



# **EPAH Technical Assistance** **Practical Experiences of** **Bydgoszcz, Poland**

15 October 2024

Barcelona

Izabela Kuśnierz, PNEC

# EPAH Technical Assistance Programme in Bydgoszcz, Poland

Beneficiary: City of Bydgoszcz, Energy  
Management Team



Expert: The Association of Municipalities  
Polish Network „Energie Cités” (PNEC)



Period: December 2022 – August 2023



# Technical assistance program

Technical Assistance (TA) was introduced in order to **support Bydgoszcz** in assessing **energy poverty**, identifying gaps, and implementing effective **local solutions**.

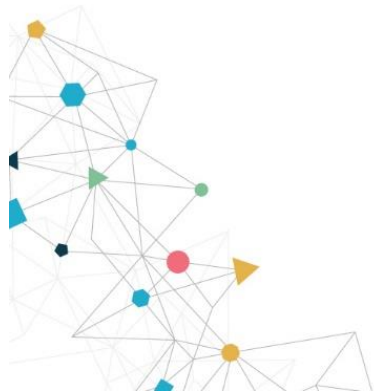
Main scope:

- Assessing the current situation,
- Defining a methodological approach to data collection,
- Analyzing collected data and identifying solutions.



# What has been done so far...

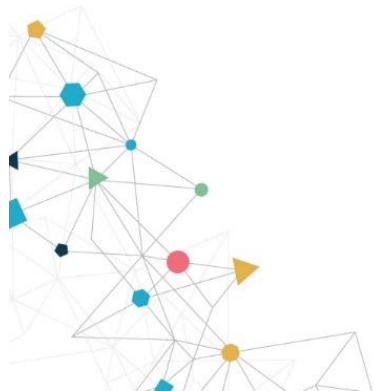
...under EPAH Technical Assistance



# What has been done so far...

...under EPAH Technical Assistance

in  BYDGOSZCZ



# Initial Assessment

## Key actions:

- A comprehensive baseline study
- An analysis of previously implemented local initiatives aimed at reducing energy poverty

## Identified gaps

Missing data on vulnerable households



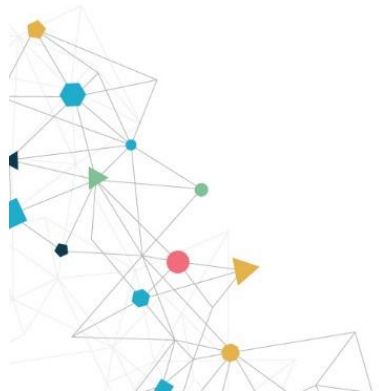
## Strategy for

collecting data through surveys and engaging local institutions



# Methodological Approach

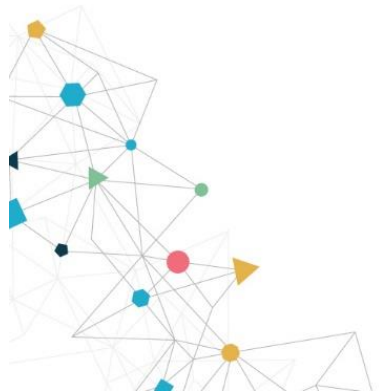
- Identification & engagement of stakeholders
- Determining key indicators
- Identification of crucial data



# Methodological Approach

- Identification & engagement of stakeholders

Energy poverty affects various aspects of society, including the energy, housing, social health and environmental sectors. To ensure a broad spectrum of understanding of this problem, it is important to cooperate with various stakeholders – both internal (from other departments) and external (from outside the city administration).



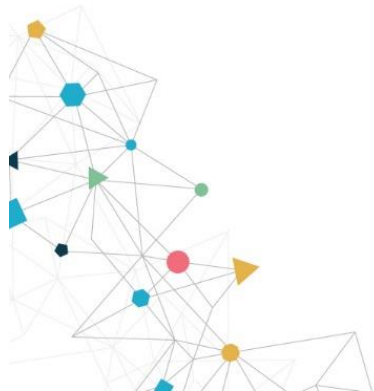


# Methodological Approach

- Determining key indicators

The indicators are a method of measuring the city's actions and allow for monitoring the impact of these actions. Their aim is to identify specific and measurable features of energy poverty. Based on the information contained in the **report of the Institute for Structural Research** and adapting it to data available at the local level, the following indicators were proposed to identify energy poverty in Bydgoszcz:

No.	Indicator	Source	Indicator type
1	Low income, high cost	Requested/publicly available data	Quantitative
2	Inability to pay utility bills on time	Data obtained from media providers	Qualitative
3	Apartment in a building with inadequate technical conditions	Based on data from EGiB	Qualitative
4	Inadequate thermal comfort in winter or summer	Self-assessment/survey (subjective measure)	Qualitative



# Methodological Approach

- Identification of crucial data

The types of data necessary to collect and their sources were determined. The focus was on publicly available or easily accessible data that would allow for preliminary and general identification of the number of people potentially at risk of energy poverty in Bydgoszcz.

Type of data		Institution
<b>Number of beneficiaries:</b>	targeted benefits	Municipal Social Welfare Center in Bydgoszcz
	energy supplements	
	housing allowances	
	disability or family benefits	
<b>Number of recipients in arrears with utility bills</b>		Municipal Thermal Power Company
		Polish Gas Company
		Enea Operator Sp. z o.o. Distribution Region Bydgoszcz
		Municipal Water and Sewage Works in Bydgoszcz
<b>Number of recipients in arrears with rent payments</b>		Municipal House Administration "ADM" Sp. z o.o.
<b>Information on buildings from the land and building register – EGiB (year of construction, function, address, area)</b>		District Office in Bydgoszcz
<b>Type of heat source</b>		Central Register of Building Emissions
<b>Data resulting from applications to other programs</b>		Provincial Fund for Environmental Protection and Water Management in Toruń

# Data analysis and solution identification

The analysis of collected data identified areas most affected by energy poverty. Neighborhoods such as Bocianowo-Śródmieście and Szwederowo were found to have the highest numbers of households at risk.

**Based on the analysis it was recommended to:**

**1. Designate units responsible for implementing the policy in this area and coordinating the cooperation of stakeholders.**

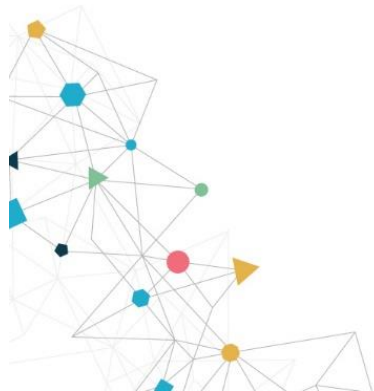
**2. Deepen the determination of the problem by:**

Intensifying activities in the indicated estates, including through a thorough survey and analysis of the behaviour of people living in the selected estates.

Conducting a survey among people applying for funding (e.g. from the Clean Air programme), which could help to clarify and/or supplement the missing data.

Monitoring the possibilities of obtaining information from other sources that could not be included in the above analysis, e.g. for legal reasons.

Selecting appropriate instruments and planning actions aimed at combating energy poverty with the participation of stakeholders and interested parties.



# Achieved Results

- **Improved understanding of energy poverty:**
  - The data collected helped the city to map out energy poverty across its districts and better understand the profiles of vulnerable households.
  - It was revealed that 5% of Bydgoszcz households receive social allowances, with nearly 10% benefiting from special programs addressing high energy costs.
- **Key indicators:**
  - Quantitative indicators such as “Low Income-High Cost” and utility areas were identified as critical for monitoring progress.
  - Qualitative indicators, including the inability to maintain comfortable living temperatures and inability to pay utility bills on time were developed and tested through the process.



# Key takeaways

## Importance of localized solutions

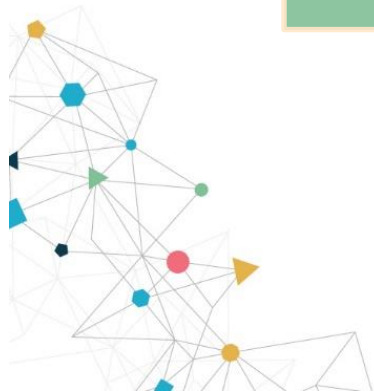
- Energy poverty varies greatly at the local level, requiring tailored strategies that reflect the specific needs of different neighborhoods.

## Cross-sectoral collaboration

- Engaging diverse stakeholders, from local government departments to NGOs and residents, was crucial for a comprehensive diagnosis of energy poverty.

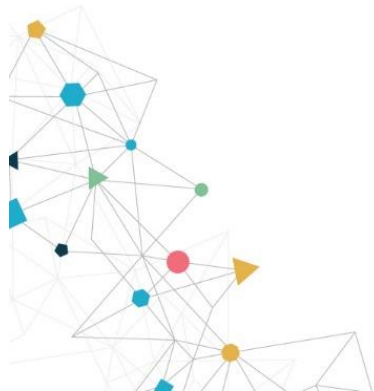
## Challenges in data collection

- Accessing reliable data from energy providers and public institutions was challenging. Improved data-sharing mechanisms are needed to fully capture the scope of energy poverty.



# Other programmes

in  BYDGOSZCZ



# Identification of the energy poverty problem in the Miedzyń estate

In June and July 2022, a **pilot survey** was conducted among **101 residents** of the Miedzyń housing estate in Bydgoszcz, the aim of which was to:

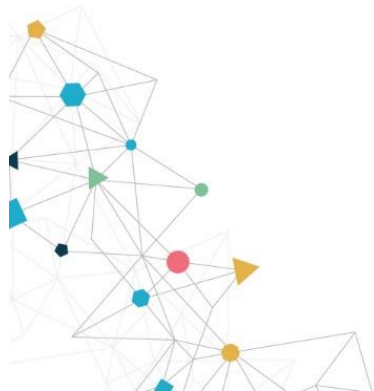
- assess the situation of residents of the Miedzyń housing estate in terms of the **occurrence of energy poverty**,
- assess the applied technique for examining energy poverty and **the research tool** used to conduct questionnaire interviews among residents.

The Miedzyń housing estate was selected to conduct a pilot study of the occurrence of the phenomenon of energy poverty due to the characteristics of this part of the City of Bydgoszcz. Certain features of the development of the Miedzyń Housing Estate were considered to be factors that may affect the occurrence of the phenomenon of energy poverty: a significant part of single-family housing, with a large area and low energy efficiency of buildings from the 1960s-1980s, heated with coal furnaces.

## Subsidies provided by the city

The city of Bydgoszcz has been providing **subsidies** for **replacing solid fuel heat sources** with low-emission heating devices since 2006. By the end of 2023, thanks to this subsidy, **it was possible to eliminate over 5.5 thousand solid fuel stoves** in the city.

Currently, final work is underway to change the rules for municipal subsidies, aiming to simplify them, link them with the “Warm Apartment” Priority Programme, but also to verify the group of beneficiaries and increase the subsidy amounts.





## „Warm Apartment” program

In december of 2022, the City of Bydgoszcz signed an agreement with the Regional Fund for Environmental Protection and Water Management in Toruń on **co-financing for the implementation of the "Warm Apartment"** program under the first recruitment. The amount of co-financing amounted to **PLN 8,500,000 (EUR ~2,000,000)**.

By December 31, 2023, a total of 49 applications for co-financing had been received, of which **19 investments were implemented**. In 2023, co-financing was received by 3 investments for a total amount of PLN 76,495.20 (EUR~17,819).



# „Clean Air” Program

The aim of the "Clean Air" program is to improve air quality and reduce greenhouse gas emissions **by replacing heat sources and improving the energy efficiency of single-family residential buildings**. The program is intended for owners or co-owners of single-family residential buildings, or separate residential premises in single-family buildings with a separate land and mortgage register.

The subsidy covers, among others: replacing old heat sources (stoves and boilers for solid fuels) and purchasing and installing new heat sources, insulating building partitions, replacing window and door joinery.

In 2023, the Family Benefits Department issued 102 certificates.

# Bydgoszcz Anti-Smog Switch

The aim of the project "Bydgoszcz Anti-Smog Switch" is the **active participation** of Bydgoszcz residents in creating grassroots anti-smog initiatives. In the most polluted housing estates **anti-smog groups** have been organised. With the support of experts, the groups **analyze the smog situation** in the housing estates and **develop tools** that will respond to the problematic situation in a given area.

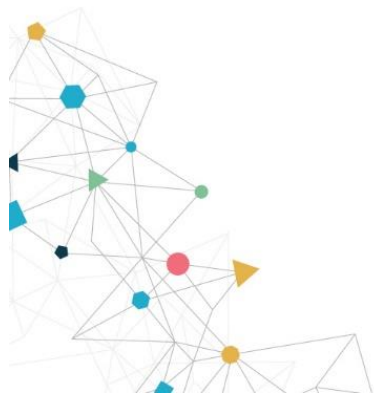
The results of the activities will be used in the work of the Municipal Anti-Smog Team, created for the needs of the project. The task of this team will be to design systemic activities for other areas of the city. A key element of the project is to create a **database of information on the state of air** in Bydgoszcz, also with the active participation of residents. Bydgoszcz residents who want to get involved in citizen air monitoring will receive sensors.

# Other actions

- Energy voucher - program from 2024
- Electricity allowance - 766 applications received
- Allowance for sensitive recipients - applications could be submitted until November 30, 2022
- Coal allowance - applications could be submitted until November 30, 2022
- Allowance for households - applications could be submitted until November 30, 2022
- VAT refund (gas allowance) - 911 applications received
- Housing allowances - 8158 applications received
- VAT refund (gas supplement) - 1,374 applications received (as of 09.10.2024)
- Housing supplements - 5,809 applications received (as of 09.10.2024)
- Protective supplements - 9,620 applications received
- Energy voucher - 13,398 applications received (as of 09.10.2024)



# Future plans



# New rules for granting subsidies

The city has adopted new, more favourable rules for granting subsidies for investments related to the **liquidation of old stoves**. Housing communities can also benefit from the solutions. Subsidies for investments in the scope of reducing low emissions consisting in replacing heat sources fired with solid fuel with low-emission heating devices will amount from PLN 6,000 to PLN 12,000 (EUR ~1,400-2,800).

The subsidy from the city budget can be combined with the subsidy granted in the Priority Program "Warm Apartment". In order to increase the efficiency of connecting buildings to the municipal heating network, the list of applicants has been expanded to include housing communities.



# Alleviating Energy Poverty through Climate Acti



The Sustainable Energy and Climate Action Plan (SECAP) is developed and regularly updated to support City of Bydgoszcz in their efforts to tackle energy poverty while addressing climate change.

The planned actions and goals of the city outline key steps, which include: thermomodernisation of social housing, modernisation of district heating system, and support for residents in the area of energy efficiency. The implementation of the Plan will also improve important social aspect of the city by enhancing residents' quality of life, increasing the sense of security, and raising living standards and reducing the number of people at risk of energy poverty.

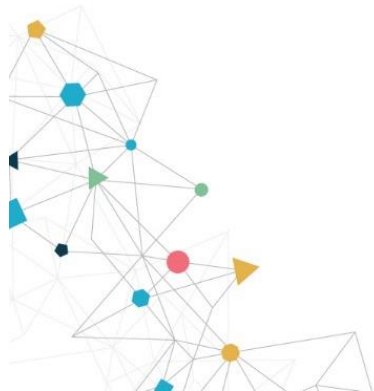


# Optimization of employees' activities focusing on social aspects



The recently changing reality is heading towards broad digitalization and this trend is becoming inevitable. In order to help employees and relieve them of repetitive, tedious tasks, the units of the Bydgoszcz City Office: the IT Department and the Energy Management Team have implemented robotization of one of the processes carried out by the Energy Management Team.

Thanks to the solutions introduced, it is possible to reorganise the team, which increased the number and speed of tasks performed, providing space and the opportunity to focus on important social aspects related to combating energy poverty.





# Questions?

