



# **CITY OF ŁÓDŹ**

## **GREEN BOND FRAMEWORK**



## THE CITY OF ŁÓDŹ IS...

- a city of many cultures,
- characterised by a dynamic development of infrastructure,
- with a population of 672 thousand (the third biggest Polish city after Warsaw and Kraków),
- located in central Poland,
- spread across 293 km<sup>2</sup>,
- characterised by a dynamic development of infrastructure and a vibrant academic community leading a profound reconstruction in the fields of economy, culture and environment.

Łódź counts among the most efficient cities in Poland in terms of transport. This results from the availability of a road network and increasingly better access to the rail system as well as from the possibility of using air transport. The location of Łódź in central Poland and the fact that it is a part of the Trans-European Transport Network connecting EU Member States provide a huge developmental advantage. Two out of nine Core Network Corridors of the Trans-European Transport Network intersect near Łódź.

Thanks to its location in the centre of Poland, extensive academic base and competitive costs of running a business, Łódź has become one of the largest business centres in the country. The City's priority industries – business service centres, logistics, household appliance manufacturing, electronics, biotechnology, video game development, modern textiles - are developing dynamically.

The sector that is developing the most dynamically in Łódź are modern business services, with over 25,900 people employed in 2020. The leaders of the group of the fastest-growing companies are still Infosys, Fujitsu and Nordea, however robotics companies such as Digital Teammates, Digital Workforce or Enigma Pattern, but also ArchiDoc, BSH, Collabera, Netguru,



## These measures can be categorised into the following core areas:

- air protection
- water retention
- development of green areas and preservation of biodiversity
- environmental education.

Payair Technologies, etc., are hard on their heels. There are already 90 modern business service centres operating in Łódź. Most of them employ less than 500 people (only 12% of such companies have over 500 employees). In 2020, the largest percentage of those employed in business services in Łódź worked in the IT sector (34.4%), followed by the BPO sector (29.7%). 8.9% of employees were engaged in research and development (R&D – an increase of almost half within a year). Łódź offers good conditions for the development of this economic sector, but it is not the most important part of the local labour market. There is still a balance in Łódź between employment in modern services and in “traditional” economic sectors. In 2020, investors declared to create 3 thousand new jobs in Łódź, including BSH and Amazon 600 jobs each, Philips - 400

and Miele - 200. Among the new investors, the most important are Completo, Langowski Logistics, UN-1F1ED2 Global Packaging Group, People Can Fly and Eficode. The office space in Łódź in 2020 increased in total by 50.3 thousand m<sup>2</sup>. Another 45 thousand m<sup>2</sup> is currently under construction. In turn, the area of production, warehousing and logistics facilities increased in Łódź by 66 thousand m<sup>2</sup> and currently amounts to 1 million m<sup>2</sup>, compared to 3.5 million m<sup>2</sup> in central Poland.

In cooperation with various groups of stakeholders, the City of Łódź takes numerous measures to counteract the negative effects of climate change and adapt to it.

These measures can be categorised into the following core areas: air protection, water retention, development of green areas and preservation of biodiversity, and environmental education.





## Air Protection

In March 2021, a resolution was adopted regarding the implementation of the Low Carbon Economy Plan of the City of Łódź. It is a strategic document that sets out major goals and lines of action as regards improvement of air quality, energy efficiency and reduction of emissions of pollutants, including greenhouse gases. The Low Carbon Economy Plan for the City of Łódź is an integrated action plan for meeting air quality standards in the years 2015-2030. The Plan covers both investment and non-investment measures in the sectors of individual housing, public buildings, spatial development, heat

and energy supply and private and public transport. Actions scheduled as part of LCEP aim at obtaining the environmental effect of reduced emissions of substances into the air and reduced final energy consumption.

Actions defined in the LCEP focus mainly on reducing emissions of greenhouse gases, i.e. carbon dioxide, sulphur dioxide and nitrogen oxides, and emissions of air pollutants - fine particles, including particulate matter PM10 and particulate matter PM2.5, as well as other substances, e.g. benzo[a]pyrene.

### **These actions include, but are not limited to, as follows:**

- making heat transport more energy efficient through the modernisation of district heating networks;
  - comprehensive thermo-modernisation of buildings based on relevant energy audit results in order to reduce the demand for heat energy through reduction of heat losses;
  - elimination of local solid fuel based heat sources;
  - optimal use of heat energy and expanding the range of influence of heating networks through their modernisation and development that will enable to connect new heat consumers directly;
  - modernisation of heat distribution networks along with heat network connections for selected housing estates in Łódź;
  - energy efficiency improvement through changing the method of heat supply, that is elimination of group district heating substations and their replacement with individual ones together with the construction of new heat network connections;
  - optimisation of the use of network heat through the construction of a system for remote monitoring and control of the operation of district heating network and substations, together with the extension of the remote heat meter reading system;
  - increase in the efficiency of heat generation through the conversion of a local heat source into a source based on a high-efficiency cogeneration system;
  - use of materials, equipment and technology for the modernisation and construction of district heating networks helping to reduce heat losses during transport;
  - improvement of energy consumption culture through educational actions aimed at raising the awareness of city residents;
- reduction of transport emissions through encouraging residents to use public transport more often.



The following low carbon economy targets were defined for the City of Łódź to be achieved by 2020:

- reduction of CO<sub>2</sub> emissions by 1.71% (96,417 MgCO<sub>2</sub>/year) by 2020, compared to the base year of 2013;
- reduction of final energy consumption by 1.21% (183,078 MWh/year) by 2020, compared to the base year of 2013;
- increase in the share of energy from renewable energy sources by 0.14% (20,877 MWh/year) in the City of Łódź by 2020, compared to the base year of 2013;

reduction of emissions of air pollutants in accordance with the provisions of the Air Protection Programme.

Energy consumption reduction indicator	183078 MWh/year
Energy consumption reduction target	1,21 %
CO <sub>2</sub> emission reduction indicator	96 417 Mg/year
CO <sub>2</sub> emission reduction target	1,71 %
RES energy generation increase indicator	20 877 MWh/year
	0,14%

Indicators and targets for the reduction of CO<sub>2</sub> emissions and energy consumption, and for the increase in RES energy generation in the City of Łódź by 2020.

The following table summarises the environmental effect, the energy efficiency achieved - the final energy gain and the amount of RES energy generated by 2030 for the City of Łódź as a whole in relation to the base year of 2013.

Energy consumption reduction indicator	699 490 MWh/year
Energy consumption reduction target	4,61 %
CO <sub>2</sub> emission reduction indicator	1 061 995 Mg/year
CO <sub>2</sub> emission reduction target	18,88 %
RES energy generation increase indicator	20 877 MWh/year
RES energy generation increase indicator	0,14%

Indicators and targets for the reduction of CO<sub>2</sub> emissions and energy consumption, and for the increase in RES energy generation in the City of Łódź by 2030.

Report on the LCEP implementation for 2019-2020 drawn up in 2021.





As regards the air, the most important measures are connected with furnace replacement and the improvement of energy efficiency in buildings. Since 2017, Łódź has been implementing measures to replace coal-fired furnaces with gas and electric ones and to connect them to the municipal gas or district heating system. From 2017 to 2020, 3,800 furnaces were replaced which entailed the cost of PLN 15.5 million spent in the form of subsidies. In 2021, PLN 4.5 million have been allocated to yet another edition of the subsidy scheme for furnace replacement. The amount has been increased from PLN 3 million to address the seriousness of the situation and to enable anyone who would like to liquidate the environmentally harmful coal-fired furnace to take action.

### **In 2020, 719 furnaces were eliminated in the City in, as follows:**

- individual installations: 140 were converted to gas heating, 51 to electric heating;
- housing communities: 1 was converted to gas heating, 17 to municipal heating;
- private tenement houses: 4 were converted to gas heating, 3 to municipal heating.

The City of Łódź Office has started preparatory work to fulfil the statutory obligation (concerning the Central Register of Building Emissions (CEEB)) to carry out an inventory in buildings and premises with regard to the used heat sources with a rated thermal input less than 1 MW.

The data thus obtained will allow us to clearly identify the types of heat sources used in the City, including their characteristics.

Clean air is also an issue closely related to low carbon transport, therefore we gradually make sure that the emissions from the City's transport fleet are being reduced constantly. The City aims at replacing its current bus fleet with a zero emission electric one.

We are also the first city in Poland to take care to develop a network of electric vehicle charging stations under an agreement with the company InPost. As a result, parcel lockers equipped with charging stations will be installed in 70 locations.

In Q1 2022, 17 electric buses along with charging stations at the depot and at bus loops are scheduled for delivery. In the next perspective, it is planned to purchase 70 electric buses and install more charging stations. These are ordered by the Operator.

The range of public transport available in Łódź is very broad and includes urban and suburban tram and bus services, national bus services, international bus services, agglomeration and national rail services, and air transport.

Urban public transport in Łódź, and partly suburban one, too, is organised by the Roads and Transport Administration (ZDiT) and operated by Miejskie Przedsiębiorstwo Komunikacyjne - Łódź Spółka z o.o. The Łódź Agglomeration is also the only one in Poland with suburban tram services. At present, MPK-Łódź Sp. z o.o. is the only tram operator.

Apart from routes within the City of Łódź' boundaries, buses operated by MPK-Łódź Sp. z o.o. provide also suburban bus services. MPK-Łódź Sp. z o. o. has its own tram rolling stock and bus fleet used to provide these services. The company owns 495 tram cars and 409 buses.





There are about 100 operators providing suburban, national and international bus services in Łódź. These include companies with their origins in the former state-owned PKS enterprises, private bus operators and international bus service providers.

The youngest public transport operator in Łódź is Łódzka Kolej Aglomeracyjna Sp. z o.o. (Łódź Agglomeration Railway). This operator was brought to life under an agreement of 2010 between the authorities of the Łódzkie Voivodeship, the City of Łódź and 11 cities and towns interested in establishing an agglomeration railway. For the purpose of providing these services, 20 Stadler FLIRT 3 two-car electric multiple units were bought. The Łódź Agglomeration Railway started its operation on 15 June 2014, along the route Łódź Kaliska - Sieradz. On 1 September 2014, another connection was effected: Łódź Widzew - Zgierz, along the route of Railway Line 16 which until then had not been used for passenger transport.

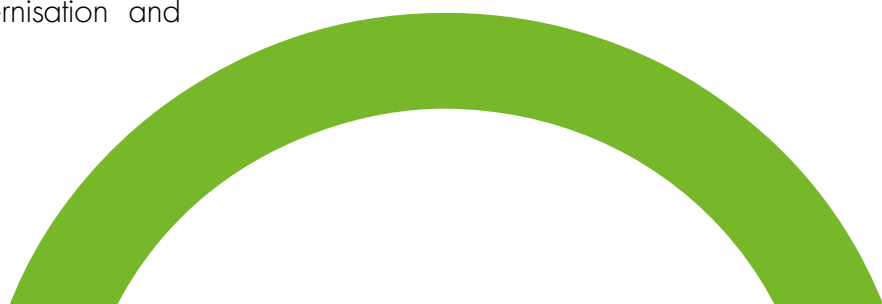
The city authorities take measures to enable residents and visitors to Łódź to travel quickly, comfortably and safely in urban space by public transport by improving its standard and safety as well as increasing the City's transport capacity and the share of public transport in urban traffic. The above objectives are achieved by means of comprehensive modernisation and renovation of tram tracks.

In order to reduce the number of people using personal transport, measures are taken to make public transport and cycling more attractive. In recent years, 22 modern trams have been delivered as part of a series of purchases of new rolling stock for MPK. This way outdated high-emission models are being phased out.

In accordance with the Act of 11 January 2018 on Electromobility and Alternative Fuels, local governments (with over 50 thousand residents) must, as of 1 January 2025, provide or outsource public transport services using 30% electric or natural gas vehicles. This makes it sort of necessary to take steps to replace the current public transport fleet with low- and zero-emission vehicles.

At present, the City is conducting a tender procedure for the lease of 22 electric office cars for the needs of the City of Łódź Office.

Our flagship area revitalisation is Poland's largest revitalisation project, by which whole quarters of Łódź Downtown will be upgraded, including through thermal modernisation and improvement of energy efficiency of old tenement houses which consume significant amount of energy.



## Water Retention

We also bear in mind the difficult hydrological situation both in the City of Łódź and in the Łódź Region. Therefore, in addition to the construction of impounding reservoirs, we are changing our approach and want to depart from the need for water drainage, which has been omnipresent in all local governments. Specialised municipal offices that

provide opinions on various investment projects place great emphasis on replacing the existing concrete surfaces, among others in parks being restored, with water-permeable ones. In 2020, we finally managed to launch the scheme of subsidies for small retention facilities and we will continue to pursue it.

## Development of Green Areas and Preservation of Biodiversity

We are continuously developing Łódź' green areas. First of all, we pay attention to the need to "unseal" downtown buildings with greenery and eliminate urban heat islands by introducing vegetation where there has been none or little of it so far. When carrying out the aforementioned area revitalisation we also develop the green infrastructure by planting new trees or shrubs. For several years now, evenly trimmed small-leaved lindens have been planted in the streets, which, thanks to special racks, grow flat to create green walls. Since the topic of green walls has been raised, we must also mention actions we are taking following the example of Western Europe. In 2021, funds are allocated to the creation of facade gardens. Removing several concrete paving slabs adjacent to buildings and replacing them with low-growing or climbing plants can and will change the face of the City of Łódź in the coming years. However, our planting activities are not limited to the Downtown area. Thanks to our collaboration with the business sector and NGOs, in 2020 not only did we plant the first trees in the city centre (this year, we are planting new trees, for example, in the Widzew District) but we also planted as many as 14,000 young trees in the Łagiewniki Forest, the largest forest complex in Łódź.

One of the most important investments currently underway is the project called Od:Nowa Parku Helenów [Re:Vitalisation of the Helenów Park]. This is the first step to make green areas in Łódź more attractive. Other projects aimed at restoring green areas in the City include: Legionów Park and Tourist Trail of the Sokołówka Valley which is a green corridor connecting the Łagiewniki Forest with bicycle routes.

In cities, including Łódź, we place more and more emphasis on biodiversity – wildflower meadows are becoming increasingly popular, cheaper to maintain but also a sought-after substitute for city lawns. This year, the City will gain a few thousand square meters of such meadows, also as part of our collaboration with the business sector. The City will also implement a project consisting in creation of a unique pollinator-friendly space, designed for us by Greenpeace Polska. Thanks to the civic budget, we also pay attention to bees – in 2021, we will conduct a pilot programme of urban beekeeping, namely training and workshops for residents who would like to start their adventure with these useful insects.



## Environmental Education

We are planning the launch of a new subsidy scheme for residents and the introduction of system solutions such as standards for shaping and protecting greenery in Łódź. Environmental education must certainly be mentioned as it is a very important element of our pro-climate measures. An innovative pilot programme for environmental education in Łódź schools awaits a grant decision. It will involve determination of a relevant curriculum and training for a group of teachers so that they can deliver classes on this issue. As part of the programme, we will create educational parklets and rain gardens in over 100 schools across Łódź to develop appropriate attitudes among young people. As part of the environmental education of residents, we also run the municipal Ecoportal where our specialists, including urban landscape architects, have prepared special instructions for residents regarding for instance the retention of rainwater in their own gardens.



# The City's 2020+ Strategy

In June 2012, the City Council of Łódź adopted Resolution No. XLIII/824/12 approving the Integrated Development Strategy for Łódź

2020+ which sets out long-term challenges and directions for the City's development. It identifies the following core pillars:

Economy  
and Infrastructure

**PILLAR I**

Society and Culture

**PILLAR II**

Space and Environment.

**PILLAR III**

## Key targets set out under Pillar 3 include:

- improvement of the quality of life of Łódź residents by increasing the attractiveness of spaces in the city centre and restoring the historic urban tissue while giving it new functions,
- improvement of the quality of life of Łódź residents and increase in the attractiveness of the City by making use of the potential of the natural environment, preserving and organising biologically active spaces and areas for recreation and a healthy lifestyle,
- improvement of the quality of life and the

economic attractiveness of the City by developing a friendly and sustainable public transport system integrated in the entire Łódź Metropolitan Area,

These measures will continue to be the focus of the City Authorities' attention. Łódź implements numerous projects dedicated to the preservation of green areas to improve water and air quality and save energy. Some of these are major projects based on EU funding, while others relate to housing estates or have won successive editions of the civic budget.







In July 2019, on the initiative of the Mayor of the City of Łódź, a Working Team of the Union of Polish Metropolises for the development of the ECO-strategy was established, whose task is to coordinate the actions of local governments to counteract the negative effects of climate change. So far, the so-called Good Practice Basket has been created to further intensify these activities. In the next stage of the Team's work, legislative projects in the field of environmental management will be developed to contribute to the increase in the real influence of local governments on shaping the climate.

The City of Łódź joined Belgrade, Piraeus and Gladsaxe to take part in the project called euPOLIS, financed under the EU Horizon 2020 programme and fully coordinated by the National Technical

University of Athens (NTUA). In collaboration with the foreign partners, the City of Łódź will work out innovative solutions to be used in spatial planning. The euPOLIS project will allow to develop a spatial planning methodology referring to nature-based solutions (NBS). This methodology is to synergise the human-/health-focused approach with the significant environmental and economic benefits of using blue-green solutions. The euPOLIS project aims to replace or combine traditional engineering systems designed to protect the environment with natural systems in order to create thriving urban ecosystems while improving the quality of life of residents.





## ASSUMPTIONS OF THE 2030+ STRATEGY FOR THE CITY OF ŁÓDŹ.

Currently, the City is preparing, in the difficult conditions caused by the COVID-19 pandemic, the 2030+ Development Strategy for the City of Łódź.

The principle of sustainable development – according to which the City will manage available resources economically and rationally while ensuring their preservation for future generations – is a horizontal principle that permeates the entire document and all spheres of the City's activities. Similarly, environmental issues are taken into account in all development-related measures. The Strategy sets out 4 strategic development goals which address questions connected with the City's development and growth:

- How to survive?
- How to develop?
- How to be attractive?
- How to offer something extra?

The achievement of each of these goals considers environmental measures and will contribute to the implementation of the European Green Deal.

Łódź is a city already known for its revitalisation. This process will be continued so that the City could use its social, spatial, construction and natural resources to the fullest and thus minimise the consumption of new environmental resources. Łódź will also be a city with responsible spatial development,

a compact and, therefore, energy-efficient city, where the satisfaction of basic needs is possible in close vicinity of a place of residence, and where non-motorised transport and electrified public transport will ensure the mobility of residents. Our City will consciously use the services that ecosystems are able to provide to combat the effects of climate change, hence special attention will be paid for instance to natural retention allowing to retain rainwater, the protection of trees and green areas providing space for recreation and reducing anthropogenic heat emissions, or care for the preservation of biodiversity and spatial continuity of biologically active areas. Łódź will also seek to radically reduce both carbon dioxide and particulate emissions by improving the energy efficiency of buildings, eliminating local hearths completely and replacing conventional energy sources with renewable ones.



## ADOPTION OF THE STRATEGY IS PLANNED FOR 2021.

The Strategy is being prepared with the strong involvement of residents who during public consultations on the draft document pointed to issues related to the climate crisis, ecology and

greenery as key priorities, where they are willing to act actively and devote resources to. This involvement increases the chances of successful project implementation.

### Green Bond Framework

The City of Łódź has been implementing green projects for years and is now formalising this Green Bond Framework. The bond market is well known to the City, which has been issuing bonds since 2009, yet by commencing the issue of Green Bonds, it intends to authenticate the transparency of its financial management and the use of proceeds.

The City has applied to the Marshal of the Łódź Voivodeship for granting EU funds from the new 2021-2027 perspective for the implementation of projects with a total expenditure of PLN 3.9 billion, with the contribution of own funds of PLN 1.2 billion. Among the projects submitted for co-financing with EU funds, 44% of them account for ecological projects related to the replacement of rolling stock, energy rationalisation, improvement of the environment in the field of water and wastewater management, improvement of air quality and reduction of CO<sub>2</sub>.

This Green Bond Framework (the "Framework") enables the City of Łódź and each of its majority owned subsidiaries to issue Green Bonds to finance investments that enable the transition

to a low-carbon and climate-resilient society. The Framework is aligned with the ICMA Green Bond Principles published in 2021. The Framework defines assets and projects with distinct environmental benefits ("Green Projects"), that can be financed by Green Bonds. It also outlines the process to evaluate, select, track and report on such investments. Each Green Bond issued under this Framework should in their relevant transaction documentation refer to this Framework.

Furthermore, the Framework is reviewed by an impartial firm, which has provided a second-party opinion to confirm its alignment with the Green Bond Principles.

The Framework and second-party opinion from CICERO are available on the City's Public Information Bulletin (BIP) website.





## I. Use of Proceeds

An amount equivalent to the net proceeds from Green Bonds shall be used to finance or re-finance, in part or in full, Green Projects. New financing is defined as financing of Green Projects implemented during the previous 12 months prior to issuance of a Green Bond. The City of Łódź will continuously exercise its professional judgement, discretion and sustainability expertise when identifying Green Projects.

For the avoidance of doubt, Green Bonds will not be used to finance investments linked to fossil energy generation, nuclear energy generation, research and/or development in the field of weapons and defence, potentially environmentally negative resource extraction, gambling or tobacco.

The allocation of proceeds from the issue of Green Bonds to the currently selected green projects will depend on the actual expenditure incurred from own resources and EU funds received until project completion. Should it turn out that the implementation of the currently selected two projects will be delayed, the Green Bond Committee will select another project eligible as a green project.

Ultimately, the City plans to use the funds from the issue of Green Bonds to finance only environmental projects related to water and wastewater management, low-emission transport and thermo-modernisation of municipal and educational facilities.





## Green Projects

### 1 Sustainable water and wastewater management

Acquisitions, investments and expenditures related to wastewater treatment, the associated infrastructure and water efficiency measures

Near term examples of such investments include the following projects:

#### Wastewater management, phase 3 in Łódź

– this project assumes the reduction of the contamination of groundwater, surface water and soil with sewage generated in the Group Sewage Treatment Plant of the Łódź Agglomeration by the use of improved wastewater treatment systems and improvement of their quality.

**Tasks covered by the project are part of measures meant to promote low-emission, environmentally friendly technologies and reduce the use of traditional raw materials and energy-intensive areas of activity.**

- Construction of retention reservoirs - the aim is to retain and take over most of the pollution load carried by rainwater (during wet weather the hydraulic load of the wastewater treatment plant increases and treating the entire load is no longer possible) and to limit water eutrophication by reducing the phosphorus and nitrogen load directed to the Ner River, which will result in a

#### Wastewater management, phase 3 in Łódź

– it means the implementation of 7 investment tasks aimed to reduce the contamination of groundwater, surface water and soil with sewage generated in the Group Sewage Treatment Plant of the Łódź Agglomeration. The tasks are aimed at using improved wastewater treatment systems and improving their quality at the outlet of the Group Sewage Treatment Plant to the Ner River. The project implementation will contribute to the increase in the efficiency of technological wastewater treatment devices, the reduction of the amount of organic matter and sludge sent for incineration, the increase in the throughput as well as the optimisation of the sludge dewatering process. The long-term effects of these measures will be noticeable in the improvement of groundwater and surface water quality for residents of Łódź and the surrounding communes.

reduction of the environmental fee. The construction of retention reservoirs No. I and II will allow to absorb 85% of wet weather wastewater. After rainfall cessation, the collected wastewater will be pumped for biological treatment during periods of reduced inflow (morning hours, holidays).

- Modernisation of the sludge dewatering system - the task's main objective is to obtain sludge dewatered to at least 21% dry mass through replacement of the sludge dewatering equipment (belt presses) with other devices (decanter centrifuges) of higher parameters; the dewatered sludge is then directed to the incineration plant;



● Increased capacity of biological wastewater treatment lines 6 and 7 will result from the modernisation of the activated sludge wastewater treatment process. This will lead to an increase in the capacity of secondary settling tanks and minimise the risk of not meeting the requirements for the quality of treated wastewater set out in the water-law permit.

● Modernisation of the sand node - the task's aim is to enable the sand node to operate more flexibly by replacing the equipment with a new one (failure rate reduction), which will contribute to increased wastewater straining, which in turn will improve further biological processes. Thanks to the replacement of the equipment that has been operating in extremely harsh conditions for nearly 30 years, the plant's failure rate is expected to decrease.

● Construction of 3 new technologies: sludge thermal hydrolysis system, installation for nitrogen removal from leachate and installation for phosphorus recovery from leachate, will result in the removal of a significant portion of organic matter in the thermal hydrolysis process, which will, first of all, reduce the amount of sludge generated (on average by 12% of sludge dry matter), increase sludge dewatering and reduce the heat of combustion to a level where all the sludge generated can be combusted. In addition, the thermal hydrolysis process will increase biogas production by about 25% compared to the amount currently generated. A part of it will be used for own needs of the thermal hydrolysis system, however about 3,500 m<sup>3</sup>/d (15% of the current production) may serve to generate additional electricity in the amount of about 9 MWh per day, which will significantly increase the plant's energy efficiency and will allow it to reduce the amount of electricity purchased from the external grid.

## 2 Clean Transportation

Acquisitions, investments and expenditures related to low carbon transportation solutions and associated infrastructure in the following categories:

Low Carbon Public Transportation - Public transport systems such as trains, trams, buses,

ferries and cableway transportation systems, with no direct emissions

Low Carbon Vehicles - Fully electrified, biofuel, plug-in hybrid electric, or hydrogen passenger and freight vehicles



Low Carbon Transportation Infrastructure - Infrastructure supporting low carbon passenger and freight transport such as:

- dedicated charging and alternative fuel infrastructure
- bus rapid transit systems, bus lanes and electrified railways, that support modal shift from private to public transportation
- infrastructure for bicycles and pedestrians.

Near term examples of such investments include the following projects:

#### Low-emission urban transport programme

– reconstruction of the tram line in Przybyszewskiego Street, together with the construction of an interchange node and reconstruction of tram tracks. The project is to make the City's internal transport more accessible thanks to the improvement of transport connections. It will ensure a positive impact on the environment and contribute to sustainable development of transportation by creating an attractive, modern and mobile chain of transport networks accessible to various user groups.

#### Low-emission urban transport programme

– the task implementation will contribute to the creation of an operational and safe public transport system in the City, offering high-quality services and meeting EU environmental protection standards. The project is to make the City's internal transport more accessible, streamline transport connections, create a modern and mobile chain of transport networks available for various groups of users, as well as to

increase the share of low carbon public transport. The measures taken assume that the decline in carriage of passengers by public transport will be stopped. The investment concerned complies with EU environmental protection standards and ensures the pursuit of sustainable development principles. The scope of the task comprises the reconstruction of the tramway tracks, road system to the extent necessary, end-to-end construction of an interchange node along Przybyszewskiego Street, aimed at integrating tram and bus transport, individual car traffic, bicycle traffic, pedestrian traffic and railway traffic.

In accordance with the Act of 11 January 2018 on Electromobility and Alternative Fuels, the City is obliged to, as of 1 January 2025, perform its public tasks using a fleet with at least 30% electric vehicles. Thus local governments are, in a way, forced to replace their fleet. At present, the City is preparing a tender for the lease of 22 office cars, all of which will be electric.

Łódź has dedicated bus lanes. Until the end of 2020, 14 km of bus lanes and 12.5 km of bus and tram lanes were built. Bus lanes are available also for electric cars, motorcycles and taxis. The construction of bus and tram lanes reduces the travel time for trams.







## II. Process of project evaluation and selection

The evaluation and selection process for Green Projects is key in ensuring that the amount equivalent to the net proceeds from Green Bonds is allocated to assets and expenditures which meet the criteria set out in the Framework.

The Ecology and Climate Department has been established in the structure of the City of Łódź Office, within which two units operate:

- Environmental Management Division,
- Environmental Protection and Agriculture Division.

### The tasks of these units include:

- concerning environment shaping,
- arranging green areas in the City,
- preparing concepts and investment projects related to environmental protection,
- managing projects and programmes,
- exercising control over the implementation of water management investments in the area of municipal technical infrastructure,
- obtaining external sources of financing for the implementation of projects related to greenery and environmental protection.

The selection of projects to be financed with Green Bonds is the responsibility of the Green Bond Committee which includes City of Łódź Office executives who set strategic objectives for the City while taking into account its financial capacity and choosing the appropriate financial instruments.

The Committee consists of six persons, with Deputy Mayor of the City of Łódź Adam Pustelnik as its Chairman. The Chairman of the Committee may invite to meetings additional persons not included in the composition of the Committee determined by the Mayor.

In order to ensure that Green Bond net proceeds are only allocated to Green Projects as defined in this Framework, the City of Łódź will bring together relevant people from the Department of Strategy and Development, Ecology and Climate Department and Public Finance Department ahead of any decision to allocate funds from a Green Bond to a Green Project. Such decisions will be made in consensus, and the Public Finance Department will keep a register of approved Green Projects. The same group will also monitor the development of the green finance market and propose updates to the framework to the extent there are material changes in market practices or standards (i.e. Green Bond Principles, the EU Taxonomy, EU Green Bond Standard, etc.).





### III. Management of Proceeds

An amount equal to the net proceeds from Green Bonds will be released into the main bank account of the City and used for financing and/or refinancing of Green Projects as defined in this Framework.

Proceeds from the issuance of Green Bonds will be released in one tranche into the City's base account just like proceeds from the issuance of other bonds covered by Resolution of the City Council in Łódź No. XI/1239/21 of 17 March 2021. Organisational units implementing green projects will submit requests for funds from the issuance of Green Bonds to the Budget Department of the City of Łódź Office which is responsible for managing the City's financial resources. If Green Bond proceeds are not fully used in a given financial year for the selected projects, the Green Bond Committee will select an additional environmental project(s) to be financed or refinanced with Green Bonds. This information will be made public.

Each and every expenditure related to the implementation of selected Green Projects must be included in the financial plan of the unit carrying out the task. This unit holds liability for the proper spending of public funds. After the end of the financial year, no later than by 31 March of the following year, the unit implementing the project will be required to submit a settlement on the use of proceeds. The report on the use of funds from the Green Bonds will stem from the reporting data on the expenses incurred in a respective financial year. The settlement of expenses

incurred from the Green Bonds shall be accompanied by copies of invoices or other documents certifying the spending of funds on Green Projects.

Ongoing monitoring of expenditure incurred from the issue of Green Bonds for Green Projects will be carried out by units directly implementing the projects, i.e. for:

- 1 Sustainable water and wastewater management - by the Municipal Service Division, and
- 2 Clean transportation - by the Municipal Investment Board.

Any unallocated proceeds temporarily held by the City of Łódź will be placed in the main bank account of the City and released as needed in the respective financial year.

Green Bonds will most likely be issued in Q4 2021 (when it will be known how much EU financing the City is to receive), therefore the City should have a possibility to account for the use of Green Bond proceeds against expenditures incurred in 2022.





## IV. Reporting

To enable investors, lenders and other stakeholders to follow the development of the Green Projects funded by Green Bonds, a Green Bond Report will be made available on the City's Public Information Bulletin (BIP) website. The Green Bond Report will include an Allocation Report and an Impact Report and will be published annually as long as there are Green Bonds outstanding or until full allocation.

Annual reports will be drawn up separately for each project and verified internally, and in the case of investments co-financed with EU funds (like in the case of wastewater management and low-emission transport projects) also by the institutions disbursing EU funds. The City's reporting is the responsibility of the Mayor.

### Allocation Report

- Total amount of Green Bonds outstanding
- Share of proceeds used for financing vs refinancing
- Share of proceeds split between the two key categories (Sustainable water and wastewater management and Clean transportation)
- Share of unallocated proceeds (if any)
- Examples of projects being financed with Green Bonds

## Impact Report

The impact report aims to disclose the environmental impact of the Green Projects financed under this Framework. Impact reporting will, to some extent, be aggregated and depending on data availability, calculations will be made on a best intention basis. The impact assessment may, where applicable, be based on relevant metrics defined in the Position Paper on Green Bonds Impact Reporting.

## Second-Party Opinion

To confirm the transparency and robustness of this Green Bond Framework, it is verified and approved by an external second-party opinion provider. The second-party opinion by CICERO is available on the City's Public Information Bulletin (BIP) website together with this Framework.

