first place in the summer 2016 poll 7 New Wonders of Poland. A 3D cinema in the futuristic part of the Science and Technology Centre was opened in 2017.

In the second phase, the EC1 East complex was revitalised and expanded. The building is the headquarters of the National Centre for Film Culture, an institution co-managed by the City of Łódź and the Minister of Culture and National Heritage. The NCFC was established in mid-2015 and was inaugurated at the beginning of 2016. It has become a key cultural and educational centre in Poland and constitutes a unique resource in this part of Europe for those interested in the world of film and audiovisual arts. Adjacent to the NCFC is the Łódź Film Commission, an entity whose role is to provide filmmakers with comprehensive assistance – from finding film sets to support in arranging the necessary paperwork for filmmaking. The facility fulfils cultural and artistic as well as social functions. It is an open space for artists of various disciplines, fully adapted to support individual creativity, workshops and group events, with all of the necessary adjacent infrastructure. This space is also meant to be used by institutions organising cultural and educational events for the inhabitants of Łódź and elsewhere.

5. Is this the end? What next?

The next stage of EC1 Łódź – City of Culture is the implementation of a project co-financed by the European Regional Development Fund entitled Revitalisation of EC1 South East. The total gross value of the project is PLN 34.4 million. The project's goal is the creation of the Comics and Interactive Narration Centre – a nationally and regionally significant centre for exhibitions and cultural and educational activities in the area of digital culture, with strong links to the creative industries, including video game production and other interactive media projects in particular.

At present, comprehensive measures introduced by the city authorities are aimed at not only the revitalisation of EC1 itself, but also at the reclamation of the surrounding area. As a result, a unique cultural and educational complex is being created in the city centre, housed in revitalised post-industrial buildings.

The project's main objective is to develop the municipal and regional economic and tourism potential by creating an educational, entertainment and cultural offer in the field of visual technology, computer games and comics, thus shaping new audiences among identified target groups.

The Centre's proposal, dedicated to the art of comics, will consist of a permanent exhibition spread over two floors, temporary exhibitions, and workshops for children, young people and adults on the art of the creation of comics. The Centre's plans include a focus on interactive narrative arts that will comprise a zone devoted to the history of computer games in Poland and around the world, a virtual reality and augmented reality zone, and a game creation module enriched with a workshop component. The Centre will also perform other cultural and social functions: festivals, exhibitions and other cultural events will be held there, e.g. game jams, e-sport events, game and comic book releases, meetings with game and comic book creators, etc. These activities will be aimed at popularising audiovisual and multimedia arts, supporting and promoting creators, and strengthening social bonds.

6. What does this mean for the Bełchatów region's transition process?

The revitalisation case of the former EC1 combined heat and power station site provides unique inspiration in planning new functions for the Rogowiec energy complex located in the municipalities of Bełchatów and Kleszczów. The two facilities are just over 60 kilometres apart as the crow flies, and it is possible to travel between them in an hour. The EC1 case concerns a facility located in the very centre of a large city. However, a well-designed cultural and educational centre will always attract visitors, thus it is pivotal to plan completely new functionality for old infrastructure and to structure the entire process of implementation: creating the concept, public consultations, raising funds, signing contractors, and finally the implementation itself, as well as attracting the attention of interested and properly defined recipients of the newly created services.

When defining the revitalisation process and new functionality for the EC1 facility, two leading cultural units were planned to be launched: the National Centre for Film Culture (within the complex of the EC1 East facilities) and the Science and Technology Centre (within the complex of the EC1 West facilities). The implementation of the project began in 2008 and continues to this day, broken up into several phases.

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English translation: Przemek Stępień

Sources:

- Błażej Moder, Proprietary programme for the implementation of tasks in the ongoing operation and development of EC1 Łódź – City of Culture in Łódź, 21.10.2019.
- [Łódź i EC1 wzorem dla światowej rewitalizacji](#) [en. Łódź and EC1 a model for global regeneration], 23.12.2020.
- [EC1 w Łodzi z perspektywy mieszkańców najbliższego otoczenia](#) [en. EC1 in Łódź from the perspective of the inhabitants of the immediate vicinity]
- [Otwarcie EC1 w Łodzi. Od starej elektrowni do Bryły roku](#) [historia inwestycji], [en. Opening of EC1 in Łódź. From an old power station to the Structure of the year (investment history)].
- [EC1 w Łodzi: między historią a współczesnością](#) [en. EC1 in Łódź: Between History and the Present].