



Lublin at a Glance





Lublin, Eastern Poland's largest city with **331,243 residents**, enjoys a continental climate marked by seasonal shifts. Its status as a prominent **university city**, accommodating 59,135 students including a substantial international cohort, underscores its vibrant and diverse atmosphere. Situated on the EU's eastern border, Lublin uniquely embodies a **fusion of European and Eastern cultures**, enriching its historical and cultural tapestry.

Despite facing urban challenges like **power management** and **energy poverty**, Lublin is embracing sustainability. Over **40% of its public transport fleet is zero-emission**, and it's actively transitioning away from coal, spearheading initiatives for decarbonization and emission reduction. Through projects like **retrofitting buildings**, installing **EV-charging infrastructure**, and promoting renewable energy sources, Lublin is forging a path towards a greener, more resilient future. **Engaging stakeholders**, particularly selected households, the city is fostering community involvement to drive its sustainable development agenda forward.

Follower City in the Scalable Cities Community

As **one of the six follower cities** in the international Making-City project, Lublin plays a key role in advancing climate neutrality in Europe. As a dynamic urban center in Poland, Lublin develops innovative solutions tailored to its unique context, focusing on energy efficiency, renewable energy integration, and low-carbon transportation. Through the Making-City project and its participation in the **Scalable Cities Community, which includes 120 cities across 18 Smart Cities and Communities projects**, Lublin demonstrates its commitment to mitigating climate change while promoting economic growth and enhancing residents' quality of life.



-  Lublin
-  The 7 other MAKING-CITY cities
-  48 Lighthouse Cities
-  72 Follower / Fellow Cities



Scan the QR code to access the interactive online map with all 120 cities or access the list of the 18 EU projects.



Lublin's Sustainable Strategy

Lublin Development Strategy (2030):

By 2030, Lublin aims to be a thriving, low-carbon metropolis known for its academic and cultural strengths. Goals include energy transformation, reducing energy demand, promoting renewables, improving zero-emission transport, and conserving biodiversity, ensuring a resilient and sustainable future.

To achieve its 2030 goals, Lublin will:

- Reduce energy demand in buildings and infrastructure with renewable sources and LED lighting.
- Promote zero-emission transport by developing electromobility and expanding bike paths.
- Invest in renewable energy.
- Engage residents in energy efficiency and sustainable habits.
- Enhance district heating.
- Protect biodiversity and ensure sustainable urban planning.
- Foster an innovative economy with modern technologies.

Lublin's roadmap from PED to climate-neutral cities mission

What is a PED according to MAKING-CITY?

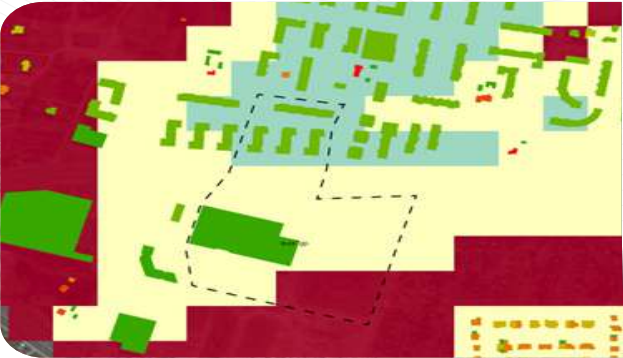
A **Positive Energy District (PED)** is an eco-friendly urban area that **produces more renewable energy** that it uses. It utilizes sustainable technologies, energy efficient buildings and smart grids to ensure environmental sustainability, community engagement and reduce its carbon footprint. PED is an example of **sustainable urban living and a greener future**.

Lublin's PED area

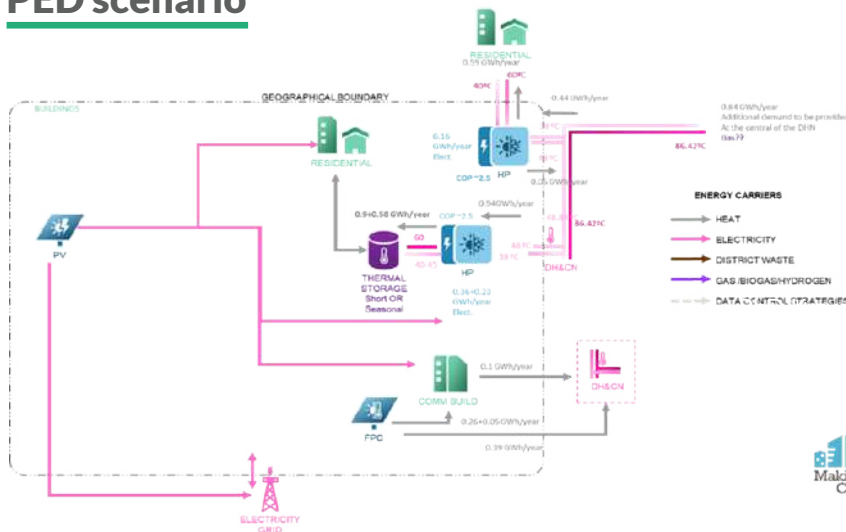
Lublin PED Area is geographically bounded and the ambition is to reach self-sufficiency. There is a shopping centre with a large rooftop area for solar generation and there are also an empty lot (just on the east side of the building) and a carpark area (on the north side) next to the commercial centre. These areas can also be evaluated for on-site (on the ground – or canopies for cars) energy generation. There are also new built (mainly in 2012) residential blocks with high efficiency and this district is so-called an “eco-district”.



Scan the QR code to access our video «What is a PED? to learn more about the concept.



PED scenario



Thanks to the **District Heating Grid (DHN)**, all buildings are connected to each other the network has potential for **sharing mechanisms in the PED Area**.

Another opportunity for renewable energy is that these buildings are connected to more or less the end point of DHN and for this reason, a **waste heat potential from the return pipe** may also be considered. There are also small size residentials, that are not connected to the DHN, around the PED area and this enlightened the technical team for exporting energy from PED to these areas with a new infrastructure.

A Vision for Lublin's Sustainable Future

„The energy transformation, and thus the aspiration for climate neutrality, is a key step in shaping the future of our city and the quality of life of its residents.

It lays the foundation for development, guarantees security and creates new economic and social prospects. It is also a response to the climate challenges facing cities and a course of action for environmental protection and innovative economic development.”

PhD Krzysztof Żuk, Mayor of the City of Lublin



Inspiring success stories of Lublin on the road to climate neutrality

Green Budget

In 2016, Lublin launched Poland's first Green Budget, allowing residents to help decide on urban greenery and recreation areas. Since 2016, the six edition of the Green Budget has been implemented, during which Residents submitted a total of 544 proposals. After evaluation, 127 projects were approved for implementation, significantly improving the city's green spaces with a budget of over PLN 4,5 million.

Low-Stack Emission Reduction Program

In 2012, Lublin launched the Low-Stack Emission Reduction Program to cut air pollutants from solid fuel heating. The program subsidizes 50% of eligible costs for switching to cleaner heating systems. Between 2013 and 2022, over 600 central heating systems were modernized through this initiative.

Hajdów Wastewater Treatment Plant

The Hajdów Wastewater Treatment Plant finished a photovoltaic farm in January 2020. With 6.552 monocrystalline panels spread over 4 hectares and a 40 kWp micro photovoltaic plant on the blower station's roof, it aims for energy self-sufficiency, meeting 70% of its electricity needs. The return on investment is expected within 6-7 years at current energy prices.



Scan the QR code & read all the success stories.

PV on bus roofs

Photovoltaic panels on city bus roofs reduce alternative load, cutting fuel consumption. Each bus's panels cover 25% of its electricity needs, resulting in 5% less fuel use annually. Developed through a partnership with Lublin University of Technology since 2013.

Sustainable Public Transportation

Opened in January 2024, Lublin Metropolitan Station integrates public transportation, out-of-town buses, shuttle buses, and rail in one eco-friendly facility. The station features extensive greenery, including 100 new trees, over 31,000 shrubs, and a 290 sqm green wall. Designed with sustainability in mind, it uses energy-efficient solutions like a "building within a building" concept, photovoltaic panels for energy, a gray water system for sanitation, and natural ventilation for the underground garage. Heat pumps and anti-smog paving further enhance its environmental credentials.



Energy storage facilities

In 2021, MPK Lublin collaborated with Lublin University of Technology to tackle challenges in electromobility. They launched a project for modular energy storage units to address high peak power consumption, which exceeds 1500 kW compared to the average daily 70 kW. These units aim to flatten the daily load curve, reduce connection power, and cut costs.

Follow and contact us



-  www.makingcity.eu
-  contact@makingcity.eu
-  [MAKING-CITY EU](#)
-  [MakingCity_EU](#)



This project received funding from the H2020 Programme under grant agreement n°824418. This content only reflects the author's view. The European Commission and INEA are not responsible for any use that may be made of the information it contains.