

# EmPowerIngUs

Innovation Transfer Network

# EPIU Good Practice

# Transferability Study



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*\* All information, data and visual material used in this Transferability Study was provided by EmPowerIngUs Project Partners or developed by the EmPowerIngUs Lead Expert.*

# 1. INTRODUCTION

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## 1.1 The Purpose of the EmPowerIngUs Transferability Study

This URBACT Transferability Study is a key output that lays the foundation for the activities of the EmPowerIngUs Innovation Transfer Network. It is based on data and insights gathered from all EmPowerIngUs transfer cities and their key stakeholders, as well as conclusions drawn from five city visits conducted between November 2024 and January 2025.

The study was produced by EmPowerIngUs Lead Expert Klemen Strmšnik in close collaboration with the lead partner EMSV Getafe project team – especially Fernando Gonzalez Ferreira (Project Coordinator) and Alejandro Lopez Parejo (URBACT Local Group Coordinator) – along with all EmPowerIngUs project partners.

The Transferability Study serves three key purposes:

- 1) To provide a detailed description of the EPIU Good Practice, developed through the Urban Innovative Actions (UIA) mechanism.
- 2) To outline the profiles of the good practice city (Getafe, ES) and all transfer cities (Maia, PT; Trikala, GR; Pomorie, BG; Etterbeek, BE), including an assessment of each city's transfer potential.
- 3) To evaluate the overall transfer potential of the EPIU Good Practice within the network and establish a methodology to support its successful transfer.

Beyond its role as a guiding document for EmPowerIngUs project partners, the Transferability Study provides a clear framework for the crucial start-up "Understand" phase of the project. Throughout the network's duration, it will remain a key reference point and source of support.

At the same time, the study is designed to reach a broader audience, including cities participating in the URBACT Programme as well as policymakers and practitioners interested in integrated sustainable urban development. This includes city officials, national policymakers, and stakeholders at the European level, such as European Commission representatives, the UIA community, and Urban Agenda for the EU stakeholders.

## 1.2 EmPowerIngUs – Empowering Cities with Data-driven Social Policies and Solutions

The Energy Poverty Intelligence Unit (EPIU) project – developed through the Urban Innovative Action (UIA) programme – marks a significant step forward in urban innovation and social inclusion by combining advanced data analysis with technical fieldwork. It not only addresses and combats energy poverty but also promotes data-driven social policies. To fully grasp the logic behind the EPIU project, one must first understand its underlying philosophy, which can be summarized in the following statement:

***"A home is much more than just a building. It encompasses the entire built environment, including the people who live within it."***

EPIU's integrated and participatory approach operates across three scales (Home, Building, and Neighbourhood), utilizing three key tools (Intelligence Unit, One-Stop Shop, and Tailor-Made Solutions) to drive action through three stages (Understand, Support, and Act).

The success of the EPIU project and its recognition as a Good Practice by the URBACT Programme have positioned Getafe as one of the most active and innovative cities in the fight against energy poverty. This enabled Getafe to compose a transnational partnership and develop the EmPowerIngUs Innovative Transfer Network – a project aiming to reflect on the key achievements and lessons learned from the EPIU Good Practice while transferring its methodologies and approaches to cities across Europe.

Rather than being a static model, EPIU was designed as an evolving process – one that is continuously refined to better serve the citizens of Getafe and beyond. This commitment to innovation is why Getafe is leveraging the EmPowerIngUs project to further enhance and improve the EPIU Good Practice.

For more information about the EPIU Good Practice please visit the [EPIU project website](#), the [EPIU UIA profile](#), or the [EPIU Portico profile](#). You can follow the progress of the EmPowerIngUs project on [our URBACT website](#), as well as [EMSV's website](#), [Facebook](#), [LinkedIn](#) and [YouTube](#) channel.

Prepared in February 2024

EmPowerIngUs project Lead Expert: Klemen Strmšnik



## 2. THE INNOVATIVE PRACTICE

### 2.1 From the Idea to the EPIU Good Practice and the EmPowerIngUs Transfer



The [Energy Poverty Intelligence Unit \(EPIU\)](#) was developed between 2019 and 2023 under the [Urban Innovative Actions \(UIA\) programme](#) by the EPIU project partnership as an initiative to identify and mitigate energy poverty in [Getafe \(Spain\)](#), ensuring that its residents live in healthy, energy-efficient homes.

The project was inspired by the recognition that factors such as low energy efficiency, the aging building stock, and a lack of renovation and modernization efforts had led to deteriorated housing conditions. These issues were identified as key contributors to the high energy costs faced by many households. Combined with varying household incomes and a sharp increase in energy prices over the past decade, these conditions left many families struggling to afford basic energy

needs, such as heating, cooking, and maintaining comfortable indoor temperatures.

A key driving force behind the project was the lack of reliable data on energy poverty. Since only a small number of people seek assistance from the authorities, many affected families remain invisible in official statistics, making the challenge of identifying energy poverty twofold. Firstly, it involves quantifying existing indicators at the municipal level, which may differ from regional or national figures. Secondly, it requires exploring additional indicators that are not accounted for at the national level but nonetheless impact the population – particularly those experiencing hidden energy poverty. This includes individuals who manage to maintain comfort in their homes and pay their bills but at the expense of falling into other forms of vulnerability.

Therefore, the main challenge for Getafe was to bridge the gap by identifying and understanding hidden energy poverty and providing affected households with tailored solutions. Based on preliminary analysis, two neighbourhoods – Margaritas and La Alhóndiga-Fátima – were selected as pilot areas.

Traditionally, in Getafe, energy poverty has been closely associated with monetary poverty. Consequently, efforts to address it have primarily been reactive rather than preventive, relying predominantly on social services mechanisms. To shift this approach, the [Energy Poverty Intelligence Unit \(EPIU\)](#) was developed around three key components:

- 1) Design of an Intelligent Data Analytics System – this system focused on identifying and predicting energy poverty by defining population clusters based on energy consumption habits, socio-demographic data, income levels, and building characteristics.
- 2) Establishment of a Multidisciplinary Municipal Public Service – a horizontal, integrated service was created to manage, monitor, and evaluate solutions while assessing the efficiency of local energy poverty policies.
- 3) Implementation of Tailored Programs – specific interventions were designed for each identified population cluster, addressing energy poverty at three scales: household, building, and neighbourhood.

The innovation of EPIU lay in its shift in focus. It moved beyond addressing monetary poverty alone to tackling both identified and hidden forms of energy poverty. Furthermore, it transitioned from reactive to preventive actions, leveraging data collection and analysis across all three scales to drive informed decision-making. The EPIU project was successfully completed in 2023.

In 2024, EPIU was recognized as an Urban Good Practice under the [URBACT programme](#). This recognition provided additional support to an already established [URBACT Innovative Transfer Network \(ITN\)](#) and enabled Getafe to share the knowledge and transfer the EPIU Good Practice through the EmPowerIngUs project to four other cities: [Etterbeek \(Belgium\)](#), [Maia \(Portugal\)](#), [Pomorie \(Bulgaria\)](#), and [Trikala \(Greece\)](#).

By leveraging the international framework of the EmPowerIngUs project, building on own new developments and unique experiences of its transfer partners, Getafe seeks to further refine the EPIU Good Practice, highlighting that it is not a “finished product” but rather a “work in progress” that continues to evolve daily.



## 2.2 The European Policy Context

The EPIU Good Practice, implemented in Getafe's neighbourhoods of Las Margaritas and La Alhóndiga-Fátima, was designed to address hidden energy poverty affecting low-income families, the elderly, migrants, and other vulnerable groups. Targeting areas with high unemployment rates and where nearly half of the households lack adequate heating systems, EPIU marked a significant advancement in urban innovation and social inclusion.

EPIU's approach combined in-depth socio-demographic analysis with technical fieldwork, enabling the identification and support of hidden energy poverty among residents through specific indicators. It fostered cross-disciplinary collaboration within the city administration, filling a gap that previously existed, and addressed the financial challenges faced by residents participating in public retrofit programs.

The project's methodologies and outcomes aligned closely with the EU's priorities on sustainable urban development, climate neutrality, and social inclusivity, underlining its relevance and potential for replication in diverse urban contexts across Europe.

EPIU's alignment with the 2021–2027 European urban policy framework is evident through its direct contributions to the [European Union Cohesion Policy Objectives](#). By implementing smart, data-driven strategies, the project advanced sustainable urban development and energy efficiency, aligning with the vision of Objective 1 – Smarter Europe and Objective 2 – Greener Europe. Its targeted focus on vulnerable communities further supports Objective 4 – More Social Europe, addressing urban poverty and promoting social inclusion. By involving local stakeholders and citizens in identifying and addressing urban challenges, EPIU brought European policy objectives closer to the community, aligning with Objective 5 – Europe Closer to Citizens. Subsequently, EPIU is fully aligned with the United Nation framework and directly contributes to the following [Sustainable Development Goals](#): 7 – Affordable and Clean Energy, 10 – Reduced Inequalities, 11 – Sustainable Cities and Communities and 13 – Climate Action.

Moreover, EPIU's engagement with local communities and its emphasis on public participation also align seamlessly with the principles of the [Urban Agenda for the EU](#) and the [New Leipzig Charter](#). EPIU's governance model and collaborative approach reflect the Urban Agenda's focus on better regulation, funding, and knowledge exchange, while EPIU's already mentioned sustainability, social inclusion and energy poverty reduction elements reflect the New Leipzig Charter's "Just" and "Green" dimensions.

EPIU also demonstrates a strong connection to [the European Green Deal](#), which aims to transform the EU into a resource-efficient, competitive economy that leaves no one and no place behind. Through its focus on energy efficiency and sustainable practices, EPIU not only contributed to mitigating climate change but also addressed social and economic inequalities, embodying the holistic approach envisioned by the Green Deal.

## 2.3 Understanding the EPIU Good Practice

### ABOUT GETAFE...

Getafe is a city and [municipality](#) in the southern part of the Madrid Metropolitan Area, in the Community of Madrid. It spans 78.74 km<sup>2</sup> and is located in the Manzanares River basin as it crosses the Meseta Central. The city lies on a predominantly flat plain at an altitude of 610 to 640 meters above sea level, with its lowest point at 540 meters in the Manzanares River valley to the east and its highest point at 704 meters on Buenavista Hill to the west. The Cerro de los Ángeles, a prominent witness hill in the city's centre, is popularly regarded as the geographical centre of the Iberian Peninsula. Due to its easily eroded soil, forests of Aleppo pines have been planted on slopes like those of Cerro de los Ángeles to prevent erosion.



Getafe's climate, like that of Madrid, is Mediterranean (Dry Semiarid (Steppe) – BSh). Based on the 1980–2010 reference period, the average annual temperature is around 15°C. Winters are cold, with an average January temperature of 6°C, maximums between 10–11°C, and minimums around 1°C. Frost is common, and snowfall occurs occasionally (about three days per year). Summers, in contrast, are hot, with an average July temperature of 26°C, maximums around 33°C, and minimums around 17°C. The daily temperature range is significant (11–



12°C), as is the annual temperature range (about 20°C). Annual precipitation is below 400 mm, with a distinct summer dry period, particularly in July and August. The average year-round humidity is approximately 57%, with higher humidity in the colder months and much drier conditions in the warmer months.

Until the 19th century, Getafe was primarily an agricultural municipality. However, during the 20th century, it underwent a transformation, becoming one of the most industrialized cities in the region. Key industrial sectors include aerospace, logistics, and high-tech manufacturing, which are concentrated not

only at the Getafe Air Base but also in nine industrial estates within the municipal area.

Fuelled by industrial expansion and its proximity to Madrid, Getafe experienced rapid population growth from 1960's, reaching 189.906 inhabitants in 2024. The city is home to one of Spain's oldest air bases, the rectorate and humanities campus of Carlos III University of Madrid, and the Cathedral of La Magdalena, which serves as the seat of the Diocese of Getafe.

Today, Getafe is divided into 11 neighbourhoods and continues to expand. In 2024, a new neighbourhood began development as part of an urban renewal project involving former Getafe Air Base barracks. For more general information on Getafe, please click [here](#).

<b>Lead Partner Institution</b>	Empresa Municipal, de Suelo y vivienda de Getafe, S.L.U.
<b>Region &amp; Country</b>	Community of Madrid, Spain
<b>City Area (in ha)</b>	7.874 ha
<b>No. of Citizen</b>	189.906
<b>Climate Type</b>	BSh – Dry Semiarid (Steppe)
<b>Employment by sectors</b>	Primary 22,5% / Secondary 10,5% / Tertiary 45,2 % / Quaternary 21,8%
<b>Current unemployment rate</b>	7.08 %
<b>Main energy sources</b>	Renewable origin (e.g. solar, wind, hydro...) 57.6% / Oil, gas, coal: 45,9 %
<b>Av. year. income per household</b>	35.402 €
<b>Av. year. energy costs per household</b>	884.34 € (2024), 868.93 € (2023), 1,516.47 € (2022)
<b>Key building stock energy linked challenges</b>	Reduction of the primary energy demand of the building stock, improvement of the efficiency of domestic installations, collective self-consumption of renewable energy.
<b>% of the population affected by energy poverty</b>	20-25% estimate considering Energy poverty and hidden energy poverty
<b>Jurisdiction over the whole City Area</b>	Yes

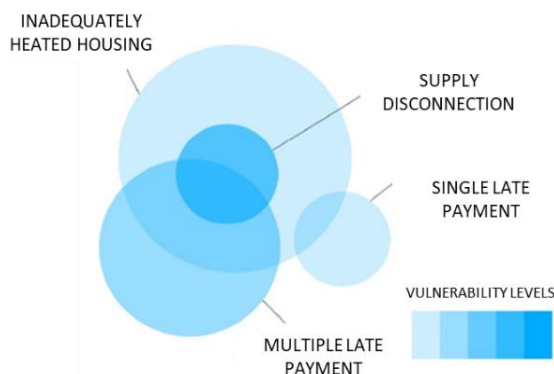
### ... AND GETAFE'S NEED FOR ACTION

Getafe's strong industrial sector has driven exponential population growth over the past 60 years, increasing from 19,224 residents in 1960 to 189,906 in 2024. This rapid demographic expansion led to the fast-paced development of new neighbourhoods, with 52% of the total housing stock built between 1960 and 1980 and an average age of 36 years since construction. The presence of the military air base further shaped the city's urban landscape, as height restrictions for buildings – imposed for flight safety – contributed to urban sprawl and defined Getafe's distinct character.

Unfortunately, much of this housing stock is of poor quality, lacking adequate energy efficiency measures and, in most cases, heating systems. Homes built prior to 1979 were built without the existence of mandatory thermal regulations. This issue is further exacerbated by extreme temperature variations, ranging from 0°C to 33°C, with occasional drops below -5°C in winter and spikes above 37°C in summer.



Getafe's average disposable income is 21.783 €, significantly lower than the Madrid regional average of 26.854 €. In terms of social assistance, 156 residents per 10,000 receive Integration Minimum Income, with 1.016 families depending on this aid. Additionally, 1.027 families benefit from the City Council's Social Emergency Program. Combined, these programs support 1.991 families, highlighting that the local social services system is operating at full capacity.



Traditionally, energy poverty (EP) is defined by the percentage of household income spent on energy costs. However, to address Getafe's specific challenges, the City Council adopted a broader definition – linking energy poverty to living conditions. Under this approach, energy poverty occurs when households cannot maintain a comfortable indoor temperature year-round as they cannot pay for a sufficient amount of energy for its domestic needs and/or when they are forced to allocate an excessive part of their household income to purchase this energy.

Two neighbourhoods – Las Margaritas and La Alhóndiga-Fátima – were identified as critical areas for rehabilitation and regeneration by the Regional Government in 2018. These Urban Deprived Areas and Neighbourhoods (UDANs) have a combined population of 10.650, consisting primarily of elderly residents and migrants (28%), with 48% of households lacking heating systems. Given their poor housing conditions and lower-income levels, the City Council prioritized its interventions in these areas.

However, a major challenge quickly became evident – the lack of reliable data on energy poverty. At the time, it was estimated that around 15% of Getafe's households (approximately 30,000 residents) were unable to keep their homes warm in winter. Additionally, rising climate change impacts and increasingly frequent heatwaves were making summer conditions more extreme. This estimate was later validated in 2021 by updated data from the Spanish National Energy Poverty Strategy, which reported that 14.3% of Spain's population was affected by energy poverty. Yet, in 2018, fewer than 1,000 residents (234 families) in Getafe sought assistance – revealing a significant gap between those in need and those receiving help.

Recognizing this gap, the City Council identified several key challenges and priorities:

- Bridging the gap in support services – the primary goal was to identify hidden energy poverty and ensure that all affected households receive support, preferably by tailor-made solutions.
- Economic impact – energy poverty actions should lead to better household income distribution, allowing more disposable income for essential consumption.
- Social impact – interventions should improve living conditions in UDANs while fostering social inclusion, without requiring additional municipal resources.
- Environmental impact – addressing energy poverty should also contribute to reducing Getafe's carbon footprint, enhancing housing sustainability, and mitigating climate change.

## EPIU GOOD PRACTICE DEVELOPMENT PROCESS

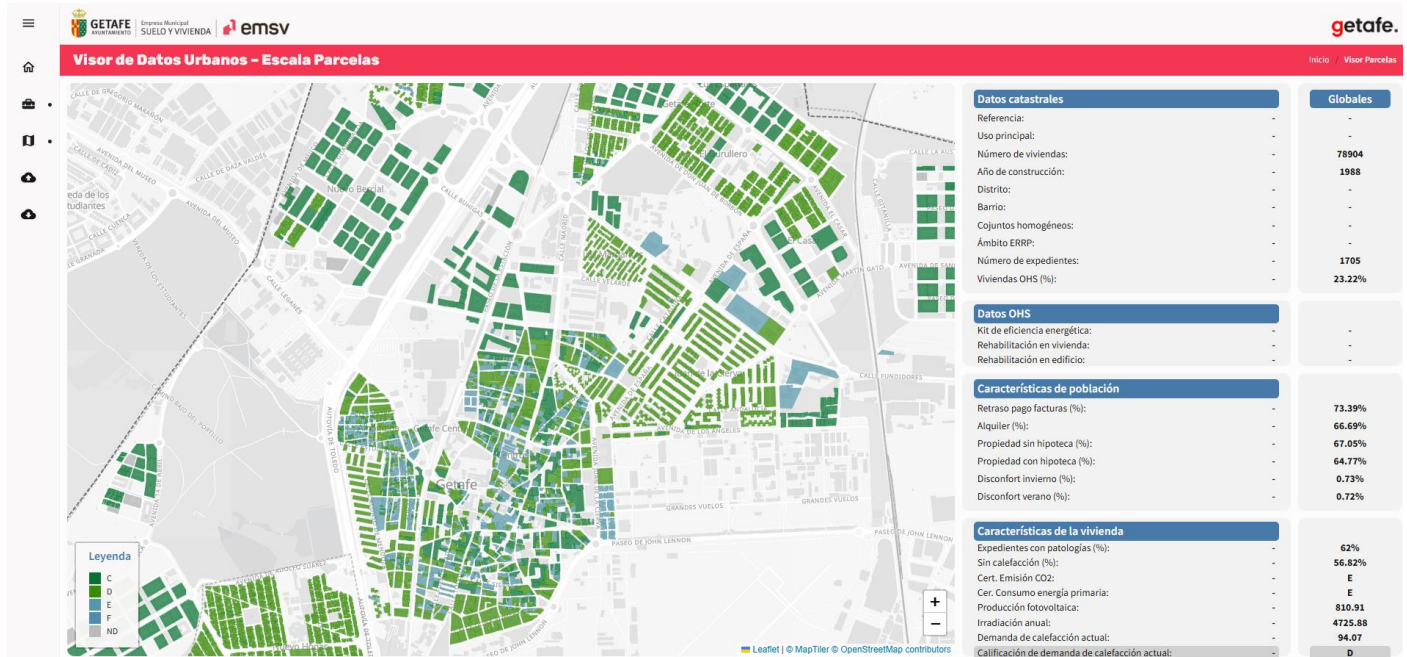
**Innovation environment** – From the outset, it was clear that addressing these challenges required a broad coalition of partners. To this end, a strategic partnership was formed, led by the [Getafe City Council](#) (GCT) and spearheaded by the [Empresa Municipal Del Suelo y la Vivienda de Getafe](#) (EMSV) – the public company responsible for municipal land and housing. The initiative was implemented with the support of seven key project partners – Carlos III University of Madrid (UC3M), Universidad Politécnica de Madrid (UPM), Environmental Science Association (ACA), Naturgy Foundation (FN), Red Cross (CR), Construction Labour Foundation (FLC) and Khora Urban Thinkers (KHORA). This partnership successfully secured EU co-funding under the [Urban Innovative Actions \(UIA\) programme](#), enabling the development and implementation of innovative solutions to combat energy poverty in Getafe.

In 2018 the [Spanish National Strategy against Energy Poverty 2019 – 2024](#) has just been adopted on the national level, while the [Community of Madrid Strategy for Social Inclusion 2016-2021](#) provided the regional strategic framework. Getafe also had an ambitious [Social Inclusion Plan](#) to determine its population's welfare in the different areas that determine inclusion and quality of life of citizens: housing, social services, education, health, etc. All stated strategies have been considered during the EPIU design period.

**EPIU ambitions** – The [Energy Poverty Intelligence Unit \(EPIU\)](#) project was implemented between 2019 and 2023 with the primary objective of reducing energy poverty (EP) by leveraging data science to identify hidden energy poverty (HEP), testing tailored solutions based on real end-user needs, and establishing a cross-disciplinary team to enhance public services related to EP. It aimed to transform administration towards a proactive and predictive model, recognizing that a reactive approach leaves out those who do not express needs.

**EPIU operational model** – In practice, the EPIU project focused on three main lines of action:

**UNDERSTANDING ENERGY POVERTY IN GETAFE:** To improve understanding of EP, the EPIU team collected and integrated all available data from multiple sources, including key national, regional and local databases from key institutions (e.g. Social Services, [PADRÓN](#) – National Statistics Institute, the Community of Madrid, [DATADIS](#) - Energy Distributors, etc.). This data encompassed information from various administrative and operational levels, incorporating both direct and indirect indicators of energy poverty. To analyse this extensive data, the team employed advanced data capture, analysis, and visualization tools, enabling a comprehensive and cross-sectoral [identification of hidden energy poverty \(HEP\)](#). This thorough diagnostic process provided valuable insights into how energy poverty manifests across Getafe and allowed for the classification of households, buildings, and neighbourhoods into distinct profiles based on their specific characteristics. This detailed segmentation was crucial for the design of tailor-made solutions that effectively addressed the unique needs of each identified profile.



**ATTENDING TO THE NEEDS OF CITIZENS IN GETAFE:** To attend to the needs of citizens in Getafe, EPIU project team [established a “Healthy Homes Office” \(HHO\)](#) – with the aim of reaching out to Getafe’s citizens with information on EP and advisory service how to address it. Its’ staff was trained through [an extensive capacity building process](#), focusing not only on the EP issues, but also on citizen management and support skills (e.g. how to reach out to citizen in EP and offer support, how to handle tough situations, how to recognize their complementary needs, how to connect to other services and experts, etc.). In the end, these are vulnerable people in sometimes complex situations, with limited capacities and often in grave need for help they do not know how to ask for. HHO staff provided [concrete advice on improving energy consumption and reduction of energy bills](#), gave-out EP relief packages (containing useful and easy-to-use household tools and appliances – e.g. LED lamps, monitoring devices, fans, insulation frouls, etc.), arranged home visits to understand the household specifics and proposed tailor-made solutions. With this they became “the face and the helping hand” of the City of Getafe.

This position also enabled them to build trust with citizen and start collecting voluntarily provided small level data – data about citizen that could help to improve EP profiles from the previous line of action. Through time they collectively created an important database of case examples, capable of supporting not only the monitoring of the situation in supported households, but also to further improve EP profiles and assess the impact of tailor-made solutions. HHO and its work was promoted through awareness raising events and by other key complementary municipal and external institutions in order to reach out to as many citizens as possible – subsequently creating a unique, well recognized and trusted one-stop-shop mechanism.



**ACTING AGAINST THE ENERGY POVERTY IN GETAFE:** To answer the question: “Which measures to implement?” the EPIU team developed [a catalogue of potential solutions](#), ranging from simple measures to complex building renovations, catering to the specific needs of different groups. Almost 80 energy efficiency measures were selected for the catalogue, all available on the market and economically accessible. They were developed on three levels – household, building and neighbourhood – and range from information, training and awareness measures to the reduction of the heat island effect, through passive measures to reduce energy demand, improve efficiency in air conditioning installations to the generation of renewable energy and collective photovoltaic consumption.

In the second step, the EPIU team considered that participatory processes should be accompanied by prior training, to ensure that decisions are based on informed proposals, initial data, and citizen feedback. Training was designed for municipal staff, [unemployed individuals, construction professionals](#), and the general public, following a structured learning pathway that identified the most relevant areas of knowledge for each group. As a result, workshops were conducted on topics such as energy efficiency and energy poverty, social vouchers, soft skills, social assistance methodologies, operational procedures, and technical capacity building, among others.

In the last step, the EPIU team carried out home/building visits to assess the situation and co-design best possible solutions for an individual household or a building. Refurbishment Guide and its Decision Trees were used as a tool to support this solution design process. On the neighbourhood scale two pilot interventions were designed with external experts – testing a bioclimatic square and a climate shelter. Low-cost interventions were implemented directly, while [household/building refurbishment works](#) were done through [public tenders to which eligible applicants could apply](#). To navigate this specific public procurement processes a Contracting Process Guide and Beneficiary Selection Process Guide were developed and tested in practice. This approach broke the tradition of monetary [aid to families in need](#), a usual approach in Getafe until this point, but rather ensured direct improvement of the living conditions with tailor made solutions.

The [impact of the second \(Attending\) and third \(Acting\) lines of action](#) was continuously measured, quantified, and evaluated. These insights were then treated as new data, valuable information, lessons learned, and actionable recommendations—all feeding back into the first line of action (Understanding). This iterative approach established a cycle of perpetual learning and continuous improvement, ensuring that:

- The EPIU Good Practice remains dynamic, adaptable, and data-driven.
- Future interventions build upon past experiences to become more effective and targeted.
- The overall strategy evolves in response to real-time insights, maximizing its impact on energy poverty mitigation.

In essence, EPIU was designed not as a static model but as an evolving process, continuously refining its approach to better serve the citizens of Getafe and beyond.

**EPIU project results** – The results of the EPIU implementation process can be summarized through the following quantitative indicators:

INDICATORS LINKED TO HHO SERVICES	
Number attracted households	1.920 households (18.3% of the population in the target areas)
Number of supported households	Within EPIU project = 1.370 until 2023 After EPIU project = 2.755 projected for 2024
Cumulative energy-linked savings of supported households	more than 600.000 €
INDICATORS LINKED TO INTERVENTIONS	
Homes rehabilitated individually	48
Homes with installed sensors	61
Energy efficiency kits delivered	81
Household/building audits	101
Buildings refurbished	8 (160 homes)
Neighbourhood interventions	2

However, as key aims of any innovation project are innovation, testing, learning – sometimes also hard lessons, but persisting in the pursuit for an effective solution – projects like EPIU should never be boiled down to just a few indicators. Instead, let’s explore EPIU’s learning curve and understand why it deserved [the title of a Good Practice](#).

EPIU project was designed and started being implemented as a “big data and AI driven project”. Everyone was expecting that AI modelling will be “the magic wand” which will deliver clear hidden energy poverty profiles, which will be used by the HHO to identify and address the most vulnerable communities and citizen. However, 1 year into the project the project team faced several unexpected barriers:

- Data collection proved to be an unexpectedly lengthy ordeal with many legal barriers and/or exposed unwillingness/inability of institutions to cooperate through data sharing, as this was never done before.

- Received data from various sources proved not to be interoperable. Furthermore, many databases existed only on paper or in scanned PDF versions and proved to be almost unusable.
- Ensuring GDPR and [implementing data protecting standards](#) proved to be contradictory with the need of AI models for as much data as possible in order to provide adequate quality answers the EPIU team was asking.

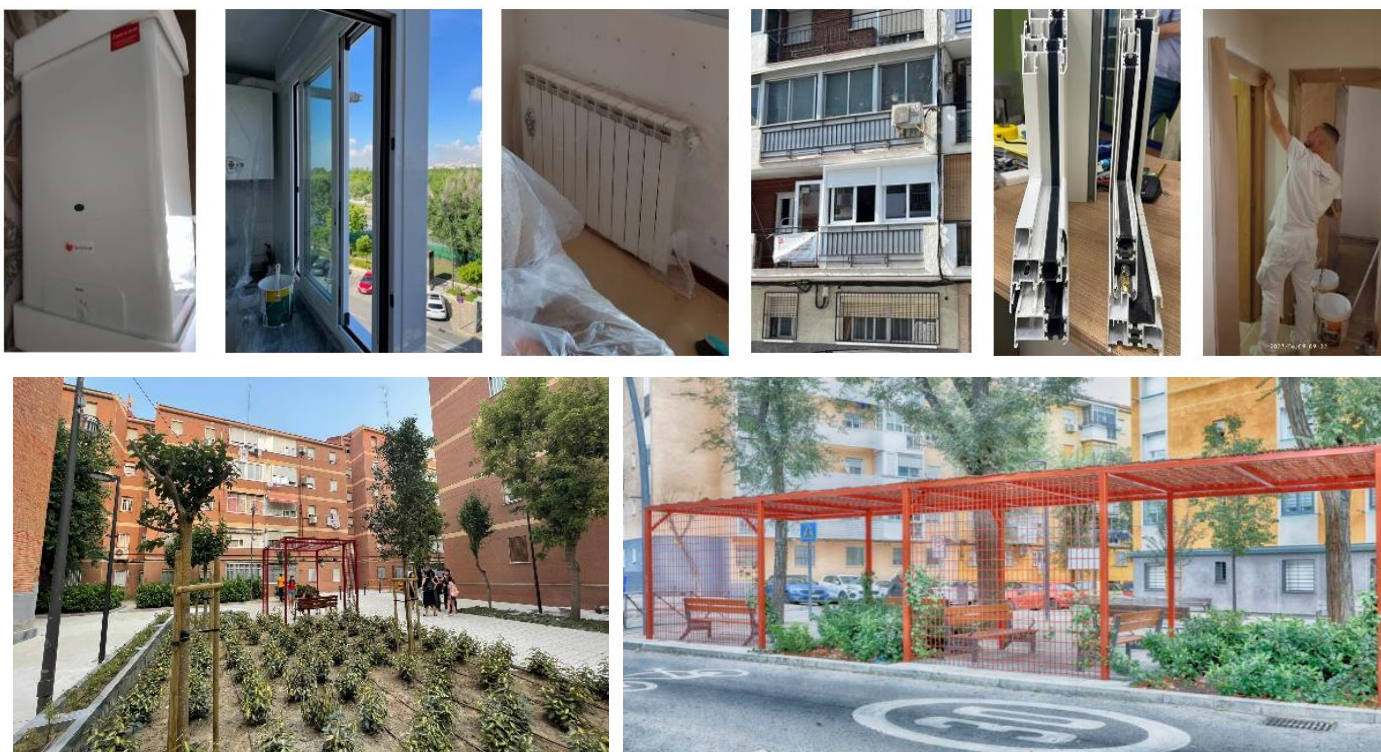
All stated barriers culminated in the realization that results from big data modelling, although a good idea in theory will simply not deliver expected results during the project lifetime. This forced the EPIU team to reconsider the overall project approach and design. They opted for an alternative solution, based on 2 key changes, that comprehensively transformed the character of the project:

- Firstly, the pursuit of using Big Data and AI for analysis was never abandoned. Periodically, as new data packages became available—whether from the service office, rehabilitation initiatives, or access to data platforms—the AI algorithm was applied to assess the quality of the existing database at that time. However, in all three attempts, the AI tool failed to produce usable conclusions. Despite this, the tool remains available to the university and can be used to reanalyse both existing and future datasets.
- Secondly, the HHO had to be redesigned to cope with new roles and expectations, effectively turning the EPIU project into a community driven project.

HHO was reinforced with additional staff, which went through an extensive training, already described in the EPIU operational model. At this point, it is important to emphasize the role that all other partners played in the reinforcement of the HHO and the valuable support they provided – especially with the implementation of tailor-made solutions. HHO also became the first “data-trap”, a mechanism for collecting small-data, provided by each citizen that came into the HHO. It was based on a straightforward logic – in order to understand your needs and address them through tailor-made solutions, we need to understand your situation and for that you need to provide us with some data.

Firstly, a more extensive questioner was formed, containing 256 questions. That proved to be “a bit too much”, as citizen neither knew all expected answers, neither had time or the willpower to deliver them. Through time a shorter questioner was developed, focusing on roughly 25 key questions. Based on received information HHO staff decided on the best course of action for an individual case.

Sometimes only soft measures – like advice on how to reduce household’s energy consumption (in average encoring savings of 20%) – proved to be enough. If not, HHO staff proposed a household visit that expanded the amount of available information, confirmed understanding of household’s needs and enabled planning of hard measures – like energy efficiency kits, small insulation improvement interventions, household focused construction improvements and in some cases even building refurbishment interventions.



Depending on the actual needs, HHO either provided advice, household/building audits, enabled limited household refurbishments (through an indispensable intermediary agent and professionals that the project hired for those renovations), or helped to design household/building refurbishment projects. In the last case EPIU project used

public tenders, available to a limited profile of potential applicants, to finance household/building refurbishment projects. This was a [novelty in city administration](#) and resulted in another good practice tool, tested and proven to be effective within the existing legal and operational system in Spain.

Furthermore, the EPIU project also implemented two neighbourhood level pilots. The EPIU-Margaritas Bioclimatic Square has been designed to [improve the climatic comfort](#) inside the nearby households by acting on squares and streets especially in hot weather. The first of a series of 'climate shelters' in large avenues, walking routes are facilitated during the hottest months was built in the Fatima-La Alhóndiga district – a point that locally mitigates the risk of overheating for road users.

Of course, the process of obtaining small data was a bit more complex than explained above. From the awareness rising and attraction of citizens to the HHO point of view, three key actions were implemented in parallel:

- ✓ The shift in communication was needed, as nobody wants to expose themselves as “being poor”. It is simply not acceptable and, in many communities, results in “a social stigma”. This is why the shift from the key word “energy poverty” to “healthy homes” was crucial to attract citizens to the HHO and its services.
- ✓ All awareness rising activities were linked to important local events and the on-going work of local community centres. This enabled “a stealth” introduction of the topic and non-invasive dissemination of all key information amongst Getafe’s citizens. However, these efforts were followed up by ensuring a constant presence of HHO staff in all community centre across Getafe – once a week for a few hours in each community centre, but enough to attract first citizens. This tapped into an unexpected potential – the “mouth-to-mouth” local community communication channel, as many neighbours of satisfied HHO clients started coming to the HHO, further reinforcing the citizen attraction efforts.
- ✓ EPIU staff quickly realized that the most important element of their work is gaining trust and building a relationship with their beneficiaries. That meant that “a client management approach was introduced, creating a safe and comfortable working environment in which both sides could communicate openly, while ensuring privacy. This enabled HHO to exploit another quickly recognized potential, this time on a municipal level – HHO staff often recognized other needs of households they were supporting. This is why HHO quickly reached out to other municipal departments and also external organizations (e.g. Red Cross), and agreed upon a referral system in which HHO would refer households to other support systems, while they would in turn do the same. This resulted in a very effective and crosscutting support system and amplified efforts to provide holistic support to households, regardless of their point of entry into the support system.

The ex-post analysis of the EPIU project revealed that the project, in addition to above presented indicators:

- ✓ Identified 28% of the population as affected by energy poverty.
- ✓ Decrease in the number of households unable to maintain their dwelling at an adequate temperature by 35%.
- ✓ Trained over 200 people with a high success rate, proven by 78-96% satisfaction score from trainees and 77% citizens satisfied with received support.
- ✓ Raised the level of cooperation between municipal services – 30.1% of HHO users were referred.
- ✓ Ensured that all tailor-made solutions were not only tested, but also prioritized, quantified and evaluated.

Testing of soft and hard measures resulted in the following conclusions:

- ✓ Beneficiaries exposed the HHO is a neuralgic point of the whole system, enabling all else to fall into its place. They also preferred advice and works as a concrete form of support over the usual subsidy support.
- ✓ Energy bill optimization was exposed as the most effective soft measure, followed by the energy kits. Both directly impacted citizen’s economic situations, while simultaneously improving living comfort and social life.
- ✓ On the household/building level, integral refurbishment should be considered a priority, but that partial refurbishment also achieves up to 35% impact at a lower cost. In this context widow replacements proved to be the most effective measure.
- ✓ On the neighbourhood it was concluded that well-designed spaces improve thermal comfort and quality of living spaces. Growth of plants in time is expected to further improve results.

While the EPIU project improved living conditions in many households, it also unexpectedly contributed to the increase in GHG emissions by 4.6%. This is explained by the fact that more households now actually use their heating. However, improving comfort conditions is much more determinant in the fight against energy poverty than reducing GHG emissions simply because the people cannot afford them.

**EPIU project afterlife** – The EPIU project itself has made significant efforts to ensure its continuity and enable the [EPIU project afterlife in Getafe](#). These efforts were recognized by Getafe’s City Council and the EMSV, who in 2023 and 2024 enabled:

- ✓ Integration of the HHO model in the EMSV as a permanent service – continuing with all services, leading calls for rehabilitation and promoting data-driven management.
- ✓ Implementation of projects such as solar photovoltaic installations in Getafe and continued delivery of energy kits to households in need.
- ✓ Continued evolution of AI modelling and dissemination tools like “the visor”.

- ✓ Improved the visibility of EPIU project results and impact by decision makers – subsequently contributing to the evolution of Getafe’s policies, enabling operational changes leading to improvement and consolidation of its local services.
- ✓ Continuously promoting mind-change and improved solutions. For example, Getafe is considering to replace some monetary subsidies with direct assistance for works, facilitating access to the most vulnerable families.

This also means that EPIU project results and outputs were up-scaled and to a large extent integrated into Getafe’s operational system, allowing Getafe to implement its solutions across the municipality.

However, In Getafe challenges related to energy poverty, housing quality, socio-economic inequalities, access to public services, and urban management persist. Energy poverty is still a

shared concern, with many households dedicating large portions of their income to energy bills. Latest research conducted by Madrid University emphasizes the importance of addressing energy poverty from the perspective of comfort, not only energy consumption and recognizes six energy poverty clusters or profiles to focus on.

Regarding housing conditions, most buildings in Getafe still lack energy efficiency due to their age, exacerbating energy poverty. While some buildings have been renovated, a comprehensive assessment of the current building stock is needed. Carlos III University of Getafe together with Polytechnical University of Madrid and EMSV are developing monitoring and simulation systems to improve energy efficiency at the building and neighbourhood levels. Socio-economic inequalities are also a challenge, as many low-income households cannot afford energy improvements, limiting their access to available assistance. EPIU has proposed assistance "in kind" to overcome this barrier, but its implementation requires regulatory changes at the local and national levels. This is why today many "available" interventions focus on middle income population with medium vulnerability, omitting the most vulnerable and higher income groups.

Despite reasonable access to basic public services, vulnerable individuals face difficulties with access. Coordinating mobility, health, education, and other services is crucial to effectively address energy poverty and improve living conditions. Urban management also faces challenges, especially in integrating energy efficiency policies and combating energy poverty in the planning and rehabilitation of existing housing. This requires close coordination among urban planners and overcoming regulatory and bureaucratic barriers.

All stated facts reflect the reality that although EPIU Good Practice delivered impressive results, there is a persistent need for its further evolution, up-scaling and mainstreaming – and Getafe understands that the EmPowerIngUs project is also a step in this direction.

**Development and operational costs** – It is important to highlight that the EPIU Good Practice was developed through the UIA mechanism, benefiting from substantial funding (nearly €5 million) and significant resources, including nine dedicated project partners and additional staff for implementation.

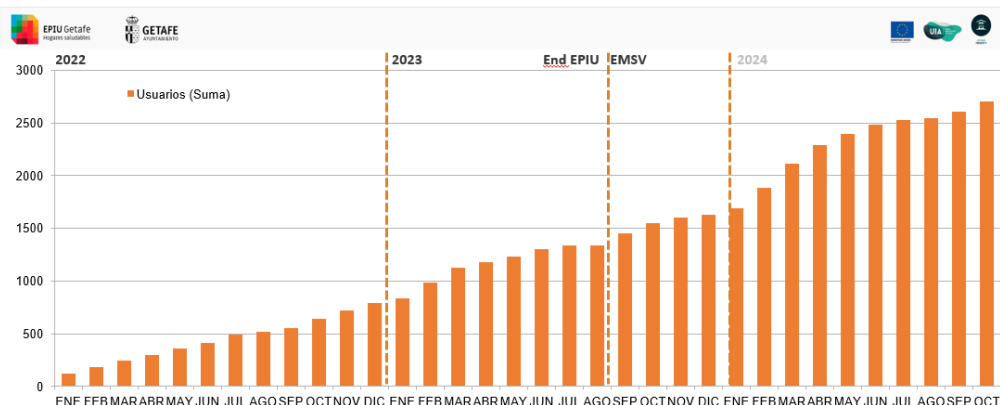
According to EMSV estimates, during the development of EPIU:

- Approximately €275,000 per year was allocated to staff costs, covering all services and awareness-raising activities, with an additional €60,000 spent on communication (promotional activities, materials, events, etc.).
- Around €100,000 was invested in big data collection and modelling.
- In total, the EPIU project allocated nearly €1.5 million to interventions, including:
  - Household level: ~€33,000 for small home interventions, ~€125,000 for larger home renovations, and ~€35,000 for self-production energy systems.
  - Building level: ~€525,000 for integral building works, ~€440,000 for partial building rehabilitation, and ~€35,000 for sensor systems in buildings.
  - Neighbourhood level: ~€250,000 for two urban cooling interventions.

For comparison, after the project ended (in 2023 and 2024), HHO continued its work with its own budget of approximately €300,000 per year.

## Integral service, evolution of users until today

Annual evolution of registered users (sum of registered users)



## EPIU LESSONS LEARNED AND TRANSFER PRECONDITIONS

All UIA projects are specific from the innovation point of view – they are living projects, in which in the pursuit of the initial objectives the possibility of new ones appears. Sometimes more valuable for the city than the original ones. This has also been the case with the EPIU project, which resulted in several important lessons learned that must not be overlooked in any transfer attempt.

**Strong leadership from public authorities:** Any project combining both social inclusion and energy transition concerns needs a well-defined and ambitious strategy. In this case, [Getafe's Mayoress advocates the "right to affordable, reliable, renewable and sustainable energy"](#) as a fundamental human right in any modern society. Such devotion is admirable, but also comes with concrete implications for policymakers, as it implies changes to regulations, communal services funding mechanisms, etc. – which are far from resolved and provide an important opportunity for further evolution of the EPIU good practice. Nonetheless, even without such forward-looking considerations, [strong political leadership](#) is one of key preconditions for any attempted transfer.

**Cross-departmental and collaborative working approach:** Too often public administration works only within the limits of its own silos – this is no news. Unfortunately, breaking this habit is one of key preconditions of the EPIU Good practice. By getting different municipal departments to work together, a transfer process will progress more efficiently and in the end result in a better service. Different municipal departments like social services, housing, consumer protection, health and emergency departments and others all benefitted from the EPIU project. Moreover, the EPIU project, especially its [HHO has proven to be the catalyst of collaborative working](#) – interestingly, the HHO that Getafe knows today has been both the cause and the consequence of such collaboration. One of its' more important side effects has been the development of a very successful direct referral system between the social services and the HHO, maximizing the impact of the support provided by the Municipality. Partnerships with external institutions also contributed to the successful up-take of specific knowledge (like IT skills, GDPR operational understanding, social and communications skills, etc.) from municipal staff and provided new long-term cooperation opportunities.

**Knowing who you are working for:** Cities need to clearly identify the categories of citizens they are providing service for, and what their needs are – creating so called profiles. Only by adopting such a user-centred focus can they design policies that will make a real difference for citizens, both at an individual household, building or neighbourhood level. The EPIU project's data analytics system, which combines statistical data from beneficiary surveys conducted by the project managers, feedback from the OHS, and data from Red Cross, enabled the design of an analytical and predictive model to identify vulnerable groups' needs. This in turn led to the design of tailored support – via the HHO – and subsidies for renovation and retrofitting – via the tailor-made solutions.

**Proactively creating data-traps:** To achieve the previous precondition and continuously improve and adapt profiles to the ever-changing reality, cities have to proactively look for or even create data-traps. Unfortunately, without data about end-users, EPIU teams will not be able to perform as expected. So, what is a data-trap? It is any situation in which the end-user is willing to provide information about his living conditions and needs in exchange for a service directed towards resolution of presented problems. Sometimes this can be as easy as making an appointment and talking to the end-user about household living conditions, habits and open issues in order to provide concrete advice. Sometimes it can be much more complicated than that. Nonetheless, any opportunity to create such situations cumulatively contributes to our in-depth understanding of energy poverty and will prove to be very valuable on the long run.

**Expect the unexpected and adapt:** As explained in the previous chapter, the EPIU project started out as "a big data and AI driven project", but ended-up being "a community driven project". The realization that big data is not "a magic wand" was a profound one and required a total re-shift of project dynamics during its implementation. This was only possible due to a truly devoted project partnership, able to understand the unexpected barriers, be flexible but persist in their pursuit for the best solution, and adapt. This lesson alone turned the EPIU project into a good practice we are describing on these pages.

**Finding the right mix of soft and hard solutions:** Once we know who we work for it is time to search for most suitable solutions. Although investing in renovation and retrofitting is key, it is not enough to alleviate energy poverty, especially when energy prices are increasingly rising. Getafe has also invested in hard infrastructure by installing small and medium-scale passive solutions. It has also provided support to residents with their consumption and bills and other measures like energy audits, energy efficiency kits, use of smart sensors to monitor and reduce energy consumption, supply cut management, etc. Proving that it is the right mix of legal, financial, administrative and technical support that is most effective for vulnerable citizens.

**The key role of the HHO and its staff:** We have already mentioned the pivotal role the HHO played in the EPIU Good Practice success, and any city attempting to transfer the good practice should not underestimate it. If EPIU project proved anything, it proved that people always work with people, not with institutions. It is extremely

important to reach out to energy poverty affected citizen with the right mixture of understanding, investigation, expert support, but most importantly respect and empathy. This is a really unique skillset that is hard to find in any administration, which is why cities attempting the transfer should invest in proper training of their HHO staff.

## EPIU GOOD PRACTICE MODULARIZATION

In order to make the EPIU Good Practice more structured and easily transferable to transfer cities it was divided into segments or modules – essentially structural or content parts of the good practice. Below you can find so called “good practice modules” (representing key segments of the good practice), as well as key development steps leading towards successful transfer of an individual module. Due to the character of the good practice, as well as the design and expectations of the ITN transfer process, 3 types of modules were introduced:

- Good practice set-up modules – modules designed to set-up key GP specific operational mechanisms.
- Service development modules – modules representing potential full scale GP operational capacities.
- Up-grade modules – modules representing further evolution of the GP itself after EPIU project closure.

GOOD PRACTICE MODULES		GOOD PRACTICE DEVELOPMENT STEPS		
GOOD PRACTICE SET-UP	Active partnership establishment and cooperation with stakeholders	1) EPIU project partnership management / 2) Identification and mobilization of key stakeholders / 3) Building enthusiastic atmosphere and providing support on regular meetings / 4) Identification of individual stakeholder goals, capacities and preparedness for cooperation / 5) Definition of a yearly action plan, roles and responsibilities / 6) Guidance in yearly action plan implementation		
	Encouraging and improving cooperation within city administration	1) Definition of key administration departments/sectors and their roles / 2) Gaining operational support / 3) On-going communication with city administration (briefing -potentially on weekly/monthly basis in order to keep CEOs informed and involved) / 4) Developing new activities for energy poverty reduction with integration into the strategic urban context / 5) Identifying opportunities for synergies / 6) Strengthening political support		
	Development of baseline studies	1) Definition of types of neighbourhoods per key characteristics / 2) Energy poverty study / 3) Urban heat island study		
	Big data collection and AI modelling	1) Big data collection and preparation - all exiting and relevant local/regional/national data on the topic of energy poverty / 2) Data-lake creation / 3) AI model transfer, adaptation and application / 4) AI modelling result sharing & publication / 5) AI modelling lessons learned sharing & publication		
	One-stop shop establishment and testing	1) Hiring or reallocating existing staff to the one-stop shop / 2) Full-scale energy poverty training of key personnel / 3) Ensuring adequate facilities and funds for its testing / 4) Defining types of data and method of its collection from citizen / 5) Announcement and promotion of testing activities / 6) Collection of own data through surveys with creation of profiles / 7) Reporting on testing activities results / 6) Data-lake improvement		
	Awareness raising	1) Identification of target groups / 2) Communication and awareness rising strategy / 3) Development of communication tools (e.g. web site, social networks, local news, etc.) / 4) Regular publication of news and contents, giving interviews, etc. / 5) Organization and implementation of regular consultations, yearly awareness rising and promotional events, exhibitions, lectures, etc.		
	One-stop shop refinement	1) Optimizing one-stop-shop operational model and standard operating procedures based on lessons learned from the testing period / 2) Ensuring adequate facilities and funds for its long-term operation / 3) Up-take of the one-stop-shop into municipal social support systems as a new service		
SERVICE DEVELOPMENT	One-stop-shop services (soft measures) on three levels	<b>Households</b> 1) Reception of users, data collection and itinerary 2) Accompaniment, energy optimization and habits 3) Coordination and monitoring	<b>Buildings</b> 4) Building visits and data collection 5) Publishing a call for beneficiaries to co-finance solutions 6) Coordination and monitoring	<b>Neighbourhoods</b> 7) Meetings with neighbourhood entities 8) Identification of necessities 9) Participated improvement proposals
	Third party solutions (Hard measures) on three levels	<b>Households</b> 1) Diagnosis: socio-energy audits 2) Home scale Decision trees 3) Cross-validation between measurements reflected in the audit and results of the decision trees. 4) Solution execution: Public procurement/execution by a third party	<b>Buildings</b> 5) Diagnosis: Preliminary building reform project 6) Building scale Decision trees 7) Cross-validation between measurements reflected in the preliminary project and results of the decision trees. 8) Solution execution: Public procurement/execution by a third party	<b>Neighbourhoods</b> 9) Diagnosis: Multivariable diagnosis of public space 10) Coordination with City involved Council Delegations 11) Methodology of intervention & definition of actions 12) Solution execution: Public procurement/execution by a third party
UP-GRADE	Improved AI modelling	1) Further improvement of AI big data analytics for hidden energy poverty profiling / 2) Using this data for improved of hidden energy poverty identification / 3) Development of a Standard Operating Procedure for the controlled use of the “EPIU data-lake” / 4) Identification of new opportunities for “EPIU data-lake” use for city administration		
	Energy communities	1) Creating local partnerships / 2) Identifying best possible locations / 3) Acquiring all necessary permits & funding / 3) Establishing first Energy Communities / 4) Learning from them and exploiting any upscaling potentials		

## SCOPE FOR IMPROVEMENT

Getafe's Urban Agenda 2030 is guiding its urban development and transformation towards a sustainable and equitable future. This strategic framework, in a context of energy poverty, creates a solid basis for developing and implementing effective actions that contribute to improving the living conditions of inhabitants and moving towards a more sustainable and resilient future.

In 2023, Getafe adopted a comprehensive retrofitting strategy for 24 homogeneous priority groups, with support from the EU and other entities. In addition, the project promoted an urban agenda that integrates the fight against energy poverty as a main focus, complemented by artificial intelligence for decision making.

The URBACT transfer methodology—Understand, Adapt, and Reuse—strongly aligns with Getafe's approach to inter-urban cooperation. Getafe is committed to sharing the EPIU Good Practice, testing its transferability to other cities, and actively learning from the feedback provided by dedicated transfer cities. This mutual learning process will enable a critical external review of the EPIU Good Practice, provide insights into potential adaptations and different solutions developed by transfer cities and deliver a deeper understanding of EPIU, leading to its further evolution.

The selection of partner cities was guided by insights from the ex-post evaluation of the EPIU project, ensuring a strong potential for mutual learning:

- **MAIA:** Selected due to its low-emission communities' strategy, active role in citizen participation and neighbourhood-scale renovations based largely on improving the efficiency of the residential environment.
- **TRIKALA:** Known for its strong track record in data systems and platforms, owning the knowledge and experience that can greatly contribute to continuous improvement in data analytics and governance.
- **ETTERBEEK:** Recognized for its successful implementation of housing improvement projects in cooperation with vulnerable groups, offering valuable insights into energy efficiency measures and social partnerships.
- **POMORIE:** Has a strong background in community work, providing expertise in addressing policy challenges related to vulnerable and migrant groups.

However, not all improvement ideas rely on knowledge exchange with transfer cities. As Getafe is actively and continuously improving the EPIU Good Practice, it has identified the following own ideas for further improvement:

- Further improvement of AI big data analytics for hidden energy poverty profiling and identification of new opportunities for strengthened municipal interdepartmental cooperation and [exploring new synergies](#).
- Development of a Standard Operating Procedure for the controlled use of the "EPIU data-lake" – respecting all data protection standards and requirements, while allowing city administration to exploit improved governance and sustainability opportunities.
- Development of Energy Communities as a tool for collective self-consumption and subsequent reduction of energy poverty.
- Upscaling EPIU solutions and their expansion to all 11 Getafe neighbourhoods.

The **Getafe Continuity Plan** will integrate all three pillars of the EPIU project but will place particular focus on the neighbourhood scale, where the ex-post evaluation highlighted areas for improvement. Getafe will:

- Actively participate in learning activities.
- Maintain a learning log, like other partners, to inform its Continuity Plan.
- Actively pursue own improvement ideas.
- Explore opportunities to upscale EPIU, extending its impact to other parts of the city.

Getafe will use the EmPowerIngUs project results to further strengthen the position of the HHO and implementation of its' urban renewal strategy – ensuring that the EPIU methodology, tools and hybrid social-structural-technological approach will be continued. By closely observing the transfer progress and engaging in dynamic knowledge exchange, Getafe will ensure that EPIU remains an adaptive, evolving model, capable of addressing urban energy poverty challenges across Europe and supporting the shift towards the 21<sup>st</sup> century administration.

Getafe views the EmPowerIngUs project as a unique opportunity to build a "coalition of the willing" around its Continuity Plan and aim for the next evolutionary step of EPIU. To strengthen this effort, the project partnership has decided to add an additional transnational meeting to its list of activities. This meeting will be centred around the Energy Poverty International Conference and will take place in June 2026 during the European Sustainable Energy Week. By aligning with this high-profile event, the conference aims to leverage EU-level attention, showcase the results and ambitions of the EmPowerIngUs project, and extend an open invitation to other European cities to join a collective call for action and the joint pursuit of funding opportunities.

### **2.4 The EPIU Good Practice Overall Transfer Potential**

EPIU good practice addressed hidden energy poverty affecting low-income families, the elderly, migrants, young families and other vulnerable groups and marked a significant advancement in urban innovation and social **EmPowerIngUs** – Transferability Study

inclusion. Its methodologies and outcomes are aligned closely with the EU's priorities on sustainable urban development, climate neutrality, and social inclusivity, underlining its relevance and potential for replication in diverse urban contexts across Europe. The actual process of the EPIU good practice development was not so long – roughly 3 years. However, we must point out that it was developed through the UIA programme – meaning a very supportive and favourable environment. The situation in transfer cities might be quite different, subsequently prolonging the time for its full transfer.

#### **Key advantages of the EPIU good practice:**

- + The EPIU project has made significant efforts to ensure its replicability and transferability.
- + It offers a comprehensive solution to tackling energy poverty, while also allowing for modular (partial) transfer.
- + It has been tested, redesigned based on lessons learned, and re-tested – proving its ability to adapt to unforeseen circumstances, deliver concrete results, and evolve over time.
- + From an operational perspective, it is adaptable to almost any cultural environment or mindset.
- + It can be transferred to cities on different starting points, particularly those with already existing systems to address energy poverty.
- + It has the potential for territorial expansion and could easily overgrow its city-focus.
- + It is designed to raise awareness, build trust, and bridge the gap between the city and its citizens.
- + The methodology linking needs and solutions can be modified to serve other types of issues.
- + It can foster interdepartmental synergies, transform public services, and help cities transition towards a modern 21<sup>st</sup>-century administration.

#### **Key disadvantages of the EPIU good practice:**

- It is inflexible regarding its core principles and its One-Stop Shop mechanism – without it, it would not function.
- It requires substantial political and operational support, making it a top-down approach that is vulnerable if not fully integrated into a city's social services support system.
- To fully realise its potential as a 21st-century public service, it requires proactive interdepartmental cooperation, access to high-quality and interoperable databases, and established data protection protocols – challenges even Getafe, as the owner of the EPIU Good Practice, is still working to overcome.
- It demands an interdisciplinary and multi-skilled team (or a well-coordinated network of key stakeholders) that undergoes specialised training to implement its full range of services – making highly trained staff dependent.
- Implementing its Big Data and AI modules requires long-term collaboration with external, highly specialised partners, complicating data protection concerns.
- Considerable time and effort must be invested in citizen outreach, awareness-raising, and trust-building.
- Once trust is established, the service cannot simply be discontinued or scaled back, as this could lead to a “boomerang effect” and resentment from citizens – it should not be treated as a one-off project.

Based on the available information, we can conclude that while the EPIU Good Practice is strict in its core principles, it remains reasonably flexible and adaptable in most aspects of its operational model. City visits have demonstrated that it can be successfully applied in cities with various starting conditions, particularly those with pre-existing systems for addressing energy poverty.

The key to its success lies in the fundamental recognition that it represents a new type of public service – one capable of delivering outstanding results and gaining strong acceptance within the community, provided it is effectively communicated, continuously implemented in close cooperation with beneficiaries, and integrated into the city's social support system (or at least closely linked to it).

As a result, any city looking to transfer the EPIU model must secure substantial political, operational, and financial backing, as well as ensure strong collaboration with both internal and external partners. Additionally, certain elements may require specific adjustments to the legal framework, while its core elements often require modifications of existing operational and social structures to unlock its full potential. While modular (partial) transfer is always possible, this would inevitably come at the cost of its overall effectiveness.

However, this analysis should be seen as a caution rather than a deterrent for cities considering the transfer of the EPIU good practice. For cities serious about tackling energy poverty, EPIU offers a clear, tested, and proven pathway to success, along with an extensive list of effective services, operational solutions, and practical tools.

**All stated makes the EmPowerIngUs good practice reasonably transferable, especially for cities aiming to address the energy poverty seriously, or for cities looking to upgrade their already existing public service systems with proven solutions. Receiving support from transfer mechanisms like URBACT ITN or innovation mechanisms like EUI could prove to be crucial for ensuring a financially strong, operationally stable and supportive environment for successful full-scale transfers of the EPIU good practice across Europe. Ultimately, the greatest challenge lies in ensuring its long-term sustainability, making it essential for any transferability strategy to address this issue effectively.**

### 3. PARTNER PROFILES

#### 3.1 EmPowerIngUs Project Partnership Composition

EmPowerIngUs project partnership was composed through a transparent selection process based on expression of interest, local context and transfer motivation description questionnaires and on-line interviews with cities interested to transfer the EPIU Good Practice. In the end, cities of Maia (Portugal), Etterbeek (Belgium), Trikala (Greece) and Pomorie (Bulgaria) were selected.

Stated transfer cities were selected out of the pool of over 40 interested cities – not only because they expressed a clear need for the EPIU Good Practice transfer, but also because they demonstrated pre-existing actions and own concepts of dealing with energy poverty, ensured adequate political and operational support for the transfer process and had previous experience with EU projects. Furthermore, they presented interesting own approaches, methods or concepts that were recognized as potential drivers of further EPIU Good Practice evolution, as well as passion for long-term commitment to energy poverty related issues.

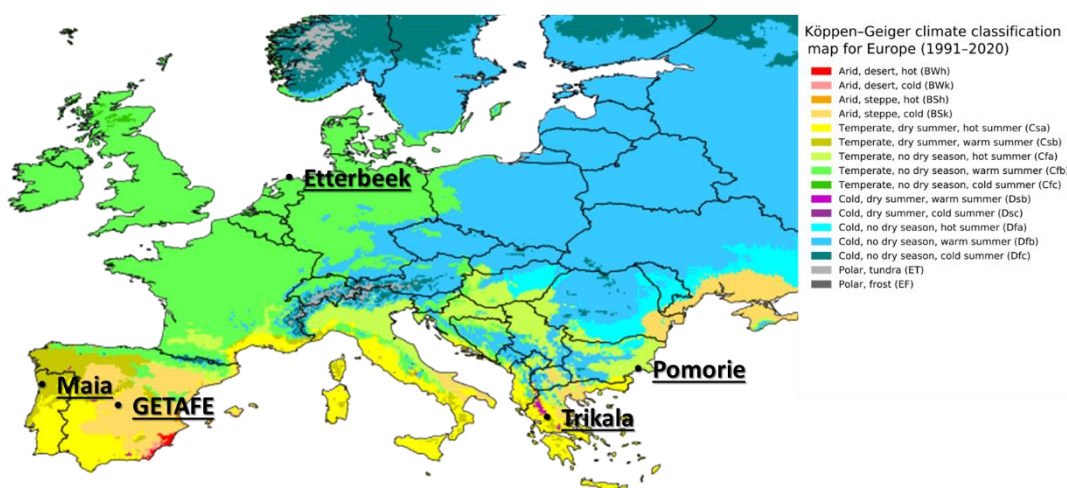


Some already have existing systems addressing energy poverty, while others are at the start of their journey. Of course, this represents an additional challenge for the Lead Partner. However, it also allows EmPowerIngUs project to achieve both aims already set-up in the application – to transfer the GP from Getafe to other cities, as well as to up-grade the GP itself based on fresh ideas from other cities.

City	Country	Partner Org. Type	Population	Climate Type
<b>Getafe</b>	Spain	Municipal Public Company	191.560	BSh – Dry Semiarid (Steppe)
<b>Maia</b>	Portugal	Municipality	134.977	Csb – Costal Mediterranean
<b>Trikala</b>	Greece	Municipal Development Agency	83.805	Csa – Interior Mediterranean
<b>Pomorie</b>	Bulgaria	Municipality	15.230	Cfa – Humid Subtropical
<b>Etterbeek</b>	Belgium	Municipality	49.877	Cfb – Maritime Temperate (Oceanic)

The geographical composition of the partnership allows the EmPowerIngUs project to explore transferability potentials under diverse climatic conditions, as well 5 different cultural, operational and legal set of conditions to address energy poverty issues. This is important as urbanist solutions, type of building and their capacity to withstand cold/heat extremes, existing public systems or a lack of them all depend on specific climate conditions and adaptation to them.

Furthermore, all selected cities have developed different coping mechanisms to deal every increasing climate change, as well unstable economic and/or energy supply conditions. This diversity will also enable Getafe to learn from transfer cities and further evolve the EPIU Good practice – thus improving its robustness, durability and transferability.



Source: Beck et al. (2023): High-resolution (1 km) Köppen-Geiger maps for 1901-2099 based on constrained CMIP6 projections. Scientific Data 10:724. doi:10.1038/s41597-023-02549-6.

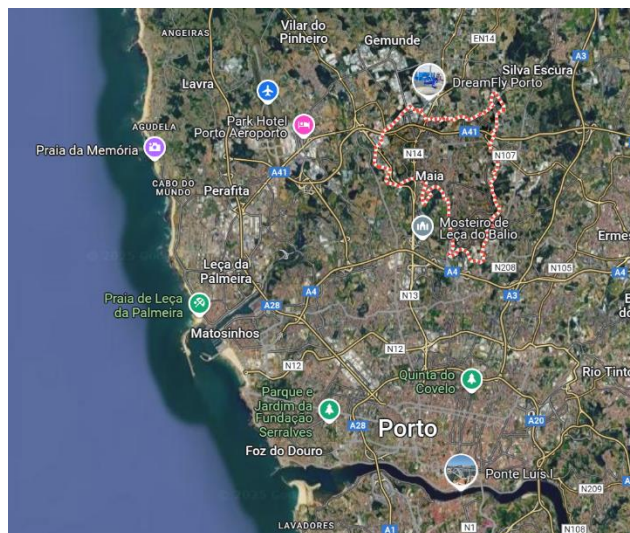
## 3.2 Transfer City Profile – Maia

### TRANSFER CITY DESCRIPTION

Municipality of Maia is a part of the NUTS II Northern Region and the Porto Metropolitan Area. It is located 11 km north of central Porto, occupies the area of 82,99 km<sup>2</sup> and is further divided into 10 parishes. It occupies a “intermediate” position between the Atlantic coast and the interior Municipalities of the Porto Metropolitan Area, covering the lower part of the Leça River basin. The majority of its territory lies below 100 meters above sea level.

According to the population census carried out in 2021, Maia has 134.977 residents and a population density of 1.627,2 inhabitants/km<sup>2</sup>. On average, Maia is characterized as a young and vital municipality.

Maia's climate is characterized by relatively low annual temperature variations, with hot summers and mild winters. Summer temperatures range from 14°C to 23°C, while winter temperatures vary between 6°C and 13°C. The region experiences consistently high humidity and significant precipitation throughout most of the year, with an annual rainfall accumulation of 1,212 mm. December records the highest rainfall, while July sees the lowest. According to the Köppen climate classification, Maia's climate falls under the “Costal Mediterranean climate”. In recent years, the Municipality of Maia has experienced several extreme weather events, primarily characterized by excessive precipitation leading to floods, high temperatures and heat waves, storms and strong winds.



<b>Partner Institution</b>	Municipality of Maia, Praça Dr. José Vieira de Carvalho, 4474-006 Maia
<b>Region &amp; Country</b>	Northern Portugal / Porto Metropolitan Area, Portugal
<b>City Area (in ha)</b>	8.299 ha
<b>No. of Citizen</b>	134.977
<b>Climate Type</b>	Csb – Costal Mediterranean
<b>Employment by sectors</b>	Primary 17,5% / Secondary 22,0% / Tertiary 29,4% / Quaternary 31,1%
<b>Current unemployment rate</b>	8,7 %
<b>Main energy sources</b>	Electricity, natural gas, oil
<b>Av. year. income per household</b>	11.914 €
<b>Av. year. energy costs per household</b>	751 € electricity + 300-400 € natural gas/electricity for heating
<b>Key building stock energy linked challenges</b>	Poor energy efficiency of buildings; absence of heating or air conditioning installations; low incomes combined with unstable energy markets
<b>% of the population affected by energy poverty</b>	Energy Vulnerability Index Municipal: Maia 0,195
<b>Jurisdiction over the whole City Area</b>	Yes

Maia benefits from a unique geostrategic location, enabling very good connectivity, high quality of service and a set of important economic relationships, at regional, national and international level. Subsequently, Maia is best known for its strong industrial image where industry, innovation and new technologies, constitute an example of a prosper development economic. It has around 20,000 companies and is one of the most industrialized municipalities in the country. Maia has become, in recent years, one of the most attractive municipalities, which has resulted in business growth rates of around 20%. In 2021 Maia was the most exporting municipality in the Porto Metropolitan Area (14,6% of the AMP total) and the 2<sup>nd</sup> in the North region (1.846 mil. €).

In 2022, residents of Maia recorded a median gross income, after deducting the IRS paid, of 11.914 €. However, an average family in Portugal can spend around 750 € for electricity and another 300 to 400 € for heating annually. These values are estimated for moderate consumption households, not including changes due to changes in prices throughout the year, which are influenced by several factors, such as market supply and applicable taxes. Electricity is still widely used as the main source of energy (57,4% in 2020), with increasing emphasis on renewable energy (e.g. heat pumps, solar panels...). Natural gas and oil are also often used, primarily for heating.

In Maia there are almost 60.000 households in over 26.000 buildings. About 77% of all residential buildings in Maia in 2021 were buildings with 3 floors, while those with up to 6 floors represent 17% of the total building stock – representing the predominant building typology. Majority of buildings were built in the period from 1960 to 2000 and are under increasing the need for their repair and up-grade. Majority of citizens are owners or co-owners of their dwellings, with the average occupancy of 2-3 people per dwelling.

Many buildings in Maia, especially older ones, were built without considering energy efficiency, which results in inadequate thermal insulation. Over 15.000 households (25%) in Maia have no type of heating, while over 25.000 (42%) rely solely on non-central heating methods. On the other hand, over 46.000 households (76%) do not have air conditioning. This means that these homes cannot heat themselves or lose a lot of heat in the winter, while heating-up excessively in the summer, leading to high electricity consumption to maintain habitable conditions.



## LOCAL CONTEXT AND AMBITIONS

Maia started tackling the energy transition already in 2014 through the Sustainable Energy Action Plan. Most relevant local strategies are based on the “National Long-Term Strategy for Combating Energy Poverty 2023-2050” which aims to eradicate energy poverty in Portugal by 2050. In 2024, Maia has developed the [Maia City Vision for 2050](#), a new sustainable strategic framework leading Maia towards a sustainable, inclusive and integrated city based on the digital transformation and energy transition - Inclusive Renewable Energy Communities being one of supported solutions.

Today, key Maia’s energy poverty challenges are linked to poor energy efficiency of the exiting building stock, absence of heating or air conditioning, low household incomes resulting in difficulty to pay energy bills and preventing citizens to strive towards planed energy transition.

Maia’s ambition is to use the Sobreiro, one of the first social housing neighbourhoods built in Maia, as their “urban laboratory” for tackling energy poverty. It consists out of 498 homes, all of which require significant energy improvements. The EmPowerIngUs project is expected to allow Maia to learn from the innovative solution and be more effective in ongoing energy related projects such as the ongoing rehabilitation project in the Sobreiro neighbourhood which aims to reduce energy consumption by 51% and reduce CO<sub>2</sub> emissions by 45%in selected buildings. Three other neighbourhoods were identified as “next in line” and can also be addressed. As Getafe just launched its first renewable energy community, Maia’s transfer team also recognized the unexploited potential of many industrial zones and plans to use the EmPowerIngUs project to reach out to them and explore such private-public cooperation opportunities.

## KEY GOOD PRACTICE TRANSFER CHALLENGES

Maia has so far attempted to address energy poverty issues through several initiatives like [1st Right](#), [BaZe – Living Lab Maia](#), [Sparcs](#) or [EHHUR](#) – all addressing the issue from a unique perspective, but none of them holistically. Moreover, the [Maia Energy Hub](#) represents a unique opportunity. It could be used as corner stone on which an EPIU-like one-stop-shop could be built. Maia also plans to apply for Citizen Energy Spaces, an initiative funded by the national Environmental Fund that fosters active community participation in the energy transition. This presents a valuable opportunity to drive the growth of the Maia Energy Hub, building on the knowledge gained from the EmPowerIngUs project. By creating synergies, this initiative will further strengthen the municipality’s commitment to sustainability and social innovation. However, there are concrete challenges that need to be addressed for a successful transfer:

- To “demystify energy poverty” and change the perception of the general public.
- To the raise awareness about benefits of the “green and sustainable” Maia, improve collaborative culture, reduce the city-citizen gap and achieve the much-needed mind-shift.
- To prove that sustainable solutions can contribute to improved living conditions of citizen.
- To improve interdepartmental cooperation within the city administration and establish new working patterns.
- To train staff, implement all testing activities and gain an in-depth understanding about needed modifications.
- To collect all available relevant data on energy poverty in Maia, test its accessibility & interoperability and explore existing efforts of external partners to address big-data and AI modelling.
- To understand the up-grade potential of exiting initiatives to address the energy poverty issue in Maia.

- To achieve internal understanding and agreement how to best address the energy poverty issue in Maia.
- To integrate the energy poverty issue into the long-term local strategic framework.
- To learn from the EmPowerIngUs transfer process and all its partners in order to design a concrete Investment plan as a sound foundation for a follow-up project, aiming to deliver a full transfer of the EPIU GP.

To overcome them, Maia plans to benefit from Getafe’s knowledge, experiences and lessons learned and to modify already proven solutions to Maia’s needs. However, EPIU transfer process is not a “copy-paste” exercise. In order to search for needed modifications an initial SWOT analysis was conducted by Maia’s transfer team:

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>+ Several local strategies and action plans that address the energy transition from different perspectives</li> <li>+ On-going urban rehabilitation carried out in the Sobreiro Housing</li> <li>+ Active involvement of research institutions</li> <li>+ Cross-disciplinary work team</li> <li>+ On-going development of a platform with energy data</li> </ul>	<ul style="list-style-type: none"> <li>– Low level of trust of deprived communities towards institutions</li> <li>– Low citizens’ participation in energy-efficiency programs, weak collaborative culture and poor private-public participation</li> <li>– Low degree of energy efficiency of buildings, equipment, etc.</li> <li>– Lack of integrated efficiency for city regulations</li> <li>– Low degree of RES penetration in the local energy grid</li> <li>– Lack of public and private financial and technical resources</li> <li>– Scarcity of information provided by some stakeholders</li> <li>– Lack of energy poverty issues connected local level data</li> <li>– Low average incomes of citizen</li> <li>– Joint building management schemes are not working at all – new regulation is needed to improve the situation</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>✓ Existing participatory co-creation sessions</li> <li>✓ Active involvement of the Sobreiro Community Centre</li> <li>✓ Existing Maia Municipality service desk (Energy Hub)</li> <li>✓ Previous experience in attracting EU/national/regional co-funding</li> <li>✓ Existing funding opportunities</li> <li>✓ MAIA Smart City – ISI data collection platform</li> <li>✓ MAIA University already working on the data lake</li> </ul>	<ul style="list-style-type: none"> <li>• Difficulty in accessing interoperable and precise data from reliable sources, for the necessary analyses, especially in the field of energy</li> <li>• Lack of access to the best available technologies, considering the use of renewable energy sources, their availability and storage capability</li> <li>• Lack of human resources and experts with specialized technical and ICT skills, data science, data analyses, social innovation and soft skills</li> <li>• Lengthy procurement processes, especially considering the level of knowledge needed due to innovative aspects of the EPIU Good Practice</li> <li>• Lack of long-term commitment from private sector partners</li> <li>• Data protection – non existing mechanisms</li> </ul>

Additionally, the city visit revealed the following assets and barriers that Maia brings to the transfer process:

IMPORTANT TRANSFER ISSUES	ASSETS	BARRIERS
<b>Political support</b>	<ul style="list-style-type: none"> <li>+ Existing political support</li> <li>+ Willingness to pursue long-term goals</li> </ul>	<ul style="list-style-type: none"> <li>– Community resistance to green city development due to poor understanding</li> </ul>
<b>Operational support</b>	<ul style="list-style-type: none"> <li>+ Existing multidisciplinary team to support integrated actions between different departments</li> <li>+ Interdepartmental recognition of the need to act</li> <li>+ Existing energy poverty initiatives that can be upgraded (e.g. Porto Energy Hub, DECO, etc.)</li> <li>+ Already recognized &amp; mobilized key stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>– Limited internal human resources to address integrated actions</li> <li>– Poor data availability &amp; GDPR limitations</li> <li>– Lack of specific skills within administration</li> <li>– Bureaucratic obstacles and delays in decision-making processes</li> </ul>
<b>Project management capacities</b>	<ul style="list-style-type: none"> <li>+ Existing and experienced project team with previous EU project implementation experiences</li> </ul>	<ul style="list-style-type: none"> <li>– Limited skilled internal human resources</li> </ul>
<b>Financial capacities</b>	<ul style="list-style-type: none"> <li>+ Own budget and already recognized funding opportunities (e.g. NORTE 2030, ENTi, EHHUR...)</li> </ul>	<ul style="list-style-type: none"> <li>– Own budget financial limitations</li> </ul>

## STAKEHOLDER AND TARGET GROUPS ANALYSIS

As the EPIU Good Practice is based on the principles of close internal cooperation between key city administration departments, proactive cooperation with key stakeholders, and has a high dependency on effective awareness raising of key target groups, it is even more important for transfer cities to fully understand who their key stakeholders and target groups are and what to expect from them.

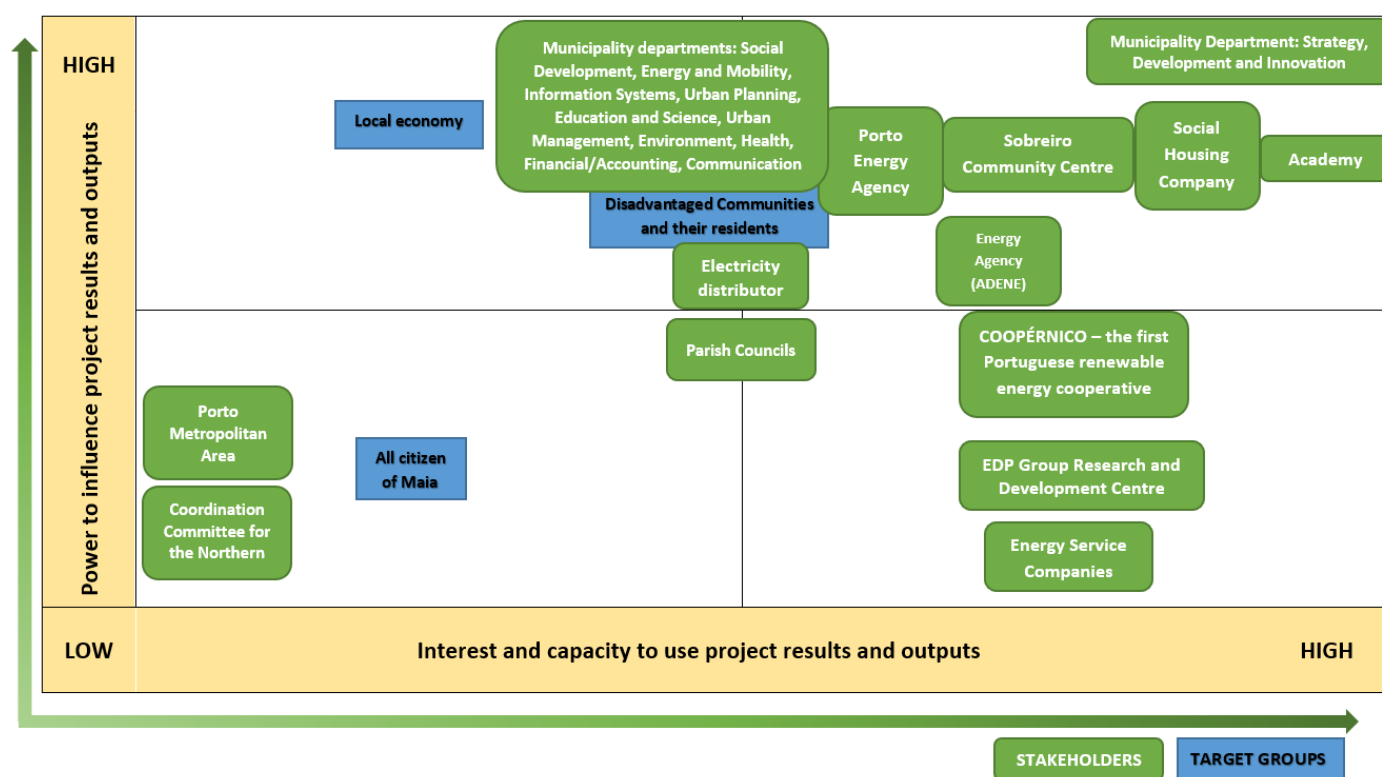
In order to mobilize them, inform them about the EmPowerIngUs project, and fully understand their interests, capacities and ambitions, the first ULG meeting was held with their representatives during the Maia city visit. The workshop was well visited by an interesting mixture of relevant municipal departments, public companies, community centres, academia, researchers, etc. Participants actively contributed to the discussion about existing challenges and potential solutions and agreed to continue working on this important cross-cutting issue. Visits to Social Housing Company, Sobreiro Community Centre and several potential pilot areas were carried out during the



Maia city visit to gain in-depth understanding of the local context, as well as to consider various transfer process options for Maia.

Based on workshop discussions and conclusions, as well as previous cooperation experience the following Analysis of Stakeholders and Target Groups was developed by the Maia project team:

### EmPowerIngUs – Preliminary Analysis of key Stakeholders and Target Groups



It paints a clear “Interest & Capacity vs. Influence Power” picture of the current situation in Maia, as well as expected URBACT Local Group (ULG) composition. We expect that, at least in the beginning, mostly above stated stakeholders will get actively involved in the ULG.

To conclude, the ULG structure is (from the perspective of GP transfer) is clear and sound. Initial enthusiasm of ULG members is present and the ULG is practically formed. Due to the nature of the EPIU Good Practice, we believe that the current composition already provides a good mix of key stakeholders to achieve Maia’s ambitions and goals for the EmPowerIngUs project. However, drawn from Getafe’s experience, we can expect some shifts in mindset, increased willingness to “take on a more active role” through time, as well as some new ULG members, which might be recognized at later stages (e.g. industrial stakeholders). Thus, Maia’s ULG should stay flexible and willing to add new ULG members, if necessary. The main challenge for the ULG coordinator at this point is ensuring the initial enthusiasm translates to concrete cooperation during the EmPowerIngUs transfer process.

### THE VISION BEHIND THE GOOD PRACTICE TRANSFER

Maia recognized in the EmPowerIngUs project a clear opportunity to transfer the knowledge and experiences from Getafe in order to support and up-grade already existing initiatives (e.g. Porto Energy Hub, DECO, etc.) with new approaches, tools and possible solutions. Maia also recognized that energy poverty is in its essence a transversal challenge that needs to be addressed holistically. This is why Maia’s team plans to focus on testing the one-stop-shop and small data gathering concepts and train key staff members to carry out the testing, on improvement of interdepartmental cooperation and awareness raising of citizens on the topic of energy poverty. Furthermore, Maia aims to mobilize local businesses, research institutions, energy providers, and community organizations to co-develop sustainable, data-driven solutions. Encouraging private sector involvement will also enable the municipality to explore new funding mechanisms, innovative business models, and long-term partnerships to enhance energy efficiency initiatives. Results of all stated efforts will guide the development of Maia’s Investment Plan.

On the other hand, Getafe recognized several of Maia’s own good practices (e.g. Sobreiro local community centre, University Data Lake...) and plans to join forces with Maia and Trikala on big data and AI modelling upgrade of the EPIU Good Practice itself. More detailed description of good practice transfer modules selected by Maia and the overall transfer methodology is provided in the Transfer Potential Assessment chapter.

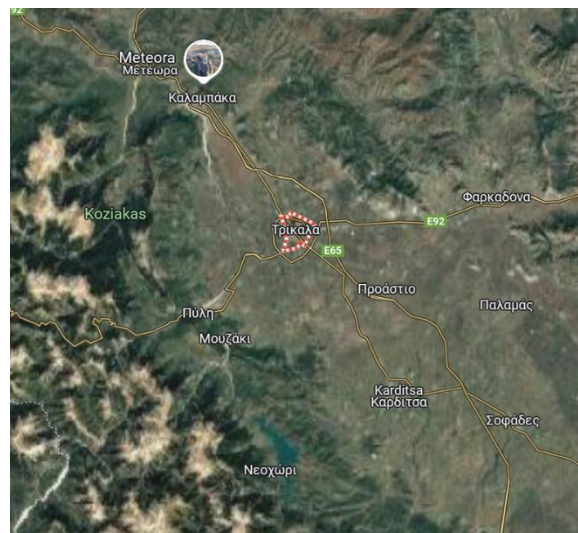
### 3.3 Transfer City Profile – Trikala

#### TRANSFER CITY DESCRIPTION

Trikala is situated in the Thessaly region of central Greece. It lies at the foothills of the Pindus Mountain range, which is part of the larger Greek mountain system. The city is surrounded by picturesque landscapes, including hills, valleys, and rivers. The river Lithaios runs through the city, adding to its scenic beauty. Trikala is one of the major cities in the Thessaly region and is well-connected in terms of transportation. It is easily accessible by road or rail, providing connections to other parts of Greece.

The Municipality of Trikala was formed in 2011 with the merger of 8 previously independent municipalities, which became municipal units. Trikala occupies 2.700 ha of territory and had in 2021 78.605 inhabitants. Due to rural surroundings the area of the municipality is not densely populated with 39,2 inhabitants/km<sup>2</sup>, while the urban part of Trikala is with 2.935 inhabitants/km<sup>2</sup>.

Due to its location, Trikala experiences the Interior Mediterranean climate (Csa). This means that the wider region enjoys hot, dry summers and mild, wet winters. The average annual temperature in Trikala is around 15.2°C. Summers can get quite hot, with July being the warmest month, averaging around 27°C. Winters are relatively mild, with January being the coldest month, averaging about 4.3°C. Trikala receives an average annual rainfall of approximately 903 mm. The wettest month is December, while July is the driest month. Humidity levels vary throughout the year, with the highest relative humidity in December (78.56%) and the lowest in July (42.60%). The city enjoys a good amount of sunshine, especially in the summer months. Overall, Trikala's climate is characterized by significant seasonal variations, making it a region with distinct summer and winter conditions.



<b>Partner Institution</b>	e-Trikala SA, Valkanou 6 str, Trikala, 42100
<b>Region &amp; Country</b>	Thessaly, Greece
<b>City Area (in ha)</b>	2.700 ha
<b>No. of Citizen</b>	78.605
<b>Climate Type</b>	Csa – Interior Mediterranean
<b>Employment by sectors</b>	Primary 21,4% / Secondary 13,2% / Tertiary 32,8% / Quaternary 32,6%
<b>Current unemployment rate</b>	19,6%
<b>Main energy sources</b>	Electricity, natural gas, oil
<b>Av. year. income per household</b>	10.800 €
<b>Av. year. energy costs per household</b>	2.710,37€ electricity cost and 23,22€ gas cost. 2.733,59€ Total energy cost per household.
<b>Key building stock energy linked challenges</b>	Poor energy efficiency of buildings; ageing infrastructure and outdated devices used for heating
<b>% of the population affected by energy poverty</b>	Estimated at 5.500 inhabitants as beneficiaries of the “Social Electricity Pricelist”, that is, 7% of the total population.
<b>Jurisdiction over the whole City Area</b>	Yes

Trikala's economy is diverse, with industries such as agriculture, manufacturing, and services playing important roles. The city also serves as a commercial hub for the surrounding rural areas, facilitating trade and business activities. The city itself has a rich history, dating back to ancient times. It was an important centre during the Hellenistic and Roman periods and has many historical landmarks and archaeological sites to explore. The area's historical significance attracts tourists interested in exploring Greece's ancient past.

In 2021, the administrative disposable income per household in Trikala was €10,800. Meanwhile, the energy costs outlined in the table primarily reflect electricity expenditures. The relatively low gas costs suggest that most households rely predominantly on electricity for heating and other energy needs.

Trikala's housing stock is largely composed of buildings constructed before 1990, which lack modern insulation and energy efficiency measures. The city consists mainly of single-family homes and multi-story apartment buildings, with older structures being the most common. Energy-efficient buildings are scarce, and many multi-unit residences require substantial renovations to enhance their energy performance. While homeownership is widespread, the rental market is also significant, with many low-income tenants struggling to afford energy-efficient upgrades. Heating systems are often outdated, relying primarily on electricity and oil, while limited access to air conditioning exacerbates extreme summer temperatures, leading to high energy consumption and costs. Few energy-efficient improvements have been implemented, and smart energy solutions remain largely unadopted.



## LOCAL CONTEXT AND AMBITIONS

The City of Trikala is steadfast in its commitment to achieving climate neutrality by 2030 as part of the [EU Mission for 100 Climate Neutral and Smart Cities](#). To implement this mission, Trikala prepared the [Climate City Contract](#) – a roadmap comprising commitments, an action plan, and an investment strategy – and is actively implementing it. Even before that, the Municipality has made significant strides in aligning with EU and national climate policies, adopting documents like Sustainable Energy and Climate Action Plan 2021 – 2030, Energy Transition Strategy 2022 – 2030 and Smart City Strategic Plan.

Within the last Plan, Trikala has designed several key climate change mitigation/ GHG reduction measures and initiatives, all respecting the principle of sustainable and participatory and place-based urban development, as well as received funding from the Recovery and Resilience Facility Instrument. Within this context it plans to ensure energy retrofitting of municipal buildings and improvement of their energy efficiency, promote sustainable energy sources (e.g. solar power plant), improve smart city infrastructure, etc. – thus, providing a unique opportunity to benefit from knowledge transfer within the EmPowerIngUs project.

Today, key Trikala’s energy poverty challenges are linked to poor energy efficiency of the existing building stock, low household incomes in combination with high energy prices – resulting in difficulty to pay energy bills and preventing citizens to strive towards planned energy transition. Trikala is actively working to combat energy poverty by implementing measures to improve the energy performance of buildings. This includes establishing an office dedicated to addressing energy poverty, encouraging energy-efficient practices, raising awareness and promoting new opportunities like energy communities. Trikala is also implementing various projects under the Trikala 2030 Strategy, focusing on energy retrofitting of municipal buildings and promoting renewable energy. Trikala’s ambition is to leverage Getafe’s experiences, insights and solutions developed to better understand and tackle the energy poverty, while implementing above stated actions.

Having strong track record in data systems and platforms and a clear commitment to proactive data-driven solutions, Trikala seems to be a natural partner for Getafe’s ambitions to up-grade the EPIU Good Practice. Furthermore, as Getafe just launched its first renewable energy community, Trikala’s transfer team also recognized the potential to use the EmPowerIngUs project to reach out to key stakeholders and explore such private-public cooperation opportunities.

## KEY GOOD PRACTICE TRANSFER CHALLENGES

However, there are concrete challenges that need to be addressed for a successful transfer:

- To reduce the stigma of energy poverty, change the perception of citizens and mobilize them for action.
- To improve interdepartmental cooperation within the city administration and establish new working patterns.
- To train staff, implement all testing activities and gain an in-depth understanding about needed modifications.
- To collect all available relevant data on energy poverty in Trikala, test its accessibility & interoperability and explore opportunities to further develop big-data and AI modelling and use it to address energy poverty.
- To understand the up-grade potential of existing initiatives to address the energy poverty issue.
- To understand household, building and neighbourhood level intervention solutions and understand how they can be used to improve already on-going projects in Trikala.
- To improve the collaborative culture with external stakeholders, reduce the city-citizen gap and build the willingness to explore new funding opportunities and public-private partnerships.
- To learn from the EmPowerIngUs transfer process and all its partners in order to design a concrete Investment plan as a sound foundation for a follow-up project, aiming to deliver a full transfer of the EPIU GP.

To overcome them, Trikala plans to benefit from Getafe’s knowledge, experiences and lessons learned and to modify already proven solutions to Trikala’s needs. However, EPIU transfer process is not a “copy-paste” exercise. In order to search for needed modifications an initial SWOT analysis was conducted by Trikala’s transfer team:

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>+ Strong strategic framework</li> <li>+ Ability to exploit synergies with other programs</li> <li>+ Recently established municipal Energy office</li> <li>+ Existing initiatives aimed at reducing energy consumption and promoting energy efficiency (Energy4all, Climate Neutrality Hub...)</li> <li>+ National Programmes' support for the reduction of static energy and building efficiency (ELECTRA)</li> <li>+ Cross-disciplinary and experienced work team</li> <li>+ Strong track record in data systems and platforms and a clear commitment to proactive data-driven solutions</li> </ul>	<ul style="list-style-type: none"> <li>- High initial costs for implementing energy efficient technologies in buildings</li> <li>- Dependence on external funding to implement solutions</li> <li>- Limited awareness to citizens despite efforts</li> <li>- Low level of trust of deprived communities towards institutions</li> <li>- Low citizens' participation in energy-efficiency programs and weak collaborative culture</li> <li>- Low energy efficiency of buildings, equipment, etc.</li> <li>- Low average incomes of citizen and reduced ability to act</li> <li>- No precise register of energy poverty in the municipality and limited data availability</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>✓ Advances in technology for smart energy systems and renewable energy</li> <li>✓ EU funding opportunities</li> <li>✓ Cooperation among local organizations (stakeholders)</li> <li>✓ Community engagement by involving its residents in energy-saving programs and energy communities</li> <li>✓ Existing Trikala's Smart City solutions and data interoperability solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in national and EU policies</li> <li>• Economic instability can reduce funding of energy projects and widen the vulnerable groups</li> <li>• Climate change impacts (severe extreme weathers) can change the city's priorities for energy infrastructures and resources</li> <li>• High unemployment rates and economic instability</li> <li>• Data protection – non exiting mechanisms</li> </ul>

Additionally, the city visit revealed the following assets and barriers that Trikala brings to the transfer process:

IMPORTANT TRANSFER ISSUES	ASSETS	BARRIERS
<b>Political support</b>	<ul style="list-style-type: none"> <li>+ Existing political support</li> <li>+ EU Mission of 100 Climate Neutral &amp; Smart Cities</li> <li>+ Covenant of Mayors</li> </ul>	/
<b>Operational support</b>	<ul style="list-style-type: none"> <li>+ Existing multidisciplinary team to support integrated actions between different departments</li> <li>+ Existing energy poverty initiatives that can be upgraded (e.g. Municipal Energy office, etc.)</li> <li>+ Already on-going complementary projects</li> </ul>	<ul style="list-style-type: none"> <li>- Limited internal human resources</li> <li>- Lack of specific skills within administration</li> <li>- Poor data availability &amp; GDPR limitations</li> </ul>
<b>Project management capacities</b>	<ul style="list-style-type: none"> <li>+ Existing and experienced project team with previous EU project implementation experiences</li> </ul>	<ul style="list-style-type: none"> <li>- Limited skilled internal human resources</li> </ul>
<b>Financial capacities</b>	<ul style="list-style-type: none"> <li>+ Own budget and already recognized funding opportunities (e.g. Climate City Contract, Recovery and Resilience Facility...)</li> </ul>	<ul style="list-style-type: none"> <li>- Own budget financial limitations</li> </ul>

## STAKEHOLDER AND TARGET GROUPS ANALYSIS

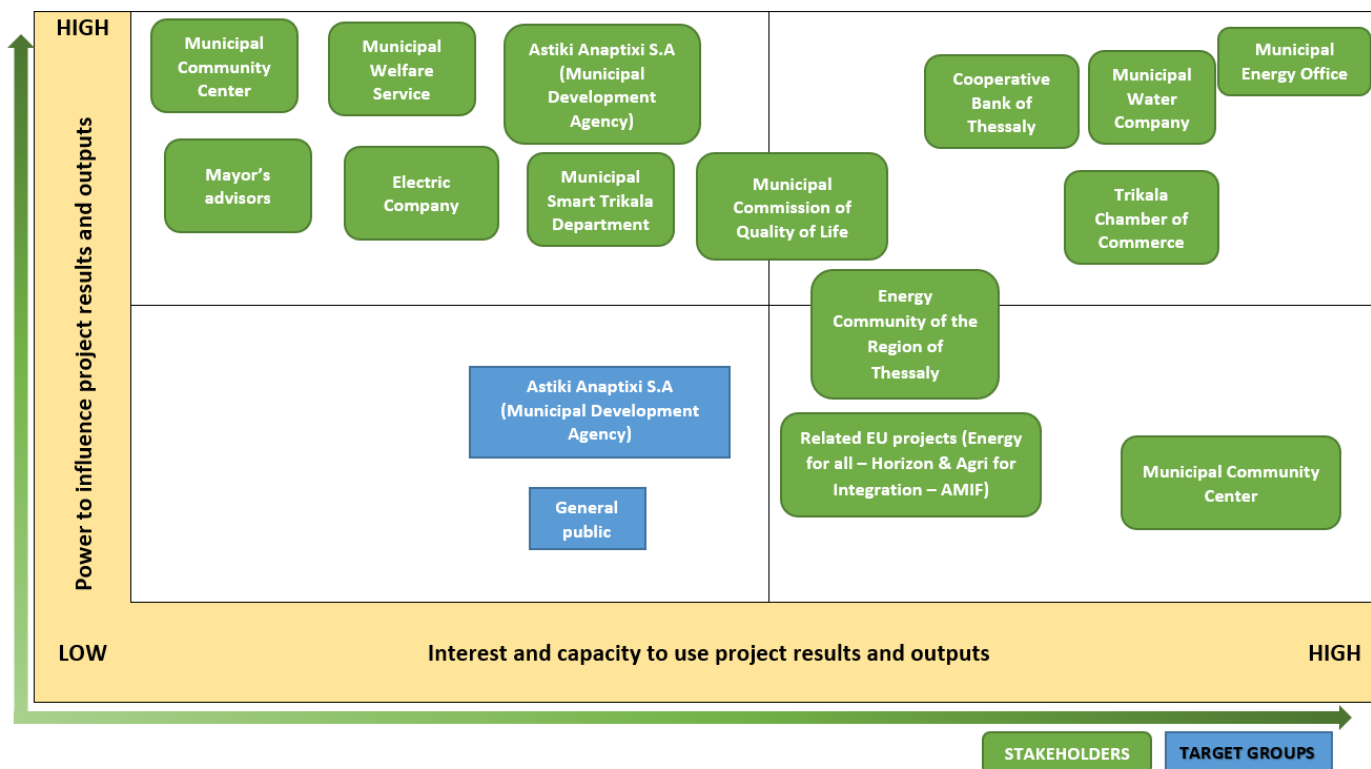
As the EPIU Good Practice is based on the principles of close internal cooperation between key city administration departments, proactive cooperation with key stakeholders, and has a high dependency on effective awareness raising of key target groups, it is even more important for transfer cities to fully understand who their key stakeholders and target groups are and what to expect from them.



In order to mobilize them, inform them about the EmPowerIngUs project, and fully understand their interests, capacities and ambitions, the first ULG meeting was held with their representatives during the Trikala city visit. In contrast to other transfer cities, Trikala organized the ULG meeting in a dispersed form. This means that it was executed through a series of bilateral meetings with individual ULG members. Cumulatively, the ULG meeting was attended by a mixture of relevant municipal departments, public companies and agencies. Participants actively contributed to the discussion about existing challenges and potential solutions, with specific focus on one-stop-shop, big-data solutions and potentials of energy communities. They were all invited to continue working on this important cross-cutting issue with the Trikala's transfer team. A visit to the Public Water Company and Smart Trikala office were carried out during the Trikala city visit to gain in-depth understanding of the local context, as well as to consider various transfer process options for Trikala and up-grade options for Getafe.

Based on workshop discussions and conclusions, as well as previous cooperation experience the following Analysis of Stakeholders and Target Groups was developed by the Trikala project team:

### EmPowerIngUs – Preliminary Analysis of key Stakeholders and Target Groups



It paints a clear “Interest & Capacity vs. Influence Power” picture of the current situation in Trikala, as well as expected URBACT Local Group (ULG) composition. Since we did not meet all listed stakeholders, we expect that the majority of above listed stakeholders will get actively involved in the ULG.

To conclude, the ULG structure (from the perspective of GP transfer) is clear and sound and the ULG was already formed during a meeting preceding the city visit. Due to the nature of the EPIU Good Practice, we believe that the current composition provides a good mix of key stakeholders to achieve Trikala’s ambitions and goals for the EmPowerIngUs project. However, drawn from Getafe’s experience, we can expect some shifts in mindset, increased willingness to “take on a more active role” through time, as well as some new ULG members, which might be recognized at later stages. Thus, Trikala’s ULG should stay flexible and willing to add new ULG members, if necessary. The main challenge for the ULG coordinator at this point is ensuring the initial willpower to act translates to concrete cooperation during the EmPowerIngUs transfer process.

### THE VISION BEHIND THE GOOD PRACTICE TRANSFER

Trikala sees energy poverty as part of the broader efforts towards sustainability and social inclusion. This is why its main objective is to develop the investment plan to tackle energy poverty, and focus its actions towards improving the energy efficiency of the households, in synergy with the actions which will be implemented through the Climate City Contract, as a part of Trikala’s participation in the EU Mission of 100 Climate Neutral & Smart Cities. Getafe’s knowledge, experiences and lessons learned will be used to test and implement an effective one-stop-shop solution, train key staff and start collecting small scale data, as well as exploit own knowledge and solutions linked to big-data and AI modelling for the upgrade of the EPIU Good Practice itself. More detailed description of good practice transfer modules selected by Maia and the overall transfer methodology is provided in the Transfer Potential Assessment chapter.

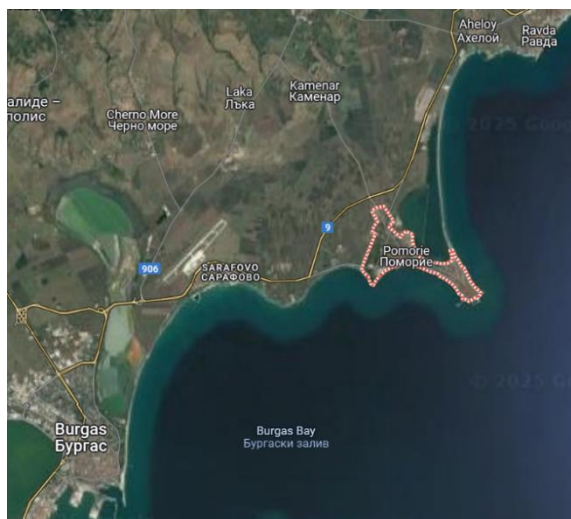
### 3.4 Transfer City Profile – Pomorie

#### TRANSFER CITY DESCRIPTION

The city of Pomorie is located on a narrow, rocky peninsula, inserted 3.5 km into the Black Sea, on the northwest coast of the Burgas Bay. From the south, east and northeast, the city is surrounded by the sea, from the north - by Lake Pomorie. Over the millennia, the configuration of the terrain has changed, which is why the settlement has also changed its location. The sea coast is low, sandy, with an open horizon to the east and west, protected to the north by Stara planina. Pomorie is an ancient city and today is an important tourist destination.

Pomorie is the Municipality administrative centre. In 2024, 15.230 people lived in the city. It is the third largest city on the Bulgarian Black Sea coast after Varna and Burgas. Pomorie enjoys convenient transport links to other cities and resorts. Burgas Airport is just 8 km away, while the proximity of Sunny Beach and the regional centre of Burgas enhances opportunities for leisure and entertainment. The waters of Pomorie Bay are a preferred location for sailing regattas, and the pier is accessible to amateur fishermen. Alongside traditional local industries such as viticulture, winemaking, salt production, and fishing, tourism and its associated activities are shaping the modern economic identity of Pomorie. Thanks to its natural resources, including iron-rich (magnetite) sea sand and the unique healing mud from Pomorie Lake, the city offers a range of distinctive wellness and tourism attractions. These include healing mud and rapa (lake water) from Pomorie Lake, known for their therapeutic properties; Pomorie salt pans and their by-products, renowned for their health benefits and Saline mineral water, a highly concentrated, naturally occurring resource unique to the region.

Pomorie also benefits from a unique microclimate, characteristic of Bulgaria's Black Sea coast, which creates ideal conditions for viticulture and winemaking. The city has a long-standing tradition in this field, dating back to 1932 with the establishment of its first modern winery, Pomorie. Today, the winery operates as part of Black Sea Gold, one of Bulgaria's most renowned winemaking enterprises. Over the years, it has received numerous national and international awards from prestigious competitions. The region is known for producing high-quality dry white and red wines, including Dimyat, Muskat, Chardonnay, Merlot, and Cabernet Sauvignon.



<b>Partner Institution</b>	Municipality Pomorie, 8200, City Pomorie, 5 "Solna" street
<b>Region &amp; Country</b>	Burgas Bulgaria
<b>City Area (in ha)</b>	6.0452 ha
<b>No. of Citizen</b>	15.230
<b>Climate Type</b>	Cfa – Humid Subtropical
<b>Employment by sectors</b>	Primary 21,8% / Secondary 18,1% / Tertiary 49,4% / Quaternary 10,7%
<b>Current unemployment rate</b>	8,0%
<b>Main energy sources</b>	Wood, diesel, methane gas and electricity
<b>Av. year. income per household</b>	8.337,89 €
<b>Av. year. energy costs per household</b>	1.840,68 €
<b>Key building stock energy linked challenges</b>	Poor energy efficiency of buildings; ageing infrastructure and outdated devices used for heating
<b>% of the population affected by energy poverty</b>	N.A.
<b>Jurisdiction over the whole City Area</b>	Yes

Pomorie has a Humid Subtropical climate (Cfa) with maritime and continental influence. Climatic conditions are favourable with continuous sunshine up to 2.360 hours per year. Due to the slow cooling of the sea water, autumn is warm and long. Snowfall is minimal (snow lasting only 5-7 days). The average summer air temperature reaches 23 °C in July and August, with maximum daily temperatures above 20 °C occurring until November. In the winters, the continental influence is evident, but much milder when compared to the interior of the country. The average air temperature in winter drops to 1.7 °C in January. The average annual air temperature is 12.5 °C.

In 2019, there was 8.452 residential buildings in Pomorie. Vast majority were built in the period between 1960 and 1990, although in the last decade new important investments were realized in Pomorie, improving the housing stock situation. Like in the rest of Bulgaria, majority of the existing housing stock in Pomorie is in private ownership. Municipal dwellings in Pomorie account for only 154 buildings or 0.2% of the housing stock. Residential buildings predominantly have low energy efficiency characteristics, leading to energy-intensive heating systems, with high energy losses, outdated installations, etc. Multi-family residential buildings are occupied by a large percentage of

citizens. The units are not centrally heated. Recently, some private homes have been renovated with energy efficiency measures, but without a previous audit, which prevents to provide a real picture of savings. Between 2014 and 2020, 8 multi-family residential buildings were financed by the National Programme for Energy Efficiency of Multi-Family Residential Buildings and put into operation. With funding from the Operational Programme 'Regions in Growth' 2014-2020, energy efficiency measures were executed in 3 other residential buildings.



Another specific of Pomorie is its summer tourist city character. During the summer season, when more than 100,000 tourists arrive in Pomorie, attracted by the tranquillity of the city, well-built infrastructure and clean beaches, the number of the population increases several times. There is strong investment interest in the construction of residential buildings, particularly in Pomorie itself, where properties are located along the coast. These coastal buildings serve not only as permanent residences but also as tourist accommodation during the summer months. The demand for holiday properties is notably high, with a growing trend of buyers preferring standalone residential buildings rather than properties within holiday complexes. This preference is largely driven by the desire for year-round access, as many summer complexes impose seasonal restrictions and often close for certain periods, particularly during the winter months. In recent years, the number of apartment-style hotels has increased, largely due to the area's tourism appeal. However, a significant portion of the housing stock is intended for seasonal use, and Pomorie has a considerable number of unoccupied dwellings during the winter months, some of which are of substandard quality.

There is no available data on energy poverty for Pomorie. However, if we take in the account relatively low yearly income of an average household and combine it with poor energy efficiency of the residential buildings, we cannot deny the existing vulnerability to energy poverty. Furthermore, climate change is becoming an important issue – in the case of Pomorie especially in summer time when heat waves make the life of the vulnerable groups significantly more difficult. They lack appropriate cooling systems or can't afford to pay their energy consumption bills.

## LOCAL CONTEXT AND AMBITIONS

Pomorie has developed several relevant local strategies: Municipality Integrated Development Plan 2021-2027, aiming to increase energy efficiency in multi-family residential buildings, to provide better living conditions for citizens, thermal comfort and higher quality of living environment; Long-term energy efficiency program, linked to the National Energy Efficiency Act, focuses on energy savings and reducing energy costs; and the Long-term program to promote renewable energy and biofuels.

Pomorie's key energy poverty challenges are linked to poor energy efficiency of the existing building stock and low household incomes resulting in difficulty to pay energy bills and preventing citizens to strive towards planned energy efficiency. To implement all stated plans and address exposed issues, Pomorie is already implementing energy efficiency measures, linked to energy efficiency refurbishments of existing housing stock, which contribute to a higher level of energy efficiency, reduced energy costs and improve the performance of buildings.

Other important city specific challenges Pomorie is facing are the lack of energy poverty relevant data and mechanisms to collect them, lack of existing municipal services to identify and fight against energy poverty, as well as poor collaboration culture. This is why it is Pomorie's ambition to benefit from Getafe's knowledge and experience to establish an energy poverty one-stop-shop. This mechanism, coupled with a high-quality Investment Plan, will provide a unique opportunity that Pomorie plans to fully exploit.

## KEY GOOD PRACTICE TRANSFER CHALLENGES

However, there are concrete challenges that need to be addressed for a successful transfer:

- To reduce the stigma of energy poverty, change the perception of citizens and mobilize them for action.
- To improve interdepartmental cooperation within the city administration and establish new working patterns.
- To train staff, implement all testing activities and gain an in-depth understanding about needed modifications.

- To collect all available relevant data on energy poverty in Pomorie, start collecting small data from citizens and create the first energy poverty linked database.
- To test the one-stop-shop mechanism in real life conditions in Pomorie.
- To understand household, building and neighbourhood level intervention solutions and understand how they can be used to improve already on-going projects in Pomorie.
- To improve the collaborative culture with external stakeholders, reduce the city-citizen gap and build the willingness to explore new funding opportunities and public-private partnerships.
- To learn from the EmPowerIngUs transfer process and all its partners in order to design a concrete Investment plan as a sound foundation for a follow-up project, aiming to deliver a full transfer of the EPIU GP.

To overcome them, Pomorie plans to benefit from Getafe’s knowledge, experiences and lessons learned and to modify already proven solutions own needs. However, EPIU transfer process is not a “copy-paste” exercise. In order to search for needed modifications an initial SWOT analysis was conducted by Pomorie’s transfer team:

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>+ Good cooperation between municipality and other administrative stakeholders</li> <li>+ Good exiting strategic framework</li> <li>+ Relevant studies on the city level</li> <li>+ Ability to exploit synergies with other programs</li> <li>+ Existing interest for energy efficiency refurbishment projects from private households</li> <li>+ Content related NGOs (Europe &amp; we, Awake Pomorie)</li> <li>+ National Programmes’ support for the reduction of static energy and building efficiency</li> </ul>	<ul style="list-style-type: none"> <li>– Low energy efficiency of buildings, equipment, etc.</li> <li>– Low average incomes of citizen and reduced ability to act</li> <li>– Weak collaborative culture and poor private-public participation</li> <li>– Low level of trust of deprived communities towards institutions</li> <li>– Low budget for vulnerable groups and social activities</li> <li>– Dependence on external funding to implement solutions</li> <li>– No precise register of energy poverty in the municipality and limited data availability</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>✓ Exploit the outreach of the URBACT local group</li> <li>✓ Improvement of the city building stock</li> <li>✓ A constructive outreach to the vulnerable groups</li> <li>✓ EU funding opportunities</li> <li>✓ Improved interdepartmental cooperation and cooperation with key stakeholders</li> <li>✓ Public-private partnership opportunities</li> <li>✓ To establish a one-stop-shop mechanism and improve municipal services</li> </ul>	<ul style="list-style-type: none"> <li>• Unstable political situation on the national level</li> <li>• State legislation obstacles</li> <li>• Poor response of key stakeholders and noncooperative citizens</li> <li>• Unstable economic situation can quickly worsen the situation</li> <li>• Inability to mobilize IT and Building sectors to participate</li> <li>• Overburdened and non-flexible administration, especially social services</li> <li>• Data protection – non exiting mechanisms</li> </ul>

Additionally, the city visit revealed the following assets and barriers that Pomorie brings to the transfer process:

IMPORTANT TRANSFER ISSUES	ASSETS	BARRIERS
<b>Political support</b>	+ Existing political support	/
<b>Operational support</b>	+ Already on-going complementary projects + Already recognized & mobilized key stakeholders	– Limited internal human resources – Lack of specific skills within administration – Poor data availability & GDPR limitations
<b>Project management capacities</b>	+ Existing and experienced project team with previous EU project implementation experiences	– Limited skilled internal human resources
<b>Financial capacities</b>	+ Own budget and already recognized funding opportunities (e.g. National/Regional Funds, Recovery and Resilience Facility...)	– Own budget financial limitations

## STAKEHOLDER AND TARGET GROUPS ANALYSIS

As the EPIU Good Practice is based on the principles of close internal cooperation between key city administration departments, proactive cooperation with key stakeholders, and has a high dependency on effective awareness raising of key target groups, it is even more important for transfer cities to fully understand who their key stakeholders and target groups are and what to expect from them.

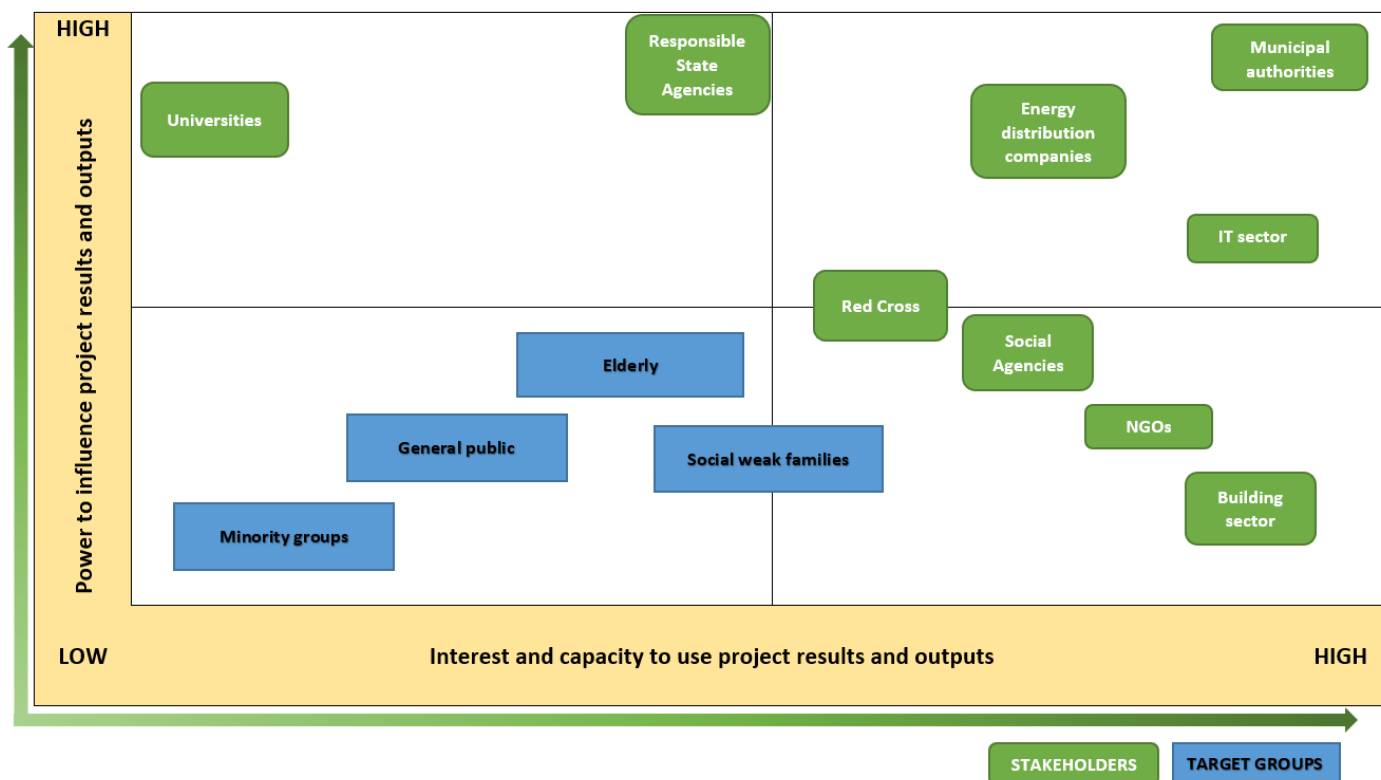
In order to mobilize them, inform them about the EmPowerIngUs project, and fully understand their interests, capacities and ambitions, the first ULG meeting was held with their representatives during the Pomorie city visit. The workshop was well visited by an interesting mixture of relevant municipal departments, public companies, community centres, Red Cross, NGOs, local initiatives, minority representatives, etc.



Participants actively contributed to the discussion about existing challenges and potential solutions and agreed to continue working on this important cross-cutting issue. Visits to three potential pilot areas “Svoboda”, “St. George” and “North” were carried out during the Pomorie city visit to gain in-depth understanding of the local context, as well as to consider various transfer process options for Pomorie.

Based on workshop discussions and conclusions, as well as previous cooperation experience the following Analysis of Stakeholders and Target Groups was developed by the Pomorie project team:

### EmPowerIngUs – Preliminary Analysis of key Stakeholders and Target Groups



It paints a clear “Interest & Capacity vs. Influence Power” picture of the current situation in Pomorie, as well as expected URBACT Local Group (ULG) composition. We expect that, at least in the beginning, mostly above stated stakeholders will get actively involved in the ULG.

To conclude, the ULG structure is (from the perspective of GP transfer) is clear and sound. Initial enthusiasm of ULG members is present and the ULG is practically formed. Due to the nature of the EPIU Good Practice, we believe that the current composition already provides a good mix of key stakeholders to achieve Pomorie’s ambitions and goals for the EmPowerIngUs project. However, drawn from Getafe’s experience, we can expect some shifts in mindset, increased willingness to “take on a more active role” through time, and new ULG members, which might be recognized at later stages (e.g. industrial stakeholders). Thus, Pomorie’s ULG should stay flexible and willing to add new ULG members, if necessary. The main challenge for the ULG coordinator at this point is ensuring the initial enthusiasm translates to concrete cooperation during the EmPowerIngUs transfer process.

### THE VISION BEHIND THE GOOD PRACTICE TRANSFER

Pomorie is aware that they are at the beginning of their energy transition journey. Thus, they joined the EmPowerIngUs project to ensure the knowledge transfer on key energy issues like energy poverty, energy efficiency, and energy from renewable sources. Pomorie will use this process to internally activate social services and other key municipal departments, improve interdepartmental cooperation, train key staff and test the one-stop-shop energy poverty office mechanism. Externally Pomorie will use the ULG as a communication channel to reach out and attract key stakeholders, raise awareness of key target groups and test their response to the energy poverty mechanism. Pomorie transfer team plans to gain in-depth understanding about energy efficiency interventions on the household, building and neighbourhood scales, as well as all public tender experiences, in order to use them in implementation of own energy efficiency linked refurbishments already taking place.

They are also eager to explore any solutions leading towards establishment of public-private energy communities, as well as understand big data and AI modelling solutions and support Getafe in its upgrade process. Results of all stated efforts will guide the development of Pomorie’s Investment Plan. More detailed description of good practice transfer modules selected by Maia and the overall transfer methodology is provided in the Transfer Potential Assessment chapter.

### 3.5 Transfer City Profile – Etterbeek

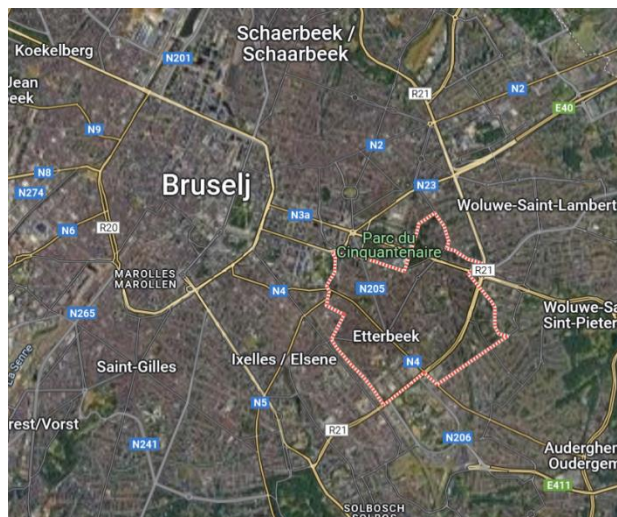
#### TRANSFER CITY DESCRIPTION

Etterbeek (3.2 km<sup>2</sup>, 2% of the regional surface area) is one of the 19 municipalities of the Brussels-Capital Region, Belgium. Located in the eastern part of the region, it is bordered by Ixelles to the west, Auderghem to the south, Woluwe-Saint-Pierre and Woluwe-Saint-Lambert to the east, and the City of Brussels and Schaerbeek to the north.

Etterbeek has seven districts and represents a fully urbanized and densely populated area (15.000 res./km<sup>2</sup>). It has a fast-growing and nationally diverse population (150 nationalities) of almost 50.000. Today, over 24.000 foreigners represent almost 50% of the population. The high proportion of foreign citizens in Etterbeek is for a great part due to the proximity with the European district where important EU institutions are located. But there are also other profiles: international students, economic migrants, family reunification, etc.

The population can be characterized as young – with 10,3% of young population (15-24) and only 11% of population older than 65 – with diverse socioeconomic profiles, mixing households of the upper, middle and popular classes, as well as homeless and people in very precarious situation. From a socio-demographic point of view, Etterbeek is split in two parts, with more affluent neighbourhoods in the North-East, intermediate areas and a zone of poverty in the South-West, known as the 'Chasse' district.

Etterbeek has a Temperate Maritime (Oceanic) climate, due to its latitude and proximity to the Atlantic Ocean. On average, the Belgian climate is therefore characterized by relatively cool, wet summers and relatively mild, rainy winters. The average annual temperature in Uccle/Brussels (calculated over a 30-year period, from 1991 to 2020) is 11°C, which is 1.2°C warmer than the 1961-1990 period (9.8°C). Annual rainfall amounts to 837 mm. In recent years, Etterbeek is experiencing climate change related extreme weather events, primarily characterized by higher humidity and excessive precipitation, higher temperatures and heat waves in the summer, as well as storms and strong winds.



<b>Partner Institution</b>	Commune d'Etterbeek, Avenue des Caserne 31/1 – 1040 Etterbeek
<b>Region &amp; Country</b>	Brussels-Capital Region, Belgium
<b>City Area (in ha)</b>	317 ha
<b>No. of Citizen</b>	49.775 (2024)
<b>Climate Type</b>	Cfb – Maritime Temperate (Oceanic)
<b>Employment by sectors</b>	Primary 0,0% / Secondary 10,3% / Tertiary 19,9% / Quaternary 69,8%
<b>Current unemployment rate</b>	14,7% (21,0% for young population of 15-24)
<b>Main energy sources</b>	Electricity, natural gas, oil
<b>Av. year. income per household</b>	27,332 €
<b>Av. year. energy costs per household</b>	Electricity costs: 13.71 c€/kWh (6% VTA included) Gas costs: 5.83 c€/kWh (6% VTA included).
<b>Key building stock energy linked challenges</b>	Suboptimal heating and ventilation behaviour (excessive consumption and/or high moisture and connected mould issues); reliance on fossil fuels leading to dependencies on market price fluctuations; poor energy efficiency of buildings; limited leeway for renovations in rented out dwellings
<b>% of the population affected by energy poverty</b>	In 2022, 28.2% of households in the Brussels-Capital Region were affected by energy poverty (compared with 26.5% in 2020 and 27.4% in 2021). Measured energy poverty = 9.3 % / Hidden energy poverty = 15.9 % / Perceived energy poverty = 6.6%.
<b>Jurisdiction over the whole City Area</b>	Yes

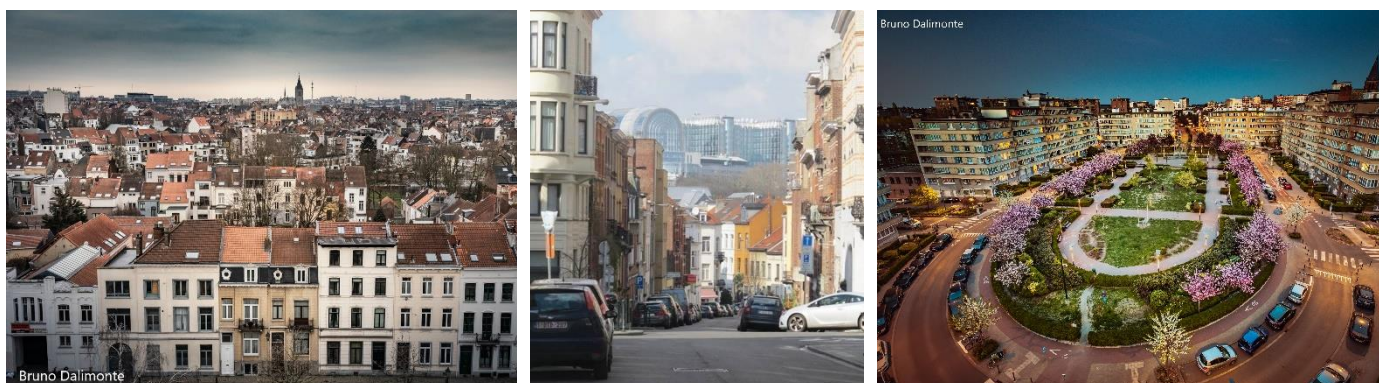
Once heavily industrialized character of Etterbeek was, due to the transformation of Brussels in to the capital of EU, replaced in recent decades by almost fully services and administration-based economy. In 2022, the administrative disposable income per household in Etterbeek was €27,332. Meanwhile, energy costs from 2020 to 2024 exhibited a clear upward trend, driven by geopolitical factors, global supply and demand dynamics, and energy security concerns in Europe. Despite recent price stabilization, energy costs remain significantly higher than pre-crisis levels. For electricity, prices declined in 2023–2024 compared to the historic highs of 2022, yet they remain elevated. As of December 2024, electricity prices were still 140% higher than in December 2020. Regarding natural gas, prices remained relatively stable until early 2021 before experiencing a sharp increase through the end of that year. A significant price drop occurred from September 2022 onward, followed by a stabilization period

extending into 2024. Based on the analysis of real consumption patterns in four-person households, a correction of the standard natural gas consumption profile for residential households was recently adopted by the Commission for Electricity and Gas Regulation – reducing the annual usage from 23,260 kWh/year to 17,000 kWh/year.

Main urban development began in the 1860s and continued until the early 1960s – resulting in a generally older housing stock with only a quarter of homes built after 1960. Older buildings are dominantly of a residential character, with two building types prevailing – mansions along the prestigious avenues and middle-class houses in closed blocks in the intervening areas. Residential development has encouraged the commercial development of the La Chasse center the Chaussée de Wavre. Buildings built between the two world wars took on the typical forms of small apartment blocks and 'bel-étage' terraced houses. Only in the north-east of the municipality, developed on a former railway site, a recent multifunctional complex of significant size can be found.

Houses with 2 facades and flat blocks make up almost all the residential buildings in the municipality. In fact, of the 6,786 residential buildings in Etterbeek, 67% are double-fronted houses and 31% flat blocks. In 2023, 63,48% of homes in Etterbeek had been certified (PEB) and more than 40% of its rental stock can be classified as 'very energy-intensive' (E, F or G label of PEB certificate). Due to climatic conditions, almost all households have a heating system – natural gas (80%), oil (13%) and electricity (6%) being key energy sources for heating.

In 2021, there were 7.876 buildings in Etterbeek (6.786 residential and 1.090 non-residential) and 26,553 dwellings, including 1,405 social housing units. According to 2011 Census, 67% of dwellings in Etterbeek are occupied by tenants.



## LOCAL CONTEXT AND AMBITIONS

The Brussels Region has an urban development strategy known as the PRDD (Plan Régional de Développement Durable), as well as an Air-Climate-Energy Plan (PACE). These strategic plans are backed up by regional legislation aimed at achieving climate neutrality by 2050, including on the energy performance of buildings and polluting vehicles. Etterbeek's energy poverty concerns are reflected in the [municipal Policy Paper 2022-2024](#), where focus is put on combating substandard housing, improved energy efficiency and strengthened support to people in precarious situations. These are implemented through already existing [Proxibat service](#) or major urban regeneration projects like the [Chasse-Gray Sustainable Neighbourhood Contract](#). In 2023, Etterbeek committed to a 55% reduction in direct GHG emissions within its territory by 2030. That same year, the municipality began implementing its Carbon Budget strategy to achieve substantial reductions in both direct and indirect GHG emissions (Scope 1 and 2) by 2030. In 2024, Etterbeek approved its Climate Plan, which outlines over 190 actions across key sectors, including buildings, mobility, resources and waste, economy, food, climate, water, environment, and governance. With a strong emphasis on an inclusive low-carbon transition, the plan aims to cut GHG emissions across the entire territory by 55% and achieve carbon neutrality by 2050.

Etterbeek already has an energy poverty focused unit and can be considered a more advanced transfer city. [Etterbeek's Energy Unit of the Public Social Welfare Centre](#) is responsible for providing guidance and financial social assistance to the most deprived people with two key objectives in sight:

- Social and budgetary support and guidance for people who have difficulty paying their gas and electricity bills. This involves negotiating payment plans and/or providing budget guidance.
- Financial assistance for people who, because of their indebtedness, are unable to pay their energy bills.

A coordinator, 6 social workers, an energy advisor and 3 administrators work within the unit, performing home visits, offering on-site advice, providing energy kits and minor repairs (up to 300 €), as well as raising awareness.

Nonetheless, Etterbeek faces several key challenges related to energy poverty. These include the poor energy efficiency of the existing building stock, low household incomes that make it difficult for residents to pay energy bills and participate in the planned energy transition, and limited options for tenants to undertake significant energy renovations. Additionally, persuading property owners to invest in building performance improvements remains a

challenge. High energy-demanding heating habits, misconceptions about energy use, and limited knowledge on optimizing consumption further contribute to energy poverty, particularly among the most socio-economically vulnerable populations.

Etterbeek's ambition is to use Getafe's knowledge, experience and lessons learned for improved understanding of the hidden energy poverty and ensured further evolution of already existing services performed by the Energy Unit and Proxibat initiative through the Investment Plan. Etterbeek also recognized the opportunity for long-term cooperation with Getafe, aiming to exploit any available external funding opportunities.

### KEY GOOD PRACTICE TRANSFER CHALLENGES

However, there are concrete challenges that need to be addressed for a successful transfer:

- To find new ways of reaching out to citizens and attracting them to awareness raising events and improving their self-awareness about energy poverty, how to identify it, and how to help yourself.
- To explore awareness raising and solution finding dialogues involving both, owners and tenants.
- To improve interdepartmental cooperation within the city administration and establish new working patterns.
- To improve the collaborative culture with external stakeholders, reduce the city-citizen gap and build the willingness to explore new funding opportunities and public-private partnerships.
- To promote sustainable solutions that can contribute to improved living conditions of citizen.
- To train staff, implement all testing activities and gain an in-depth understanding about needed modifications for the full-scale good practice transfer process.
- To gain in-depth understanding behind the hidden energy poverty approach, collect all available relevant data on energy poverty in Etterbeek, test its accessibility & interoperability and explore existing efforts of external partners to address big-data and AI modelling. Data collection, treatment, and use will have to consider data protection and privacy obligations, as well as Belgium's fragmented data landscape, which limits data availability and interoperability.
- To explore transfer potentials of building level solutions and use them in our urban renovation projects.
- To understand the up-grade potential of exiting energy poverty reduction services and initiatives.
- To learn from the EmPowerIngUs transfer process and all its partners in order to design a concrete Investment plan as a sound foundation for a follow-up project, aiming to deliver a full transfer of the EPIU GP.

To overcome them, Etterbeek plans to benefit from Getafe's knowledge, experiences and lessons learned and to modify already proven solutions to own needs. However, EPIU transfer process is not a "copy-paste" exercise. In order to search for needed modifications an initial SWOT analysis was conducted by Etterbeek's transfer team:

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>+ Strong political committed to the fight against energy poverty and to tackle unoccupied housing issue</li> <li>+ The Energy Unit already exists and has a highly qualified and experienced multidisciplinary team</li> <li>+ Existing social enterprise to carry out minor repairs to sanitary and electrical equipment</li> <li>+ The ongoing drive to renovate social housing and housing owned by the Régie Foncière</li> <li>+ The possibility of intervening financially in energy-related debts for the benefit of citizens</li> <li>+ Existing organizations supporting homeowners to renovate their homes and improve energy efficiency</li> </ul>	<ul style="list-style-type: none"> <li>- Insufficient mobilisation capacity of citizens suffering from energy poverty, combined with very limited knowledge of the links between consumption habits, efficient energy use, and resulting energy bills.</li> <li>- No precise register of energy poverty in the municipality and limited data availability due to fragmented data landscape</li> <li>- No standardized interdepartmental communication and coordination mechanisms between key municipal energy poverty actors</li> <li>- Low energy performance of buildings</li> <li>- Lack of budget to hire more staff and carry out long-term structural interventions</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>✓ Possible Evolution of Energy Unit's and Proxibat's services</li> <li>✓ Raised awareness in the importance of interdepartmental collaboration and collaboration with other key social actors in Etterbeek</li> <li>✓ Improvement of energy poverty linked policies, services and solutions based on best practices</li> <li>✓ Exploration of big-data and AI modelling for improved understanding of hidden energy poverty</li> <li>✓ Cooperation with energy suppliers in Brussels in order to pass on comments and solve citizens' issues</li> <li>✓ Long term cooperation with high quality partners across EU to exploit recognized funding opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Unstable energy prices and rising rents with ability to quickly worsen the situation in Etterbeek and influence project results</li> <li>• Federal and regional funding/subsidies for the energy unit have fallen in 2024 - the trend is expected to continue in 2025</li> <li>• Landlords who are not willing to collaborate when it comes to improving the quality of the accommodation</li> <li>• The departure of several energy suppliers who are leaving Brussels for commercial reasons, which does not leave much choice of energy contracts and results in a de-facto duopolistic market</li> </ul>

Additionally, the city visit revealed the following assets and barriers that Etterbeek brings to the transfer process:

IMPORTANT TRANSFER ISSUES	ASSETS	BARRIERS
Political support	+ Existing political support	- /

	+ Willingness to pursue long-term goals	
<b>Operational support</b>	+ Existing Energy Unit and Proxibat services + Existing methods to reach out to beneficiaries + Interdepartmental recognition of the need to act + Already recognized & mobilized key stakeholders	- Limited data availability - GDPR restrictions - Lack of specific AI modelling skills within the city administration
<b>Project management capacities</b>	+ Existing and experienced project team with previous EU project implementation experiences	- Limited skilled internal human resources
<b>Financial capacities</b>	+ Own budget and already recognized funding opportunities (Federal & EU funds, SUD, crowdending, Energy Performance Contracts...)	- Own budget financial limitations

## STAKEHOLDER AND TARGET GROUPS ANALYSIS

As the EPIU Good Practice is based on the principles of close internal cooperation between key city administration departments, proactive cooperation with key stakeholders, and has a high dependency on effective awareness raising of key target groups, it is even more important for transfer cities to fully understand who their key stakeholders and target groups are and what to expect from them.

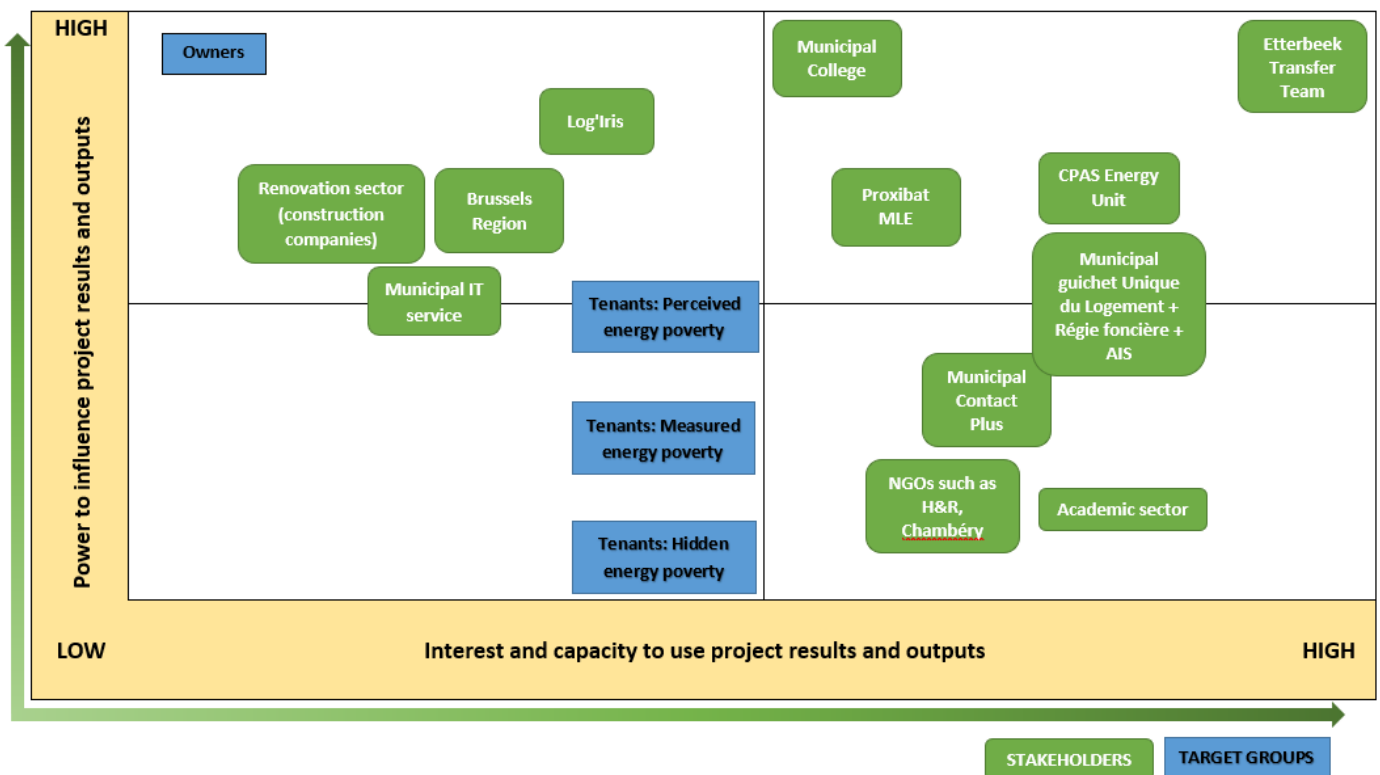
In order to mobilize them, inform them about the EmPowerIngUs project, and fully understand their interests, capacities and ambitions, the first ULG meeting was held with their representatives during the Etterbeek city visit. The workshop was attended by an interesting mixture of relevant municipal departments, public companies, an NGO in charge of a community center, academia, researchers, and even a regulator for access to data. Participants actively contributed to the discussion about existing challenges and potential solutions, with specific focus further identification of beneficiaries, improved understanding of big-data solutions, and agreed to continue working on this important cross-cutting issue with the Etterbeek transfer team.



Additional meetings with the Housing Service, Energy Unit, the visits to the Chambéry Community Centre and several buildings in the Chasse neighbourhood were carried out during the Etterbeek city visit to gain in-depth understanding of the local context, as well as to consider various transfer process options for Etterbeek.

Based on workshop discussions and conclusions, as well as previous cooperation experience the following Analysis of Stakeholders and Target Groups was developed by the Etterbeek project team:

**EmPowerIngUs – Preliminary Analysis of key Stakeholders and Target Groups**



It paints a clear “*Interest & Capacity vs. Influence Power*” picture of the current situation in Etterbeek, as well as expected URBACT Local Group (ULG) composition. We expect that, at least in the beginning, mostly above stated stakeholders will get actively involved in the ULG.

To conclude, the ULG structure is (from the perspective of GP transfer) is clear and sound and the ULG was practically already formed. Due to the nature of the EPIU Good Practice, we believe that the current composition already provides a good mix of key stakeholders to achieve Etterbeek’s ambitions and goals for the EmPowerIngUs project. However, drawn from Getafe’s experience, we can expect some shifts in mindset, increased willingness to “*take on a more active role*” through time, as well as some new ULG members, which might be recognized at later stages (e.g. owners). Thus, Etterbeek’s ULG should stay flexible and willing to add new ULG members, if necessary. The main challenge for the ULG coordinator at this point is ensuring the initial willpower to ensure concrete cooperation during the EmPowerIngUs transfer process.

## THE VISION BEHIND THE GOOD PRACTICE TRANSFER

The vision behind the good practice transfer seems to be quite clear in the case of Etterbeek – use all available knowledge and solutions from Getafe, select, test and modify most promising ones and use them to up-grade already existing energy poverty reduction services. This is why Etterbeek’s team plans to focus on testing the one-stop-shop improvements and small data gathering concepts, train key staff members for testing and awareness raising of citizens on the topic of energy poverty. In case big-data and AI modelling will prove its worth, it could become an important block of the follow-up project. Results of all stated efforts will guide the development of Etterbeek’s Investment Plan.

On the other hand, Getafe recognized Etterbeek’s advanced energy poverty reduction services and housing improvement projects in cooperation with vulnerable groups. This offers a valuable insight into energy efficiency measures and social partnerships for the upgrade of the EPIU Good Practice itself. More detailed description of good practice transfer modules selected by Etterbeek and the overall transfer methodology is provided in the Transfer Potential Assessment chapter.

### 3.6 Transfer Potential Assessment

In order to make the **EPIU Good Practice** more structured and easily transferable to transfer cities, it **was divided into segments or modules** – essentially structural or content parts of the good practice. In chapter 2.3 you can find so called “good practice modules”, explained in more detail. However, the EPIU good practice was developed in a longer timeframe and with more available resources. To overcome this obstacle and ensure best possible transfer process with available resources, EPIU good practice modules were merged with the overall URBACT transfer process and divided into three types, according to realistic transferability potential assessment – resulting in the following three types of modules (see chapter 4.2 for further explanation):

- **Initial transfer modules** – Designed to facilitate knowledge transfer, test selected solutions, and improve transfer cities’ readiness for full-scale adoption.
- **Long-term transfer modules** – Represent the full-scale transfer of the EPIU good practice but are unlikely to be implemented within the EmPowerIngUs project timeframe due to their complexity, resource requirements (both human and financial), and the necessary preconditions for effective adaptation.
- **Up-grade modules** – Focus on the continued evolution of the EPIU good practice, incorporating either good practice examples from transfer cities or Getafe’s own further developments.

The EPIU good practice was thoroughly explained to all transfer cities and their stakeholders during city visits. As a result, we established a baseline situation in each transfer city and conducted a transfer potential assessment for each module, tailored to each city. This assessment was based on data provided by the transfer cities and insights gained from city visits.

The **assessment was conducted in several steps**. Firstly, during the Deep Dive meeting, a first draft assessment was conducted for all good practice modules, enabling transfer cities to understand the modules, explore their existing transfer potential, and consider a full good practice transfer during the EmPowerIngUs project, regardless of their priorities. Secondly, preliminary assessment findings were discussed with key stakeholders during city visits on the first ULG meetings, helping each transfer city refine its priorities. Thirdly, based on the collected insights, transfer cities developed their final assessment, defining how far they were willing to go in the transfer process. In parallel, the Lead Expert, supported by the Lead Partner, conducted an independent assessment.

The Lead Expert then compared both assessments, prepared comments and suggestions for improvement, and presented them to all transfer cities during an online meeting on February 18, 2025. The conclusions were discussed, validated, and incorporated into **the final transfer potential assessment**, which is presented below.

**Meaning of the assessment signs:**

+	TC has already achieved this GP step on its-own	+	TC will implement this GP step within the project	LTT	TC will implement this GP step within the long-term transfer	?	TC needs to know more before it can decide	-	TC will not implement this GP step
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GOOD PRACTICE MODULES		GOOD PRACTICE DEVELOPMENT STEPS					GE	MA	TR	PO	ET
<b>INITIAL TRANSFER</b>	<b>Active partnership establishment and management</b>	1) Identification of key stakeholders	+	+	+	+	+				
		2) Mobilization of key stakeholders (1 <sup>st</sup> autonomous meeting)	+	+	+	+	+				
		3) Building enthusiastic atmosphere and providing support on regular meetings	+	+	+	+	+				
		4) Identification of individual stakeholder goals, capacities and preparedness for cooperation	+	+	+	+	+				
		5) Definition of a yearly TC Roadmap, roles and responsibilities	+	+	+	+	+				
		6) Guidance in yearly TC Roadmap implementation	+	+	+	+	+				
		7) Investment/Continuity Plan development	+	+	+	+	+				
		8) Forming the Investment/Continuity Plan implementation partnership	+	LTT	LTT	LTT	LTT				
	<b>Knowledge transfer</b>	1) Nominating the ULG coordinator	+	+	+	+	+				
		2) ULG management training	+	+	+	+	+				
		3) Nominating the Energy poverty manager position or Energy poverty reduction team within the city administration (testing activity)	+	+	+	+	+				
		4) In-depth understanding on the EPIU big-data & AI modelling solutions and results	+	+	+	+	+				
		5) In-depth understanding on the EPIU one-stop-shop mechanism (HHO)	+	+	+	+	+				
		6) In-depth understanding on the EPIU energy poverty measures on all 3 levels	+	+	+	+	+				
	<b>Encouraging and improving cooperation within city administration</b>	1) Definition of key administration departments/sectors and their roles	+	+	+	+	+				
		2) Gaining operational support	+	+	+	+	+				
		3) On-going communication with city administration (briefing -potentially on weekly/monthly basis in order to keep CEOs informed and involved)	+	+	+	+	+				
		4) Developing new activities for energy poverty reduction with integration into the strategic urban context	+	+	+	+	+				
		5) Identifying opportunities for synergies with other on-going initiatives	+	+	+	+	+				
		6) Strengthening political support for Investment/Continuity Plan	+	+	+	+	+				
	<b>Preliminary testing with first and second level data collection</b>	1) Collection of all exiting and relevant data on the topic of energy poverty (relevant local/regional/national level data)	+	+	+	+	+				
		2) Defining types of data and method of its collection from citizen (testing activity)	+	+	+	+	+				
		3) Setting-up preliminary testing activities (testing activity)	+	+	+	+	+				
		4) Announcement and promotion of testing activities (testing activity)	+	+	+	+	+				
		5) Collection of own data through surveys with creation of profiles (testing activity)	+	+	+	+	+				
		6) Reporting on testing activities results	+	+	+	+	+				
	<b>Awareness raising</b>	1) Identification of target groups	+	+	+	+	+				
		2) Communication and awareness rising strategy	+	+	+	+	+				
		3) Development of communication tools (web site, social networks, local news, etc.)	+	+	+	+	+				
		4) Regular publication of news and contents, giving interviews, etc.	+	+	+	+	+				
5) Organization and implementation of yearly awareness rising and promotional events, exhibitions, lectures, etc.		+	+	+	+	+					
6) Organization of international energy poverty seminars, conferences, etc.		+	LTT	LTT	-	-					
<b>Development of baseline studies</b>	1) Definition of types of neighbourhoods per key characteristics	+	+	+	LTT	LTT					
	2) Energy poverty study	+	LTT	+	LTT	LTT					

LONG-TERM TRANSFER	One-stop shop establishment	3) Urban heat island study		+	LTT	LTT	LTT	+		
		4) Other relevant studies		+	LTT	LTT	LTT	LTT		
		1) Hiring or reallocating existing staff to the one-stop shop		+	LTT	+	LTT	+		
		2) Full-scale energy poverty training of key personnel		+	LTT	LTT	LTT	+		
		3) Ensuring adequate facilities and funds for its preliminary operation		+	LTT	+	LTT	+		
		4) Optimizing its operational model and standard operating procedures based on lessons learned from the testing period		+	LTT	+	LTT	+		
	One-stop-shop services (soft measures)	Household level	5) Ensuring adequate facilities and funds for its long-term operation		+	LTT	LTT	LTT	+	
			1) Reception of users, data collection and itinerary		+	LTT	LTT	LTT	+	
			2) Accompaniment, energy optimization and habits							
		Buildings level	3) Coordination and monitoring							
			4) Building visits and data collection		+	LTT	LTT	LTT	+	
			5) Publishing a call for beneficiaries to co-finance solutions							
		Neighbourhoods level	6) Coordination and monitoring							
			7) Meetings with neighbourhood entities		+	LTT	LTT	LTT	LTT	
			8) Identification of necessities							
		Third party solutions (Hard measures)	Household level	9) Participated improvement proposals						
				1) Diagnosis: socio-energy audits		+	LTT	LTT	LTT	+
				2) Home scale Decision trees						
	3) Cross-validation between measurements reflected in the audit and results of the decision trees.									
	Buildings level		4) Solution execution: Public procurement/execution by a third party							
5) Diagnosis: Preliminary building reform project			+	LTT	LTT	LTT	LTT			
6) Building scale Decision trees										
7) Cross-validation between measurements reflected in the preliminary project and results of the decision trees.										
Neighbourhoods level	8) Solution execution: Public procurement/execution by a third party									
	9) Diagnosis: Multivariable diagnosis of public space		+	LTT	LTT	LTT	LTT			
	10) Coordination with City involved Council Delegations									
	11) Methodology of intervention & definition of actions									
Third level data collection and AI modelling	12) Solution execution: Public procurement/execution by a third party									
	1) Third level data collection		+	LTT	LTT	?	?			
	2) Data warehouse creation									
	3) AI model transfer, adaptation and application									
	4) AI modelling result sharing & publication									
UP-GRADE	Improved AI modelling	5) AI modelling lessons learned sharing & publication								
		1) Further improvement of AI big data analytics for hidden energy poverty profiling		+	+	+	+	+		
		2) Using this data for improved of hidden energy poverty identification			(only support to LP)	(only support to LP)	(only support to LP)	(only support to LP)		
		3) Development of a Standard Operating Procedure for the controlled use of the "EPIU data-lake"								
	Energy Communities	4) Identification of new opportunities for "EPIU data-lake" use for city administration								
		1) Creating local partnerships								
		2) Identifying best possible locations		+	+	+	+	+		
		3) Acquiring all necessary permits & funding			(only support to LP)	(only support to LP)	(only support to LP)	(only support to LP)		
		4) Establishing first Energy Communities								
		5) Learning from them and exploiting any upscaling potentials								

During the assessment, an overlap between Initial and Long-Term Transfer Modules was identified in collaboration with transfer cities. Due to varying starting positions and existing mechanisms, some cities have the capacity to adopt more ambitious approaches and focus on different solutions. As a result, the partnership opted for a flexible interpretation of the module categorization – allowing each city to follow own ambitions.

Based on the assessment presented above, **we expect all transfer cities to successfully complete the vast majority of transfer steps within the Initial Transfer Modules** – gaining knowledge, testing pre-selected solutions, and enhancing their readiness for full-scale adoption. These modules will be implemented within the EmPowerIngUs project timeframe, tailored to the specific potential and ambitions of each transfer city.

A particularly encouraging finding is the high level of coherence in the baseline situation from an operational model perspective. With the exception of Etterbeek, which already has a functioning energy poverty mechanism, an established social support service, and even a third-party dwelling improvement approach, the other three transfer cities are starting from very similar positions. Given Etterbeek's more advanced starting point, it will serve as a "second opinion" provider on transferred modules – further strengthening the knowledge exchange process and adding valuable practical experience. This alignment means that the transfer process can proceed almost simultaneously for all project partners.

**From this point onward, transfer ambitions of the cities begin to diverge in different directions.** Maia and Pomorie will focus on developing a high-quality Investment Plan, leaving the transfer of additional modules for a future long-term full-scale transfer process. Trikala is in a unique position, as it is currently establishing its own energy poverty office. This provides an opportunity to conduct key baseline studies and develop the one-stop-shop mechanism as far as possible within the project timeframe. Etterbeek, with its advanced starting position, will focus on further improving its energy poverty service and testing new approaches. Additionally, **all Transfer Partners will** contribute their specific knowledge and expertise to **support the Lead Partner in the further development of Up-Grade Modules**, ensuring the continuous evolution of the EPIU good practice.

According to the transfer potential assessment methodology, transfer cities were evaluated using the following scoring system, where Level C represents the lowest score and Level A the highest:

- **Level C:** a clear Investment Plan will be produced, identifying aspects to be transferred and resources to support the process within a clear future time frame. However, there is limited prospect of securing financial support.
- **Level B:** a clear Investment Plan will be produced, identifying aspects to be transferred and resources to support the process within a clear future time frame. There is a reasonable prospect of securing financial support.
- **Level A:** a clear Investment Plan will be produced, identifying aspects to be transferred and resources to support the process within a clear future time frame. Some elements of transfer may take place already during the network journey. There is a high prospect of securing financial support

**The transfer potential assessment itself is presented on the assessment sheet below, but can be summarized in the following way. All transfer cities plan to fully implement the EmPowerIngUs Initial Transfer Modules and actively support the further development of the EPIU good practice by Getafe. This commitment qualifies them for a level A score. However, funding limitations were highlighted as a significant barrier by all cities. On the other hand, each transfer city identified specific funding sources or at least potential opportunities, though in most cases these have not yet been actively pursued. As Trikala was the only city able to outline a clear future funding strategy, it is the only one deserving a definitive level A rating. For the other three transfer cities, a split score was assigned: level A for their Investment Plan and concrete transfer efforts, and level B for securing financial support.**

At this stage, it is important to emphasize that this transfer potential assessment represents a current snapshot based on information gathered from EmPowerIngUs project partners, as well as insights from the Lead Expert and Lead Partner during city visits. Since good practice transfer is a dynamic process, both the transfer potential and priorities may evolve over time due to progress made and changes in circumstances. Therefore, **this assessment should be viewed as a “snapshot of the current situation and mindset” in each transfer city** rather than a fixed evaluation. At the same time, the structured approach – where transfer potential is assessed for each development step of each module in every transfer city – allows the EmPowerIngUs partnership to use the presented tables as a performance monitoring tool throughout stages 2 and 3.

Partner	Population	Key Transfer Assets	Key Transfer Barriers	Transfer Potential	Comments & Explanation
<b>Maia (Portugal)</b>	134.977	<ul style="list-style-type: none"> <li>+ Existing political support</li> <li>+ Willingness to pursue long-term goals</li> <li>+ Existing multidisciplinary team to support integrated actions between different departments</li> <li>+ Interdepartmental recognition of the need to act</li> <li>+ Existing energy poverty initiatives, can be up-graded</li> <li>+ Already recognized &amp; mobilized key stakeholders</li> <li>+ Existing and experienced project team</li> <li>+ Own budget and already recognized funding sources</li> </ul>	<ul style="list-style-type: none"> <li>- Community resistance to green city development due to poor understanding</li> <li>- Limited internal human resources to address integrated actions</li> <li>- Poor data availability &amp; GDPR limitations</li> <li>- Lack of specific skills within administration</li> <li>- Bureaucratic obstacles and delays in decision-making processes</li> <li>- Limited skilled internal human resources</li> <li>- Own budget financial limitations</li> </ul>	<p><b>A</b> for IP &amp; initial transfer</p> <p><b>B</b> for securing financial support</p>	Maia is to some extent already addressing the energy poverty issue and plans to use this project to mobilize key stakeholders, reinforce existing efforts and develop a clear Investment Plan. Above selected GP modules will be transferred already during the Network journey. Maia also already identified internal and external funding sources – however, they are yet to be targeted. Thus, Maia shows reasonable prospect of securing financial support.
<b>Trikala (Greece)</b>	83.805	<ul style="list-style-type: none"> <li>+ Existing political support</li> <li>+ EU Mission of 100 Climate Neutral &amp; Smart Cities</li> <li>+ Covenant of Mayors</li> <li>+ Existing multidisciplinary team to support integrated actions between different departments</li> <li>+ Existing energy poverty initiatives, can be up-graded</li> <li>+ Already on-going complementary projects</li> <li>+ Existing and experienced project team</li> <li>+ Own budget and already recognized funding sources</li> </ul>	<ul style="list-style-type: none"> <li>- Limited internal human resources</li> <li>- Lack of specific skills within administration</li> <li>- Poor data availability &amp; GDPR limitations</li> <li>- Limited skilled internal human resources</li> <li>- Own budget financial limitations</li> </ul>	<p><b>A</b></p>	Trikala is in a unique position, as it is currently establishing its own energy poverty office. It will use this project to gain available knowledge and experiences, mobilize key stakeholders and develop a clear Investment Plan. Above selected GP modules will be transferred already during the Network journey. Trikala already identified internal and external funding sources, which seem to be within reach. Thus, Trikala shows high prospect of securing financial support.
<b>Pomorie (Bulgaria)</b>	15.230	<ul style="list-style-type: none"> <li>+ Existing political support</li> <li>+ Already on-going complementary projects</li> <li>+ Already recognized &amp; mobilized key stakeholders</li> <li>+ Existing and experienced project team with EU project implementation &amp; funding experiences</li> <li>+ Own budget and already recognized funding sources</li> </ul>	<ul style="list-style-type: none"> <li>- Limited internal human resources</li> <li>- Lack of specific skills within administration</li> <li>- Poor data availability &amp; GDPR limitations</li> <li>- Limited skilled internal human resources</li> <li>- Own budget financial limitations</li> </ul>	<p><b>A</b> for IP &amp; initial transfer</p> <p><b>B</b> for securing financial support</p>	Pomorie is the transfer city with the lowest starting position, but with a dedicated project team and experiences in attracting funds for refurbishments. It will develop a clear Investment Plan. Above selected GP modules will be transferred already during the Network journey. Pomorie already identified internal and external funding sources – however, they are yet to be targeted. Thus, Pomorie shows reasonable prospect of securing financial support.
<b>Etterbeek (Belgium)</b>	49.775	<ul style="list-style-type: none"> <li>+ Existing political support</li> <li>+ Willingness to pursue long-term goals</li> <li>+ Existing Energy Unit and Proxibat services</li> <li>+ Existing methods to reach out to beneficiaries</li> <li>+ Interdepartmental recognition of the need to act</li> <li>+ Already recognized &amp; mobilized key stakeholders</li> <li>+ Existing and experienced project team</li> <li>+ Own budget and already recognized funding sources</li> </ul>	<ul style="list-style-type: none"> <li>- Limited data availability</li> <li>- GDPR restrictions</li> <li>- Lack of specific AI modelling skills within the city administration</li> <li>- Limited skilled internal human resources</li> <li>- Own budget financial limitations</li> </ul>	<p><b>A</b> for IP &amp; initial transfer</p> <p><b>B</b> for securing financial support</p>	Etterbeek is the transfer city with the highest starting position, with a functioning energy poverty mechanism, social support service and even third-party dwelling improvement approach. It aims to further improve the its services and will develop a clear Investment Plan. Above selected GP modules will be transferred already during the Network journey. Etterbeek already identified internal and external funding sources – however, they are yet to be targeted. Thus, Etterbeek shows reasonable prospect of securing financial support.

## 4. SYNTHESIS, TRANSFERABILITY AND METHODOLOGY OUTLINE

### 4.1 Introduction

Based on the information provided about the EPIU good practice, practical experiences and lessons learned from Getafe, as well as the characteristics of the transfer cities and the conclusions of the transferability potential assessment, we can identify the following **key elements and open issues that must be appropriately addressed** by the methodology underpinning the transferability process:

- **Adapting to the starting points of all transfer cities** – Transfer cities are at unique starting positions and will require varying levels of support throughout the transfer process. However, they are also keen to learn from each other, so an effective balance between different types of knowledge exchange must be established.
- **Capacity building for ULG coordinators** (and, if possible, project coordinators) – ULG coordinators (ULGCs) will be the key figures in the EmPowerIngUs project, making it essential to enhance their capacities. Training should focus on core ULG coordination and management skills, such as discussion facilitation, group motivation, conflict resolution, consensus decision-making, and expectation management. Additionally, it should incorporate the transfer of practical experiences and lessons learned from Getafe, as these may prove crucial given the condensed 18-month project implementation timeframe.
- **Stakeholder mobilisation and long-term engagement** – A key step in the transfer process should be the practical presentation of the good practice to the ULG members in transfer cities. Capturing their interest and engaging them in ULG activities is crucial for a successful transfer. This should be structured in a way that enables the exchange of experiences between stakeholders from Getafe and those from transfer cities, foster enthusiasm and encourage participants to take an active role in their own ULGs. Identifying the “hook” for ULG members and maintaining enthusiasm over time will be a key challenge for the ULG coordinator.
- **Knowledge transfer and on-line support** – Once key stakeholders have been successfully mobilised, they must be given full access to Getafe’s knowledge, experiences, lessons learned, and proven solutions. This process should be adaptable to the specific needs and capacities of the transfer cities. Furthermore, Getafe and lead expert should provide continuous online support throughout the adaptation and transfer process.
- **Demystifying energy poverty, engaging citizens, and testing solutions** – This is a key element that will not only shape the content of the Investment Plan but will also likely determine the overall success of the transfer process. Cities will have the flexibility to select which solutions they wish to test in order to validate their effectiveness and guide the full transfer process in the future. However, many of these solutions rely on citizen engagement, making awareness-raising one of the key modules to be transferred.
- **Establishing partnerships and exploiting synergies** – Once the ULG network is operational, the ULGC must develop an in-depth understanding of individual members, their interests, and their ambitions. This is crucial for identifying and fostering partnerships and synergies, both within the ULG and with other on-going initiatives or projects in transfer cities – strengthening the transfer process and Investment Plan implementation potential.
- **Ensuring continuous operational and political support within the city administration** – Political, operational, and financial support are of vital importance. However, insights from city visits and partner experiences suggest that such support should not be taken for granted. Transfer cities should use every visit from Getafe as an opportunity to promote the EmPowerIngUs project within their city administration. They should also strive to engage key departments in their ULGs, or at least secure their operational backing.
- **Ensuring long-term sustainability** – The design of this transfer process is geared towards ensuring long-term sustainability by developing the Investment Plan and identifying potential funding sources for its implementation. This may be achieved through follow-up projects or by integrating the plan into existing city services and mechanisms.

The key elements and open issues outlined above are addressed by the methodology presented in the following chapter, taking into account the nature and complexity of the EmPowerIngUs good practice, as well as the capacities, timescale, and available budget of the entire partnership.

### 4.2 Transfer Network Methodology

As described in Chapter 1, the modularisation of the EPIU good practice is based on the approach and operational model used by Getafe for its practical implementation. While Getafe seeks to further refine the EPIU good practice to ensure its continuous evolution, the EmPowerIngUs project aims to achieve **two major objectives**:

- 1) **To transfer selected modules to transfer cities** and enhance their readiness for a full-scale transfer.
- 2) **To further upgrade and improve the EPIU good practice**, either by incorporating good practice examples from transfer cities or through its own continued development.

To achieve this, **the EmPowerIngUs transferability concept** divides the EPIU good practice modules into three pillars:

- **Initial transfer modules** – These modules are designed to transfer knowledge, test solutions, and improve transfer cities' readiness for full-scale adoption. They will be implemented within the EmPowerIngUs project lifetime, aligned with each transfer city's potential and ambitions. This approach ensures that the EPIU good practice is transferred as extensively as possible while considering each city's starting position, specific context, and existing capacities, as well as the project's timescale and available budget. Consequently, most ULG activities will focus on these modules, ensuring that any transferred solutions are tailored to the needs of each transfer city.
- **Long-term transfer modules** – These modules represent a full-scale transfer of the EPIU good practice but are unlikely to be implemented within the EmPowerIngUs project timeframe due to their complexity, resource requirements (both human and financial), and necessary preconditions for effective adaptation. However, knowledge transfer within the project will provide transfer cities with a comprehensive understanding of these modules, along with lessons learned from Getafe. This will enable transfer cities to assess their full transfer potential through the development of their Investment Plans and to implement solutions through follow-up projects or integration into existing city services and mechanisms. This process may also contribute to the potential transformation of the ULG into an Investment Plan implementation partnership.
- **Up-grade modules** – These modules focus on the continued evolution of the EPIU good practice, incorporating either good practice examples from transfer cities or Getafe's own further developments. However, transfer cities will also benefit from this process. Their active contribution to the upgrade modules will allow the entire partnership to jointly explore the future evolution of the EPIU good practice, strengthen the partnership dynamic, and position transfer cities in a "developer" role – an experience that could prove highly valuable for Investment Plan implementation in all transfer cities.

During the transferability potential assessment, an overlap between Initial and Long-Term Transfer Modules was identified in collaboration with transfer cities. Due to varying starting positions and existing mechanisms, some cities can adopt more ambitious approaches and focus on different solutions. As a result, the partnership opted for a more flexible interpretation of the above-described module categorisation, which is reflected in the per-partner transfer assessment in Chapter 3.6.

Nevertheless, the Lead Partner maintains the overall expectation that all Transfer Partners will seek to implement Initial Transfer Modules to the greatest extent possible. Equally important is the expectation that all Transfer Partners actively contribute to the implementation of the Upgrade Modules, as each partner was selected based on specific knowledge that Getafe aims to leverage for this purpose.

Following this concept, all modules were further detailed and divided into key implementation steps, which were presented to the partnership during the Deep Dive visit to Getafe and subsequently discussed in all four transfer city visits. Transfer Partners reviewed their priorities within their city administrations, identified ULG members, and ranked all modules according to their preferences and strategic interests. During this process the following anticipated adaptations were recognized by the project partnership:

GOOD PRACTICE MODULES		INTERESTED TRANSFER CITIES	ANTICIPATED ADAPTATIONS OF THE EPIU GOOD PRACTICE
INITIAL TRANSFER	Active partnership establishment and management	All Transfer Cities during the initial transfer	There is no need for any major adaptations to this module, as EPIU operational model was already adapted to the needs of the EmPowerIngUs project and some key deliverables were already included. Only minor changes linked to communication tools and methods due to city specifics and cultural context can be expected. These adaptations will be carried out by ULG coordinators during their work.
	Knowledge transfer	All Transfer Cities during the initial transfer	This module is based on the training EPIU project staff received during project implementation. However, it was designed for a much longer and more intensive knowledge transfer (up to 6-months long full-time training) than can be implemented within the EmPowerIngUs project timeframe and with available resources. Lead Partner already started making necessary modifications of the curriculum and knowledge transfer tools, taking into account identified pre-knowledge of individual transfer cities – a combination of on-line and in-person trainings during city visits will be provided. Transfer cities will be expected to nominate at least 2 persons to receive this training and use the gained knowledge to implement testing activities.
	Encouraging and improving cooperation within city administration	All Transfer Cities during the initial transfer	There is no need for any major adaptations to this module, as EPIU operational model was already adapted to the needs of the EmPowerIngUs project and some key deliverables were already included. Only minor changes linked to communication tools and methods due to city specifics and cultural context can be expected. These adaptations will be carried out by ULG coordinators during their work.
	Preliminary testing with first and second level data collection	All Transfer Cities during the initial transfer	Three out of four transfer cities opted to test setting-up and implementing the one-stop-shop mechanism in practice. Etterbeek, who already has a functioning similar mechanism, opted to test Getafe's approaches of reaching out to citizens – thus, testing potentially useful up-grades of the existing mechanism. All four transfer cities also opted to test small data collection system, as well as to start collecting all relevant local/regional/national energy poverty data to understand their interoperability and data protection concerns within their own operational and legal systems. During knowledge transfer, special emphasis will be put on these solutions and in-depth training will be suggested by the Lead Partner and modified by transfer cities to ensure their adaptation to the local specifics and high-quality testing.

	<b>Awareness raising</b>	<b>All Transfer Cities during the initial transfer</b>	All transfer cities can offer existing awareness raising mechanisms and are willing to adapt them to the needs of the project. There is no need for any major adaptations to this module, only minor changes linked to communication tools and methods due to city specifics and cultural context can be expected. These adaptations will be carried out by Communication Officers during their work.
	<b>Development of baseline studies</b>	<b>Maia and Trikala</b> for partial initial transfer, others for the long-term transfer	Transfer cities understand the need for these studies, but due to limited resources and timeline opted not to include them in the initial transfer process – a well justified decision. Only Maia and Trikala opted for partial transfer of this module (only selected steps) – both cities decided that they need selected baselines to actively address energy poverty issues, however both might need additional external resources to develop them.
	<b>One-stop shop establishment</b>	<b>Trikala and Etterbeek</b> for partial initial transfer, others for the long-term transfer	Only Etterbeek (with already functioning mechanism) and Trikala (with a similar mechanism in development) opted to include some steps in the initial transfer process. Both transfer cities will use the project to further improve/establish their own one-stop-shops. For all other partners, this is at this point a step too far and decided to go for the long-term transfer option – based on their starting point, a well justified decision.
<b>LONG-TERM TRANSFER</b>	<b>One-stop-shop services (soft measures) on three levels</b>	<b>Etterbeek</b> for partial initial transfer, others for the long-term transfer	Only Etterbeek (with already functioning mechanism) opted to try to transfer solutions on the building scale – however, they might need additional external resources to actually implement them. From the long-term transfer point of view, these modules need to be modified to local context and conditions. Catalogue of potential solutions on all 3 levels must be reviewed and up-graded with potential new solutions, support delivery mechanisms must be synchronized with results of the one-stop-shop testing activities, as well as with relevant legislation and funding source requirements. Such modifications should be integrated into the Investment Plan.
	<b>Third party solutions (Hard measures) on three levels</b>	All Transfer Cities during the long-term transfer	All transfer cities opted for the long-term transfer – based on their starting point, available time/resources and the fact that these services are performed by third parties, a well justified decision. From the long-term transfer point of view, these modules need to be modified to local context and conditions. Catalogue of potential solutions on all 3 levels must be reviewed and up-graded with potential new solutions, support delivery mechanisms must be synchronized with results of the one-stop-shop testing activities, as well as with relevant legislation and funding source requirements. Such modifications should be integrated into the Investment Plan.
	<b>Third level data collection and AI modelling</b>	Maia and Trikala during the long-term transfer, Pomorie and Etterbeek need to know more	From the long-term transfer point of view, this module will need to be adapted to availability and quality of data, relevant city-level specifics, as well as any data protection standard operating procedures valid in transfer cities. In general, AI model can be transferred or re-used. However, there are important preconditions to be met – for example, availability of highly specialized equipment and knowledge. Such preconditions must be integrated into the Investment Plan.
	<b>Improved AI modelling</b>	<b>Getafe with support from all transfer cities</b>	Up-grade modules will be in general developed by the Lead Partner, while Transfer Partners are expected to provide active support by sharing own knowledge, specific solutions and critical opinion delivered from their point of view. No major adaptations are expected, as these modules were not a part of the original EPIU good practice and will be co-designed through the EmPowerIngUs project.
<b>Energy communities</b>			

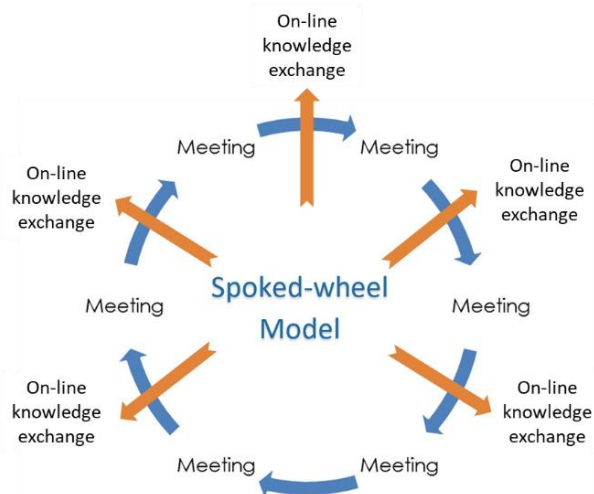
In order to draw a picture of the overall design of the transferability concept (which is to a large extent dictated by the URBACT approach itself) one can imagine the physical structure of a human body, where:

- EmPowerIngUs transnational exchange and learning activities will provide the “skeleton”.
- EmPowerIngUs city level activities will provide the “muscle structure”.
- EmPowerIngUs communication activities will provide the “skin”.

The concept presented below is based on the experience and in-depth understanding gained by the entire partnership during the Deep Dive Meeting in Getafe (6–8 November 2024) and the four transfer city visits conducted between November 2024 and January 2025.

## THE CONCEPT BEHIND THE NETWORK (TRANSNATIONAL) LEVEL ACTIVITIES

The methodology for the network (transnational) level activities was developed in consultation with all project partners. Two principal models—the “Carousel” and “Radial” models—were considered. Given that Getafe also aims to learn from transfer cities, and that transfer cities themselves recognised the value of learning from each other, the “Carousel” model emerged as the obvious choice. However, the transfer potential assessment highlighted differences in starting positions and the need for individual coaching support, making the “Radial” model a valuable complementary approach. Additionally, the knowledge transfer module requires regular online exchanges – sometimes at the transnational level and sometimes through bilateral discussions.



Ultimately, the EmPowerIngUs partnership decided to integrate both models, as illustrated in the accompanying graphic. The model is fundamentally based on the “Carousel” structure, where the final partnership conference will be held in Brussels or Getafe, and transfer cities will organise four

partnership meetings. Between these events, a series of online transnational exchange and learning activities – primarily linked to the knowledge transfer module – will provide ample opportunities for individual coaching and targeted support to transfer cities when most needed.

The advantages of the selected “**Spoked-Wheel**” model are clear. It is well-aligned with the needs of the envisioned transfer process and offers the Lead Partner multiple opportunities to oversee and support the transfer process effectively throughout stages 2 and 3 of the EmPowerIngUs project. Network (transnational) level activities will be implemented through the following types of meetings:

WHAT, WHERE, WHEN & WHO	KEY TOPICS TO BE COVERED AT THE TRANSNATIONAL MEETING	ROLES & RESPONSIBILITIES
<p><b>Transnational Meetings</b>            1<sup>st</sup> TNM in Trikala (GR), 15. – 17. 4. 2025 / 2<sup>nd</sup> TNM in Etterbeek (BE), 3. – 5. 6. 2025 / 3<sup>rd</sup> TNM in Pomorie (BG), 16. – 18. 2025 / 4<sup>th</sup> TNM in Maia (PT), 17. – 19. 3. 2026            Obligatory attendance of ULGC and/or PC + 1 topic devoted stakeholder from each TC, LE &amp; LP</p>	<p>All four planned Transnational Meetings will be organized by transfer cities as 3-day events:            • Key topic knowledge transfer &amp; adapting discussions (1-day)            • Key topic devoted training and groupwork (1-day)            • Other key knowledge exchange, awareness raising and open issues (1-day)            Meetings will enable the partnership to discuss progress on 5 priority topics at the appropriate time in the cities with most ambition to develop them (Big data and AI &amp; ULGC training in Trikala; One-stop-shop mechanism &amp; testing activities training in Etterbeek; Refurbishments and other hard measures &amp; Investment Plan development training in Pomorie; Awareness rising &amp; draft Investment Plan peer review in Maia).</p>	<p><u>Hosting PP</u> – organisation of the meeting (<i>agenda, venue, travel info, catering, workshop materials, moderation, city presentation, etc.</i>), city visit with focus topic presentation  <u>All PPs</u> – preparation of pre-agreed presentations/reports /examples, active participation  <u>LP &amp; LE</u> – focus topic content, training &amp; expert support</p>
<p><b>On-line knowledge exchange meetings</b>            A series of on-line meetings throughout stage 2            Obligatory attendance of designated trainees from each TC, LE &amp; LP</p>	<p>A series of on-line meetings will be organized by the Lead Partner in order to deliver EmPowerIngUs training to trainees (at least 2) selected by Transfer Partners. Training will cover all key topics necessary to test the one-stop-shop mechanism in transfer cities, but will also focus on selected testing solutions. This knowledge exchange will be further supported by in-person trainings delivered on Transfer Meetings. Lead Expert will support this knowledge transfer process.</p>	<p><u>LP</u> – full on-line meeting organization &amp; implementation (PPTs, training materials, exercises, examples, etc.)  <u>LE</u> – expert support  <u>All PPs</u> – Active participation</p>
<p><b>EmPowerIngUs Final Conference</b>            Brussels (BE)/Getafe (ES) in June 2026 as a part of the EU Sustainable Energy Week            Obligatory attendance of ULGC, PC and 1 additional stakeholder from each TC, LE &amp; LP</p>	<p>EmPowerIngUs final partnership meeting and the Final Conference will be organised in Brussels (BE) or Getafe (ES) (do be decided during the mid-term reflection process) as a 3-day event. Day 1 and 3 will be devoted to final EmPowerIngUs partnership meeting. On day 2 EmPowerIngUs Final Conference will be organised during the EU Sustainable Energy Week to disseminate project results and raise awareness about the energy poverty and attempts the network is making towards its reduction.</p>	<p><u>LP</u> – full organisation of the meeting &amp; conference (<i>agenda, venue, travel info, catering, workshop material, moderation, city presentation, etc.</i>)  <u>LE</u> – expert support  <u>All PPs</u> – Active participation and presentation of own results</p>

As previously indicated, transnational meetings will serve as platforms for delivering targeted training, including ULG Coordinator training, training on testing activities, and Investment Plan design training. These sessions will be developed and delivered by the Lead Expert, with support from the Lead Partner and Ad-hoc Experts. Transnational meetings will be further strengthened by **regular monthly online project management and problem-resolution meetings**, involving Project Coordinators and ULG Coordinators. When necessary, Financial and Communication Officers will also participate. These meetings will also serve as a preparatory platform for the organisation and design of all in-person transnational meetings and online knowledge exchange sessions. Additionally, a **mid-term reflection process**, to be conducted towards the end of 2025, will provide an opportunity to assess progress and make necessary adjustments to the transferability process.

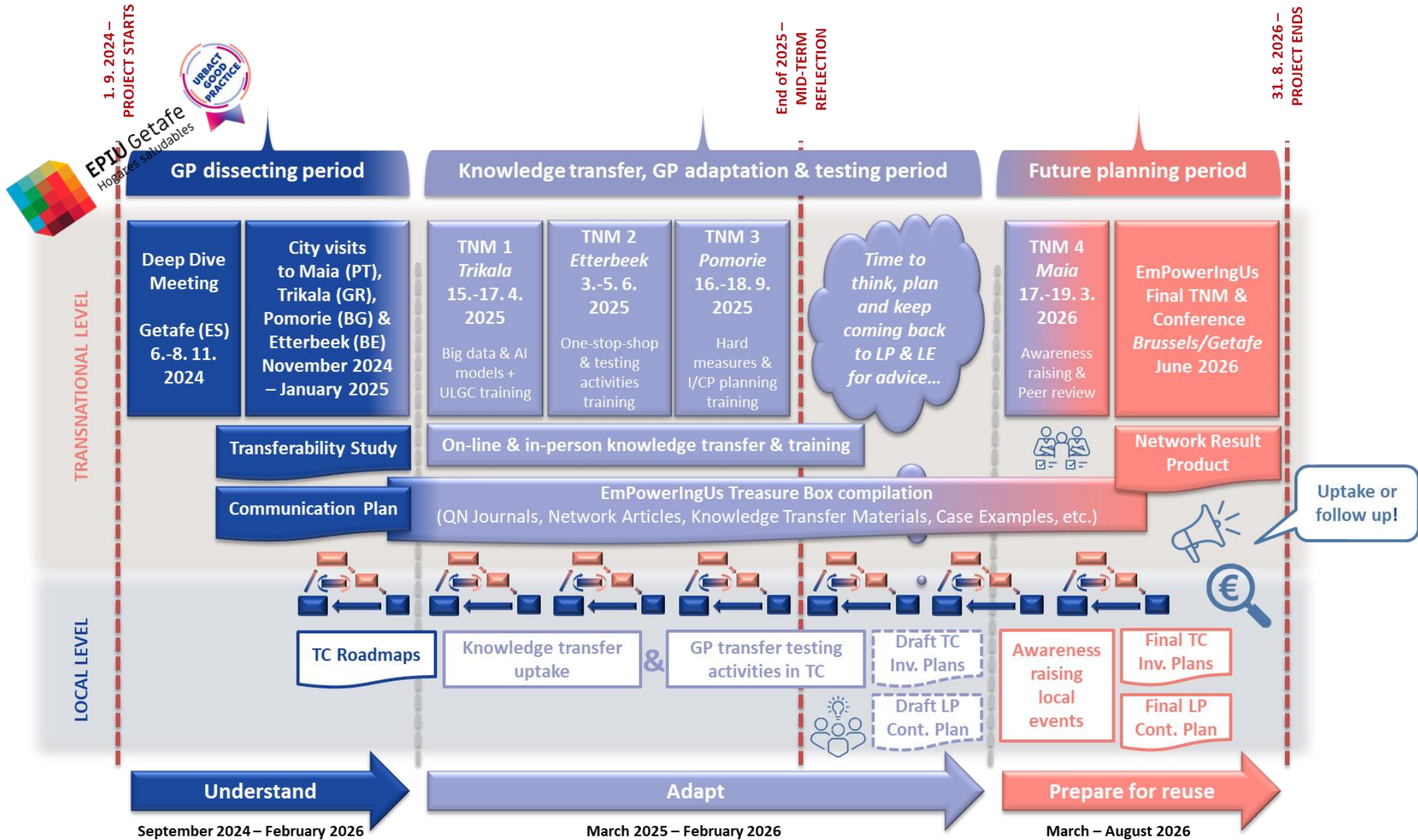
To reflect on network activities and dynamics, four **Quarterly Network Journals** will be produced by the EmPowerIngUs project partnership. These journals will provide insights into network progress at both transnational and local levels. They will be designed and delivered by the Lead Expert, based on inputs from all project partners, and will contribute to the production of **the Network Result Product (Final Report)**.

As mentioned above, a final network meeting will be organised by the Lead Partner towards the end of Stage 3. Given the overlap of Stage 3 with the EU Sustainable Energy Week (typically held in June), the project partnership has identified important synergies and has decided to combine the final network meeting with the **EmPowerIngUs Final Conference**. The network meeting will focus on final Investment/Continuity Plans and the conclusion of project activities, while the Final Conference will share network results and lessons learned with an external audience of cities and urban stakeholders, as outlined in the network Communication Plan.

All transnational-level activities will be managed by the Lead Partner, Lead Expert, and Ad-hoc Experts, as relevant. We are confident that this approach to transnational exchange and learning activities will ensure a well-structured and targeted knowledge transfer, while directly addressing key elements and open issues identified in the introduction to this chapter.

The above-described concept is further illustrated in the **EmPowerIngUs Transfer Process Roadmap** below.

# EmPowerIngUs TRANSFER PROCESS ROADMAP



## THE CONCEPT BEHIND THE LOCAL (CITY) LEVEL ACTIVITIES

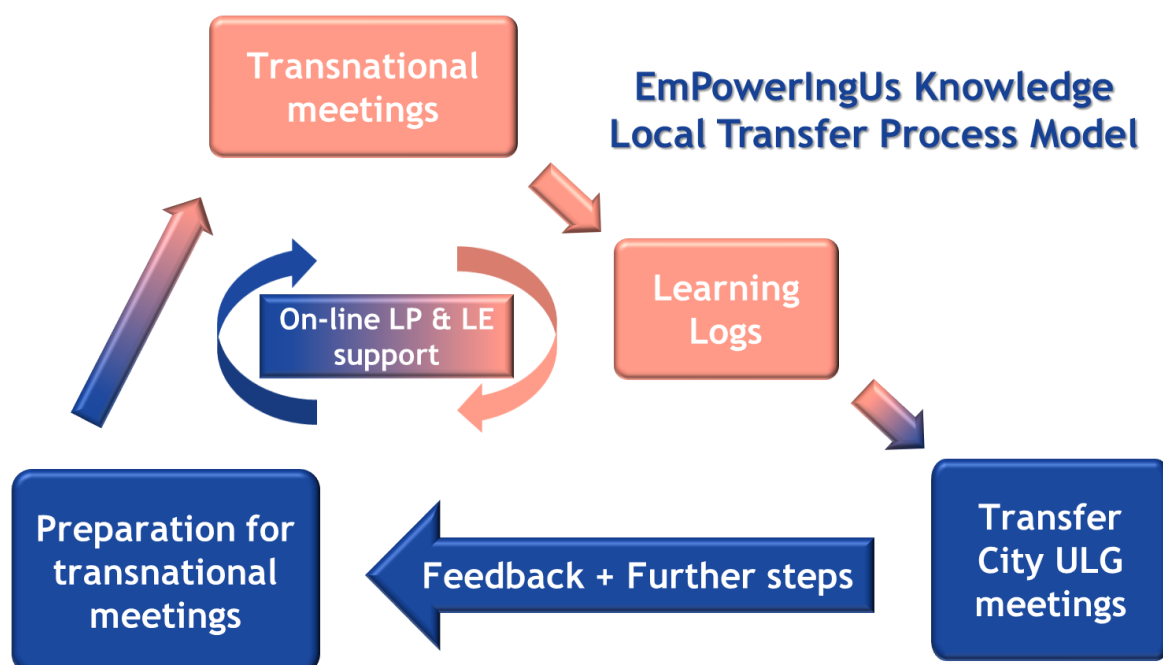
As concluded in Chapter 3, **URBACT Local Groups** (ULGs) have now been successfully established in all transfer cities, with each group having met at least once. While their composition may evolve during the EmPowerIngUs project implementation, the ULG Contact Lists can already be provided by Transfer Partners. During the final month of Stage 1 and the first month of Stage 2, all transfer cities will develop their own **EmPowerIngUs Roadmaps** for the 18-month period. These roadmaps will serve as ULG work programmes, co-created with ULG members and based on preliminary findings from the Transferability Study. They will outline each city's transfer process and key steps. To support this process, the Lead Expert (LE) will organise a dedicated online workshop.

Local activities will be driven by the ULG Coordinator and ULG members, who will meet regularly – around 10 times over the 18-month period. These meetings will focus on designing activities, dividing roles and assignments, discussing further transfer steps, etc. The ULG Coordinator will be responsible for ensuring a regular and uninterrupted knowledge transfer flow from the transnational level to ULG members, as well as for guiding them through the transfer process.

To ensure an effective transfer of knowledge from transnational to local levels, transnational network meetings will always conclude with **Key Topic Learning Logs**. These logs, designed by the LE and completed by transfer city representatives (primarily ULG Coordinators), will serve as a key information set to be relayed to ULG members. As a general rule, **ULG meetings** will be scheduled 1–2 weeks after each transnational event, allowing ULG Coordinators to share relevant insights and ensure continuity in the transfer process.

Between transnational events and ULG meetings, ULG Coordinators and members will work on their assignments, which include – adapting solutions to the local context, testing activities, communication and awareness-raising, **Investment/Continuity Plan development**, creating local partnerships, identifying potential funding sources, etc. Additionally, Transfer Partners will be expected to monitor the development of up-grade modules and provide feedback from their perspective. ULG Coordinators will collect all relevant insights and share them with the Lead Partner, Lead Expert, and, where relevant, Ad-hoc Experts. Any open issues will be addressed either through online support or as part of plenary discussions at the next transnational meeting.

Transfer Partners will support the Lead Partner, Lead Expert and Ad-hoc Experts with local level information, proactive feedback and pre-agreed reports. They will also actively participate in all on-line meetings, using these opportunities to expose and resolve any locale level transfer issues. Under the leadership of the Lead Expert (and in some cases Ad-hoc Experts) they will proactively develop their own Investment Plans, while the Lead Partner will do the same with the Continuity plan.



The transferability concept has been designed to incorporate major transnational events that will support the local transfer implementation process. These events will be organised in accordance with the timeline and sequence outlined in the **EmPowerIngUs Knowledge Local Transfer Process Model**. However, the model does not explicitly illustrate the fact that the concept allows for a five-month period dedicated to good practice adaptation, testing, and Investment/Continuity Plan development. At this stage, it is crucial to provide Transfer Partners with the necessary “thinking and breathing room”, enabling them to focus on their own needs. During this time, transnational meetings will be paused, and support will be provided through online meetings.

In practical terms, the Lead Partner (LP) and Lead Expert (LE) will use the first seven months of Stage 2 to equip transfer cities with as much knowledge and experience as possible, motivate ULG coordinators and members to adapt targeted solutions, encourage high-quality **testing and evaluation of testing results** and support planning activities. Following this intensive phase, Transfer Partners will use the final five months of Stage 2 to draft their Investment Plans, while the Lead Partner will prepare a draft of its Continuity Plan.

The fourth transnational meeting at the beginning of Stage 3 will serve as a **peer review** and comparison platform for all drafted plans. This session will focus on refining the delivery of actions, enhancing stakeholder involvement, ensuring the completeness and quality of all plans and navigating their completion. Both the Investment Plans and the Continuity Plan are key deliverables of the project. They will provide all partners with a clear roadmap for full good practice transfer, thereby significantly strengthening the long-term sustainability of the EmPowerIngUs project results.

Recognising the importance of attracting end-users and raising awareness, each project partner will host a **local event targeted at a city or regional audience**. These events will be organised as part of the URBACT Local Group (ULG) activities. Additionally, project partners are encouraged to organize more local events or connect the topic of energy poverty to already existing relevant awareness raising events and initiatives.

It is expected that throughout this process ULG coordinators will intensively cooperate with ULG members on adaptation of the selected EPIU good practice modules and oversee participatory planning processes on local level. The local level transfer process any dynamics will be captured by Quarterly Network Journals. Together with Learning Logs and other supporting material from all Transnational Meetings, Knowledge Transfer material (e.g. PPTs, recordings of on-line trainings, exercises, guidelines, templates, examples, etc.) and 3 EmPowerIngUs Articles produced by the Lead Expert, they will be collected in the **EmPowerIngUs Treasure Box**.

## THE CONCEPT BEHIND JOINT COMMUNICATION ACTIVITIES

Similar to previous two topics joint communication activities will be also divided into two parts – transnational and local activities. The overall concept is to a large extent dictated by the URBACT approach itself and is in detail described in the Work Plan part of the Application Form. All joint communication activities will be implemented under the leadership of the appointed a **communication officer** and based on the **EmPowerIngUs Communication Plan**, which is currently under development. Its two main communication objectives are:

- Showcasing the network at EU/national/regional/local levels;
- Highlighting good stories to engage citizens and politicians and gain support for implementation of Investment/Continuity plans.

In order to reach the widest possible audience several types of communication tools will be used. Communication officer will develop templates and guidelines and coordinate the work on the transnational level, but content will (mostly) be provided by all Project partners on their own local/regional/national levels. All produced **communication outputs** – for example, Quarterly Network Journals, EmPowerIngUs network articles, Network Final Report and other city-specific communication outputs – will be compiled into the communication designated space of the **EmPowerIngUs Treasure Box** – representing key source of high-quality information to be used for dissemination and communication purposes on transnational and local level.

All transnational meetings and events will be exploited from the communication and awareness raising point of view. Meanwhile, **EmPowerIngUs URBACT website**, as well as **project partner's own websites and social media accounts** (e.g. LinkedIn, Instagram, Facebook, YouTube, etc.) will be regularly maintained and will provide the general public with information on project progress. It will be the task of each Project Partner to translate the network communication plan into communication activities at local level. Furthermore, all Project Partners are tasked to identify local “good practice stories” and use them for story-telling and good practice explanation purposes. National URBACT Points (NUPs) will be involved to achieve the widest possible outreach on the local/regional/national level and use their mobilization capacities and connections with decision makers.

At least one **city-level awareness rising event** will be organized by all EmPowerIngUs project partners – most likely towards the end of stage 2 or in the beginning of stage 3 – in line with project progress dynamics and ability to share project results. However, due to the nature of the EmPowerIngUs awareness rising module, transfer cities will be encouraged to use already existing relevant and well visited local events or facilities (e.g. community centres) to implement additional smaller events, workshops and lectures – all aiming to raise the awareness and motivate citizens to reach out for support. New tools and approaches – like gamification and connecting energy poverty to other “lighter topics”. – will be used to reach out to vulnerable citizens and neighbourhoods.

On the transnational level, the project partnership decided to exploit the overlap of Stage 3 with the EU Sustainable Energy Week (typically held in June), use the topic-devoted attention on all levels and organize the **EmPowerIngUs Final Conference**. Depending on available resources and support, this event will be organized in Brussels or in Getafe. Project partnership plans to use all existing transnational partnerships (e.g. NetZeroCities

network, Eurocities, URBACT, EUI, Horizon Europe, etc.) and NUPs to ensure the widest possible outreach and dissemination of project results, as well as deliver key messages to key decision makers – thus, reinforcing efforts for Investment/Continuity Plans implementation in the future. Furthermore, EmPowerIngUs project partnership will **use all available opportunities** provided by URBACT or other relevant programmes (e.g. URBACT City Festival, Urban cities Forum, etc.) **to disseminate project results and key messages across Europe.**

### **4.3 Conclusions & Overall Transfer Assessment**

This Transferability Study offers an in-depth understanding of the EPIU good practice, along with an assessment of its transfer potential and a vision for its future evolution (Chapter 2). It also presents profiles of four distinct transfer cities—each with a unique transfer environment and set of challenges (Chapter 3). Additionally, the study evaluates the transfer potential of each city and outlines a clear methodology for the transfer process (Chapter 4). The following paragraphs summarize the key conclusions relevant to the EmPowerIngUs transfer process.

We can conclude that while the EPIU good practice is strict in its core principles, it remains reasonably flexible and adaptable in most aspects of its operational model. City visits have demonstrated that it can be successfully applied in cities with various starting conditions, particularly those with pre-existing systems for addressing energy poverty.

The key to its success lies in the fundamental recognition that it represents a new type of public service – one capable of delivering outstanding results and gaining strong acceptance within the community, provided it is effectively communicated, continuously implemented in close cooperation with beneficiaries, and integrated into the city's social support system (or at least closely linked to it).

As a result, any city looking to transfer the EPIU model must secure substantial political, operational, and financial backing, as well as ensure strong collaboration with both internal and external partners. Additionally, certain elements may require specific adjustments to the legal framework, while its core elements often require modifications of existing operational and social structures to unlock its full potential. While modular (partial) transfer is always possible, this would inevitably come at the cost of its overall effectiveness.

However, this analysis should be seen as a caution rather than a deterrent for cities considering the transfer of the EPIU good practice. For cities serious about tackling energy poverty, EPIU offers a clear, tested, and proven pathway to success, along with an extensive list of effective services, operational solutions, and practical tools.

All stated makes the EmPowerIngUs good practice reasonably transferable, especially for cities aiming to address the energy poverty seriously, or for cities looking to upgrade their already existing public service systems with proven solutions. Receiving support from transfer mechanisms like URBACT ITN or innovation mechanisms like EUI could prove to be crucial for ensuring a financially strong, operationally stable and supportive environment for successful full-scale transfers of the EPIU good practice across Europe. Ultimately, the greatest challenge lies in ensuring its long-term sustainability, making it essential for any transfer strategy to address this issue effectively.

**Overall, we can conclude that all EmPowerIngUs Transfer Partners have a strong understanding of the complexity behind the EPIU good practice and the specific conditions under which it was developed. This understanding has guided them to focus their initial transfer efforts on knowledge collection, stakeholder mobilization, in-depth analysis, and testing of selected solutions – ultimately improving their readiness for full-scale transfer in the long run. At the same time, the Lead Partner will be able to further develop and evolve the EPIU good practice and prepare a high-quality Continuity Plan, ensuring alignment with both key objectives of the EmPowerIngUs project.**

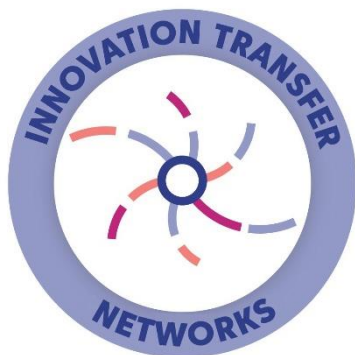
**Given the limited timeframe and resources of the EmPowerIngUs project, both the Lead Expert and Lead Partner fully support these transfer decisions. They are logical, realistic, and tailored to the current conditions and starting points of each transfer city. Moreover, they account for existing assets and barriers and are based on discussions with key stakeholders.**

**The approach ensures that the EmPowerIngUs project serves as a catalyst for energy poverty reduction activities in transfer cities, while placing strong emphasis on high-quality Investment Plans as key instruments for the full-scale transfer of the EPIU good practice in the long run. Considering that each transfer city must navigate its own city-specific challenges, the outlined approach is not only well-founded but also ambitious, demonstrating a strong commitment to long-term success.**

The development of this Transferability Study has been a learning process in itself. Over the past six months – through one Deep Dive meeting, four transfer city visits, and countless online meetings and emails – the project partnership has gained valuable insights and is now fully prepared to implement the EmPowerIngUs project over the next 18 months.



**EPIU Getafe**  
Hogares saludables



**EmPowerIngUs**