



EPAH GUIDELINES

ADDRESSING VULNERABILITY & EQUITY IN ENERGY POVERTY ACTION

EU
**Energy Poverty
Advisory Hub**



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Contact: Mathilde Leyge. Email: Mathilde.LEYGE@ec.europa.eu

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Author: Energy Poverty Advisory Hub (EPAH), managed by the European Commission Directorate General for Energy (DG ENER)

Written by: Marina Varvesi, Marco Orso Suber (AISFOR)

Contributors: Dora Biondani, Emin Ben Kaddour, Nicole Kruz, Kristina Eisfeld (Climate Alliance), João Pedro Gouveia, Miguel Sequeira (CENSE, NOVA School of Science and Technology, NOVA University of Lisbon), Marta García (Ecoserveis), Virginia Dicuonzo (AISFOR), Irene González Pijuan (Enginyeria sense Fronteres and Sheffield Hallam University), Lidija Živčič (Focus Association for Sustainable Development), Rita Mergner (WIP Renewable Energies)

Reviewers: Mathilde Leyge, Chiara Massarotto (Directorate General for Energy, European Commission)

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Energy Poverty

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Reader's guide

The European Commission's Energy Poverty Advisory Hub (EPAH) is the leading EU initiative supporting local, regional and national authorities in their efforts to tackle energy poverty and ensure a just, inclusive energy transition. Through technical assistance, knowledge development, capacity building, networking, and direct collaboration with local governments and communities, EPAH provides practical tools and strategic guidance to accelerate fair and effective action on the ground.

EPAH has developed a comprehensive methodological approach structured around **three phases**: **Diagnosis**, **Planning**, and **Implementation**. These phases are presented in three EPAH Handbooks — [A Guide to Energy Poverty Diagnosis](#), [A Guide to Planning Energy Poverty Mitigation Actions](#), and [A Guide to Implementing Energy Poverty Mitigation Actions](#). Together, they offer a step-by-step framework to understand local realities, design coherent plans, and deliver impactful measures.

Building on this core methodology, the **EPAH Guidelines** offer a series of thematic deep dives that complement the Handbooks. The EPAH Guidelines are designed to support local governments, community organisations, and practitioners in navigating complex aspects of energy poverty by:

- **exploring specific themes in depth**, adding analytical and practical layers to the EPAH methodology;
- **embedding operational guidance** that follows the EPAH three-phase process, ensuring full alignment with the methodology;
- **providing real case studies, practices, and lessons learned** that can inspire replication or adaptation in local contexts;
- **offering hands-on tools**, such as checklists, templates, monitoring elements, and examples that support day-to-day decision-making and service delivery.

These documents are intended for the wide ecosystem of actors working directly or indirectly on energy poverty, including:

- Municipal and regional officers
- Energy advisors and front-line service providers
- Policymakers and elected officials
- NGOs and civil society organisations
- Social, health, and housing professionals
- Community groups, local networks, and intermediaries

Key terminology used in this guideline

In this guideline, priority households refers to households in situations of vulnerability and those at-risk of vulnerability, as identified through the diagnosis. Where relevant, the text specifies particular vulnerability dimensions (e.g. housing tenure, health-related constraints, digital exclusion). Where feasible, this guideline encourages involving people experiencing vulnerability, or organisations that represent and support them, in diagnosis, planning and implementation, using safe and accessible formats.

How to use the guidelines

The guidelines support **practical, everyday work**, by showing how specific approaches or focus areas can be applied in day-to-day local action. They offer concrete entry points whether readers are designing new measures, refining existing practices, or coordinating multi-actor responses. Each guideline can be understood as:

- a stand-alone practical guide aligned with the EPAH methodology;
- a thematic lens that deepens understanding of a specific dimension of energy poverty;
- a practical companion for integrating that dimension into every phase of the EPAH process.

Readers may also consult the introductory handbook and the three EPAH Handbooks, as well as other [EPAH publications](#) for additional methodological detail and examples:

- ▶ The “[Introduction to the EPAH Handbooks: A Guide to Understanding and Addressing Energy Poverty](#)” which establishes the common background to all three handbooks.
- ▶ The “[EPAH Handbook 1: A Guide to Energy Poverty Diagnosis](#)” which focuses on the practical assessment of energy poverty at the local level.
- ▶ The “[EPAH Handbook 2: A Guide to Planning Energy Poverty Mitigation Actions](#)” which provides information on how to prepare and integrate an energy poverty mitigation plan within the Local Social Climate Plan.
- ▶ The “[EPAH Handbook 3: A Guide to Implementing Energy Poverty Mitigation Actions](#)” which provides information on the execution of an effective energy poverty project.

Together, these resources can help local governments and practitioners embed energy poverty considerations across strategies, social services, climate planning and implementation.

In combination with EPAH Handbooks and other EPAH publications, the EPAH Guidelines form a coherent support package enabling areas to integrate energy poverty considerations across policies through a proper diagnosis - planning - implementation process.

Acronyms

ACRONYM	MEANING
CoM	Covenant of Mayors for Climate and Energy
EC	European Commission
EED	Energy Efficiency Directive
EPBD	Energy Performance of Buildings Directive
EPAH	Energy Poverty Advisory Hub
HBS	Household Budget Survey (Eurostat)
JRC	Joint Research Centre (European Commission)
NECP	National Energy and Climate Plan
NGO	Non-Governmental Organisation
OSS	One-Stop Shop
RES	Renewable Energy Sources
SCF	Social Climate Fund
SECAP	Sustainable Energy and Climate Action Plan
SILC	Survey on Income and Living Conditions (Eurostat)
TA	Technical Assistance (EPAH)

01

Energy vulnerability and equity

Addressing vulnerability and equity requires a human-centred approach. Rather than focusing only on technical aspects, this perspective places people, **their lived experiences and unequal capacities to access and benefit from energy services at the centre.** Energy poverty is not experienced uniformly: it is mediated by multiple factors, including climate, health, age, income, housing conditions, gender, migration background, social isolation, cultural factors and access to information. A human-centred approach recognises these differences as fundamental rather than marginal.

This approach not only responds to visible deprivation, but also anticipates fragility, instability and emerging needs before they translate into acute situations (such as severe energy poverty). As such, it enables local governments to consider households that are at risk of falling into energy poverty. Embracing this approach gives local authorities the opportunity to engage with a wider spectrum of households whose situations may easily deteriorate in the face of changes connected with energy prices, health conditions, employment, housing insecurity, climatic stress or other factors.

At the same time, applying a vulnerability- and equity-oriented approach does not necessarily mean that all identified needs can be addressed simultaneously. In contexts where financial and operational resources are limited, local authorities may need to phase action over time and prioritise households facing the most severe vulnerability, the highest barriers to access, and the greatest risk of exclusion. This helps ensure that limited resources are directed first to those least able to cope through standard delivery mechanisms.



The approach presented in this guideline is not only reactive but also preventive, helping ensure that policies address both current needs and future exposure to energy poverty.

1.1

What do we mean by vulnerability in the EPAH context?

In the context of energy poverty, vulnerability¹ refers to the factors and circumstances that increase the likelihood of households experiencing difficulties in accessing adequate and affordable energy services, or that limit their capacity to cope with energy-related challenges when these arise. Vulnerability does not describe a fixed status, but rather a situation shaped by the interaction of multiple personal, social, economic and contextual factors.

¹ https://energy.ec.europa.eu/topics/markets-and-consumers/energy-consumers-and-prosumers/energy-poverty_en

The EPAH approach recognises that vulnerability is multidimensional and dynamic. Households may experience a situation of vulnerability as a result of changes in income, health, employment, housing conditions, household composition or access to information and support. These factors often interact and accumulate over time, creating unequal levels of exposure to energy-related risks and unequal capacity to respond across the population.

While financial constraints remain a central driver, EPAH highlights that energy poverty is also influenced by housing quality, tenure status, health conditions, age, disability, energy literacy, social isolation and cultural or linguistic barriers. As a result, **households with similar income levels may experience very different energy-related outcomes.**

To support a more nuanced understanding, the EPAH methodology identifies several **key dimensions of vulnerability that influence households' ability to secure essential energy services and to access available support:**



Sociodemographic characteristics

Sociodemographic factors such as age, gender, disability, migration background or social isolation can significantly affect households' exposure to energy poverty and their capacity to navigate energy systems and support mechanisms.



Household characteristics

Household size, composition and dependency ratios play an important role in shaping energy needs and consumption patterns. Examples include lone-parent households, single-person households, and households with young children or dependent older persons.



Health conditions

Health-related factors are closely linked to energy vulnerability. Chronic illnesses, disabilities or conditions that increase sensitivity to cold or heat can raise energy needs and reduce households' ability to cope with inadequate indoor conditions. They may also limit capacity to engage with administrative procedures, increasing exclusion risk.



Energy literacy

Energy literacy plays a critical role in shaping households' ability to understand energy bills, tariffs, contracts and consumption patterns, as well as available support schemes and efficiency measures. Limited energy literacy can hinder informed decision-making, reduce the uptake of available measures and increase exposure to unfair practices or inefficiencies.



Cultural and contextual factors

Cultural, linguistic and contextual factors may also influence vulnerability to energy poverty. Language barriers, digital exclusion, trust in institutions, tenure insecurity or local infrastructure conditions can affect households' access to information, services and support. These factors are often highly context-specific and require local knowledge to be properly understood.

These dimensions rarely operate in isolation. Vulnerability often emerges from the way different factors **intersect and reinforce one another**, creating cumulative disadvantages. For example, poor housing conditions may amplify the impact of low income, while health-related needs combined with limited energy literacy or language barriers may significantly restrict access to support. This intersectional nature of vulnerability helps explain why households with similar income levels may experience very different energy-related outcomes, even within the same neighbourhood or building.

Vulnerability is also **dynamic**. Some factors tend to be relatively **structural or static**, such as long-term health conditions, disability or persistent housing deficiencies, while others are more dynamic, including job loss, changes in household composition, sudden health events, extreme weather conditions or sharp increases in energy prices. Therefore, households not currently experiencing energy poverty may nonetheless be at risk of falling into it, particularly when multiple pressures coincide.



Considering these dimensions together is essential for effective and fair local action, as it helps local governments move beyond average assessments and better understand differentiated needs and barriers:

- 1 Identify households experiencing energy poverty, as well as those at risk of falling into energy poverty.
- 2 Anticipate where standard measures may not reach or adequately benefit priority households.

This provides the foundation **for proportionate and inclusive local responses aligned with households' lived realities**.

1.2 From identifying vulnerability to designing equitable responses

Identifying vulnerability is necessary for understanding energy poverty, but it is not sufficient on its own to ensure fair and effective local action. Knowing which households are experiencing energy poverty or are at risk does not automatically translate into measures that reach them or respond to their specific constraints.

Moving from vulnerability to equity requires a deliberate shift in perspective. **While vulnerability analysis helps identify risk factors, exposure and access barriers, equity provides the principle for shaping responses that take unequal starting points and unequal capacities into account.** Households differ significantly in their ability to access information, navigate administrative procedures, engage with support mechanisms or invest time and resources in energy-related solutions. These differences are often closely linked to the intersecting and dynamic vulnerabilities described above.

An equity-oriented approach, therefore, goes beyond uniform solutions. It considers how measures are prioritised, how access is organised and how delivery mechanisms function in practice for different groups. This includes anticipating barriers (such as health, language, digital access, tenure status or trust in institutions) and adapting procedures, communication and support accordingly. Without such adaptations, even sound measures may remain inaccessible to priority households.

Where feasible, equity also means involving people experiencing vulnerability, or organisations that represent and support them, in shaping priorities and delivery choices.



In the context of energy poverty, equity means ensuring that support mechanisms are proportionate to households' real situations, both for those currently experiencing energy poverty and for those at risk of falling into it as circumstances change. Integrating equity into decision-making helps translate vulnerability analysis into concrete choices about prioritisation, access pathways and delivery models.

1.3 Why vulnerability and equity matter in tackling energy poverty

Energy poverty is not experienced evenly across the population, and the ongoing energy transition risks amplifying existing differences if vulnerability and equity are not explicitly addressed. Policies and measures based on average conditions, standard eligibility criteria or uniform delivery mechanisms may overlook households facing complex, intersecting or less visible forms of vulnerability.

When vulnerability and equity considerations are absent, local energy poverty actions may unintentionally reinforce existing inequalities. Households with higher capacities, better access to information or stronger administrative skills are more likely to benefit, while others remain excluded despite being eligible or at risk. This can result in non-take-up, unfair outcomes and a concentration of benefits among groups that are already better positioned.

Placing vulnerability and equity at the centre of energy poverty action supports a more realistic and inclusive approach. It enables local governments to understand how different vulnerability dimensions interact, how risks may evolve over time and why standard measures may fail to reach certain households. By explicitly addressing these dynamics, policies can better respond to lived realities, improve targeting, ensure fairer access and contribute to more effective and inclusive outcomes across diverse household situations.



Placing vulnerability and equity at the centre of energy poverty action supports the design of measures that respond to people's lived realities and contribute to inclusive and fair outcomes across diverse household situations.

02

How this guideline builds on the EPAH methodology

This guideline translates vulnerability and equity into practical guidance aligned with the EPAH three-phase methodology (Diagnosis, Planning and Implementation). It shows how these considerations can be applied consistently across the EPAH cycle to strengthen the effectiveness and fairness of local energy poverty action.

ii. Diagnosis

In the **Diagnosis** phase, the EPAH methodology supports municipalities in identifying the households in energy poverty by analysing the scale, drivers and spatial patterns of energy poverty and by combining quantitative indicators with qualitative insights, including local knowledge and inputs from frontline actors.

➔ **A vulnerability and equity approach helps identify differentiated risks and access barriers that standard indicators may miss.**

Planning

In the **Planning** phase, the EPAH methodology focuses on prioritising actions, defining objectives and coordinating stakeholders across sectors.

➔ **A vulnerability and equity approach helps ensure priorities, access routes and delivery choices reflect unequal starting points and capacity.**

Implementation

In the **Implementation** phase, the EPAH methodology focuses on delivering actions, engaging households and coordinating service delivery on the ground.

➔ **A vulnerability and equity approach helps design outreach, accessibility and monitoring so measures reach priority households and benefits are fairly distributed.**



This guideline provides a coherent framework to support local governments in embedding vulnerability and equity across the EPAH cycle, thus aligning diagnosis, planning and implementation with households' lived realities, contributing to more targeted, inclusive and effective energy poverty action.

2.1

Challenges and opportunities of applying a vulnerability- and equity-oriented approach

When applying a vulnerability and equity lens, local governments often face challenges that go beyond technical or energy-related questions. These challenges typically relate to data, outreach, governance and delivery capacity, and they affect whether measures can reach priority households in practice.

The table below summarises common challenges and corresponding opportunities for strengthening local responses.

For each challenge the relevant step in the EPAH handbook has been identified. The reader may therefore choose to read the table from the perspective of a specific challenge and consult the relevant steps identified for that challenge.

The challenges:

1 Fragmented data and insufficient disaggregation to identify vulnerability situations and access barriers	
Corresponding Opportunities Strengthening data integration, disaggregation and sharing across social, housing, health and energy sectors; use of EPAH tools (Indicators Dashboard, Technical Assistance, ATLAS) and vulnerability analysis to support evidence-based targeting.	Where to look in this guideline (phase/steps) <ul style="list-style-type: none">  Diagnosis Steps 4, 6 and 7 (indicators and sources, interpretation, communication)  Planning Step 4 (defining opportunities and barriers)
2 Limited outreach capacity and difficulty engaging hard-to-reach households	
Corresponding Opportunities Partnerships with community groups and trusted intermediaries; inclusive participation and co-design approaches to reach priority households more effectively.	Where to look in this guideline (phase/steps) <ul style="list-style-type: none">  Diagnosis Step 5 (additional evidence)  Planning Steps 3 and 9 (evaluating options, prioritising)  Implementation Step 5 (delivery and outreach)

3 Siloed governance structures separating social, housing and energy domains

Corresponding Opportunities

Development of social–energy synergies through joint programmes; strengthened cross-sectoral and interdepartmental cooperation at the local level.

Where to look in this guideline (phase/steps)

Diagnosis Step 3 (cross-sector hypotheses)

Planning Steps 6 and 10 (social factors, local social climate plan)

4 Limited trust in institutions among priority households

Corresponding Opportunities

Engagement through trusted intermediaries; participatory approaches that build confidence, legitimacy and long-term trust.

Where to look in this guideline (phase/steps)

Diagnosis Steps 5 and 7 (additional evidence, communicating local energy poverty)

Planning Step 6 (social factors)

Implementation Steps 5 and 6 (delivery, feedback/evaluation)

5 Complex administrative procedures that deter participation

Corresponding Opportunities

Simplified procedures, personalised administrative support and accompaniment; use of funding instruments to reduce documentation burdens, digital barriers and upfront costs.

Where to look in this guideline (phase/steps)

Diagnosis Steps 4 and 5 (sources/indicators, additional evidence on access barriers and non-take-up)

Planning Steps 3, 4 and 7 (evaluating options, opportunities and barriers, economic factors)

Implementation Steps 3 and 5 (financial plan, access)

6 Limited financial capacity of priority households to invest in energy efficiency, renovations or participation in energy programmes

Corresponding Opportunities

Use of dedicated public funding and social financing instruments (e.g. Social Climate Fund, targeted national and regional schemes), combined with grants, advance payments, zero-interest loans and integrated social–energy support, to remove upfront cost barriers and enable access for priority households.

Where to look in this guideline (phase/steps)

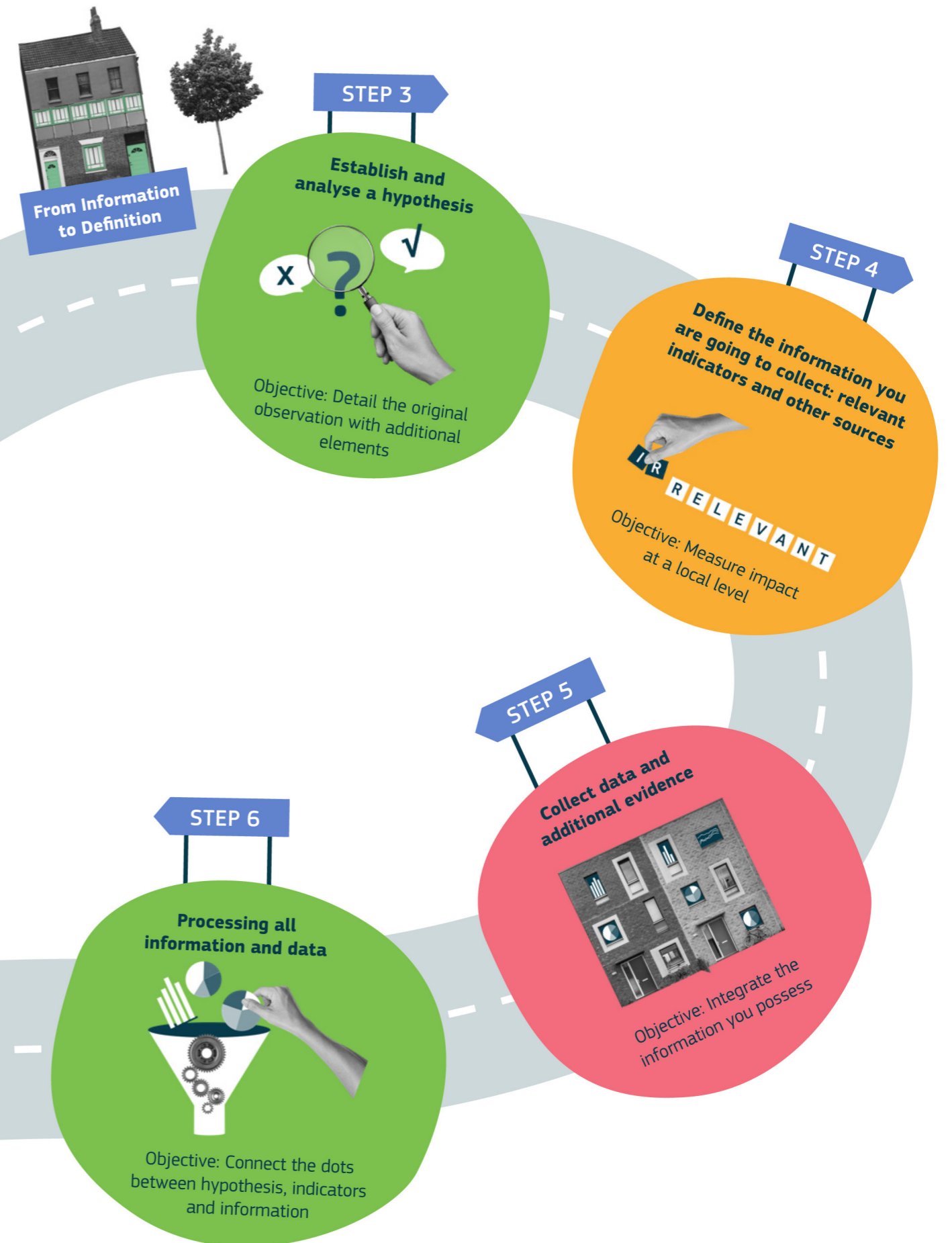
Diagnosis Steps 3 and 4 (affordability assumptions, indicators and sources)

Planning Steps 3, 7, 9 and 10 (evaluating options; economic factors; prioritising; developing a local social climate plan)

Implementation Steps 3 and 6 (financial plan; evaluation of distributional outcomes)

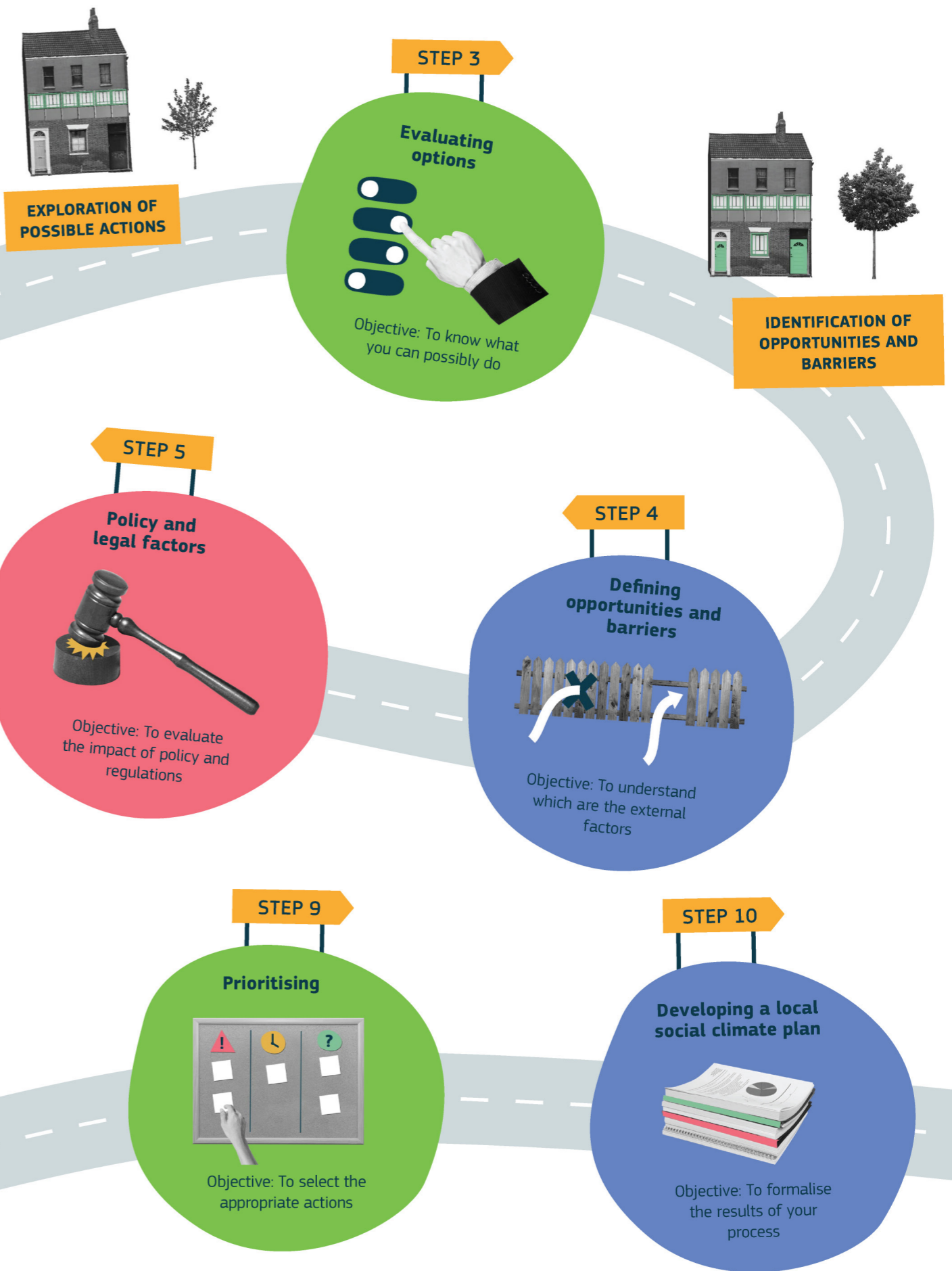
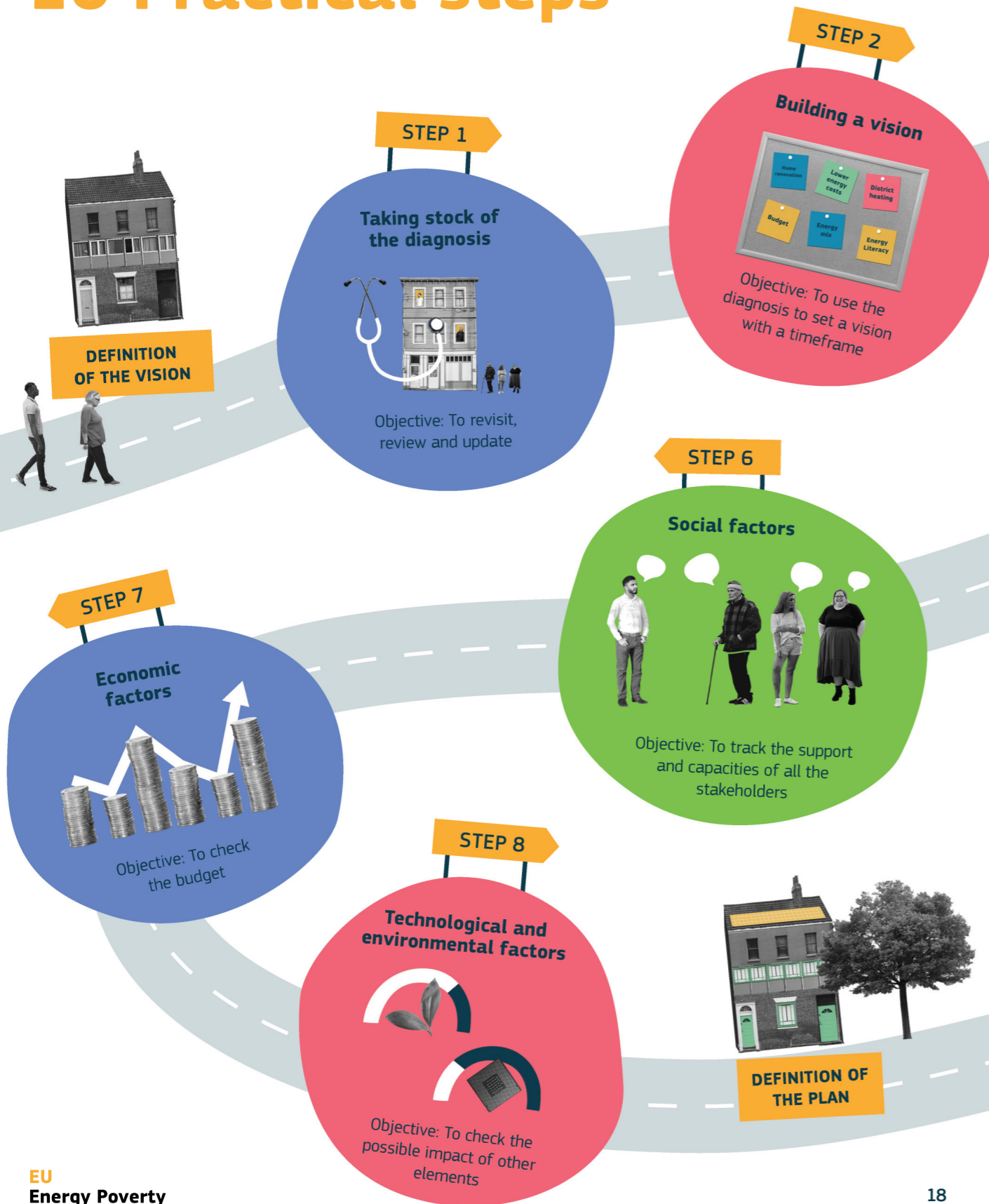
Diagnosis

7 Practical steps



Planning

10 Practical steps



Implementation 6 Practical steps

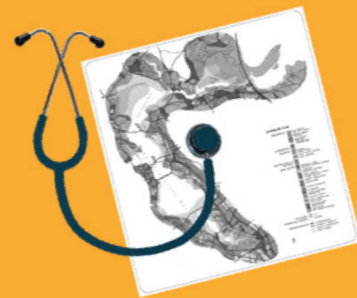


SETTING THE COURSE FORWARDS



STEP 1

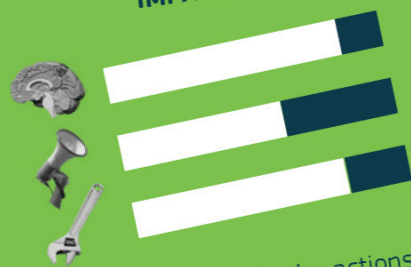
TAKING STOCK OF DIAGNOSIS AND PLANNING



Objective: Revisit, review and update

STEP 6

EVALUATING THE IMPACT



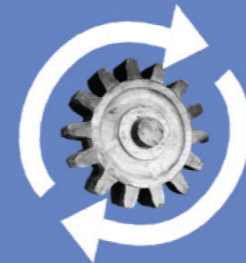
Objective: Evaluate the actions to inform future strategies



REVISIT AND RENEW

STEP 2

DEVELOPING THE OPERATIONAL PLAN



Objective: Define detailed tasks and subtasks

STEP 3

DESIGNING A FINANCIAL PLAN



Objective: Include details on the financial flow expected

STEP 4

ESTABLISHING A MONITORING PLAN



Objective: Establish performance indicators to assess progress

STEP 5

APPLYING THE ENERGY POVERTY LENS



Objective: Tailor the action to vulnerable consumers



IMPLEMENT A SPECIFIC ACTION



Integrating vulnerability and equity across the EPAH phases


The following chapters translate the concepts of vulnerability and equity into practical guidance aligned with the EPAH three-phase methodology (Diagnosis, Planning and Implementation) and its step structure. The guideline highlights where applying a vulnerability and equity lens changes analysis, prioritisation, access conditions and delivery choices, including how benefits are distributed.

In the **Diagnosis** phase, the guideline focuses on Steps 3, 4, 5, 6 and 7, where vulnerability and equity considerations most clearly affect how local energy poverty is analysed, interpreted and communicated. In the **Planning** phase, the guideline focuses on Steps 3, 4, 6, 7, 9 and 10, where prioritisation, access conditions and distributional choices are defined, while other steps function primarily as enabling steps. In the **Implementation** phase, the guideline revisits Steps 3, 5 and 6, which most directly shape financial accessibility, delivery practices and the distribution of outcomes; the remaining steps follow the EPAH Handbook guidance and are treated as enabling.


The following tables are provided as a navigation aid. They summarise the EPAH steps across the three phases and indicate where this guideline adds vulnerability- and equity-specific guidance. They can be used as an index to navigate the document either step-by-step or starting from a specific challenge (as reported on pages [14 and 15](#)).


Diagnosis phase – Overview of vulnerability and equity integration

Diagnosis Steps	Vulnerability & equity lens Focus of this guideline	Related Challenge
STEP 1 Understand the complexity of energy poverty	Not explicitly revisited. This step remains applicable as set out in the EPAH Handbook and does not require additional adaptation through a vulnerability and equity lens.	—
STEP 2 Identify and engage the stakeholders involved	Not explicitly revisited. Stakeholder engagement is important for equity and is reflected through guidance in later steps within this guideline.	—
STEP 3 Establish and analyse a hypothesis	Revisited. Frame hypotheses to reflect how contextual and personal factors interact, to capture differentiated risks and intersecting vulnerabilities, including priority households potentially overlooked by income-based assumptions.	<ul style="list-style-type: none"> ③ Siloed governance structures ⑥ Limited financial capacity

 Diagnosis 7 Steps	Vulnerability & equity lens Focus of this guideline	Related Challenge
STEP 4 Define relevant indicators and other sources	Revisited. Select indicators and sources that capture multiple dimensions of vulnerability, emphasising disaggregation, cross-sectoral data and complementary administrative and qualitative evidence.	<ul style="list-style-type: none"> 1 Fragmented data 5 Complex administrative procedures 6 Limited financial capacity
STEP 5 Collect data and additional evidence	Revisited. Expand data collection beyond aggregated statistics to include lived experience, qualitative inputs and insights from frontline actors, supporting the identification of access barriers and non-take-up drivers.	<ul style="list-style-type: none"> 2 Limited outreach capacity 4 Limited trust in institutions 5 Complex administrative procedures
STEP 6 Processing all information and data	Revisited. Interpret findings through an accumulation lens: how vulnerabilities interact and compound over time, shaping unequal exposure, resources and coping capacity beyond average or single-indicator readings.	<ul style="list-style-type: none"> 1 Fragmented data
STEP 7 Define your local energy poverty and communicate it	Revisited. Ensure outputs clearly identify priority households and key access barriers, and communicate findings in accessible formats so they can be used directly for prioritisation in planning.	<ul style="list-style-type: none"> 1 Fragmented data 4 Limited trust in institutions

Planning phase – Overview of vulnerability and equity integration

 Planning Steps	Vulnerability & equity lens Focus of this guideline	Related Challenge
STEP 1 Taking stock of the diagnosis	Not explicitly revisited. This step remains applicable as set out in the EPAH Handbook and ensures continuity between diagnosis findings and planning decisions.	—
STEP 2 Building a vision	Not explicitly revisited. An equity-oriented vision is essential to define priorities and recognise unequal starting points across households; relevant aspects are further reflected in subsequent steps.	—
STEP 3 Evaluating options	Revisited. Assess options not only for technical performance, but also for accessibility, relevance and feasibility for priority households; identify where complementary measures are needed to remove barriers to uptake.	<ul style="list-style-type: none"> 2 Limited outreach capacity 5 Complex administrative procedures 6 Limited financial capacity

 Planning Steps	Vulnerability & equity lens Focus of this guideline	Related Challenge
STEP 4 Defining barriers and opportunities	Revisited. Analyse external and procedural factors for their differentiated impacts on priority households, anticipating exclusion risks and defining mitigation strategies (e.g. alternative access routes, assisted support, trusted intermediaries).	1 Fragmented data 5 Complex administrative procedures
STEP 5 Policy and legal factors	Not explicitly revisited. This step remains applicable as set out in the EPAH Handbook; relevant constraints and enabling conditions are considered through other steps where they affect access and feasibility.	<p style="text-align: center;">—</p>
STEP 6 Social factors	Revisited. Identify relevant stakeholders, governance structures and implementation capacities through an equity lens, strengthening coordination across sectors and engaging actors working directly with priority households to support inclusive delivery.	3 Siloed governance structures 4 Limited trust in institutions
STEP 7 Economic factors	Revisited. Assess financial resources and funding design in relation to the capacity of priority households, ensuring that financial and administrative requirements do not create barriers to access.	5 Complex administrative procedures 6 Limited financial capacity
STEP 8 Technological and environmental factors	Not explicitly revisited. This step remains applicable as set out in the EPAH Handbook; relevant aspects are considered where they affect feasibility, suitability and access for priority households.	<p style="text-align: center;">—</p>
STEP 9 Prioritising	Revisited. Apply prioritisation criteria that explicitly weigh severity of need, access barriers and risk of exclusion, so resources reach those least able to benefit from standard delivery.	2 Limited outreach capacity 6 Limited financial capacity
STEP 10 Developing a local social climate plan	Revisited. Translate vulnerability and equity insights into targeted measures, governance, funding routes and monitoring, including safeguards to ensure the plan reaches priority households and can be adjusted if unequal uptake emerges.	3 Siloed governance structures 6 Limited financial capacity

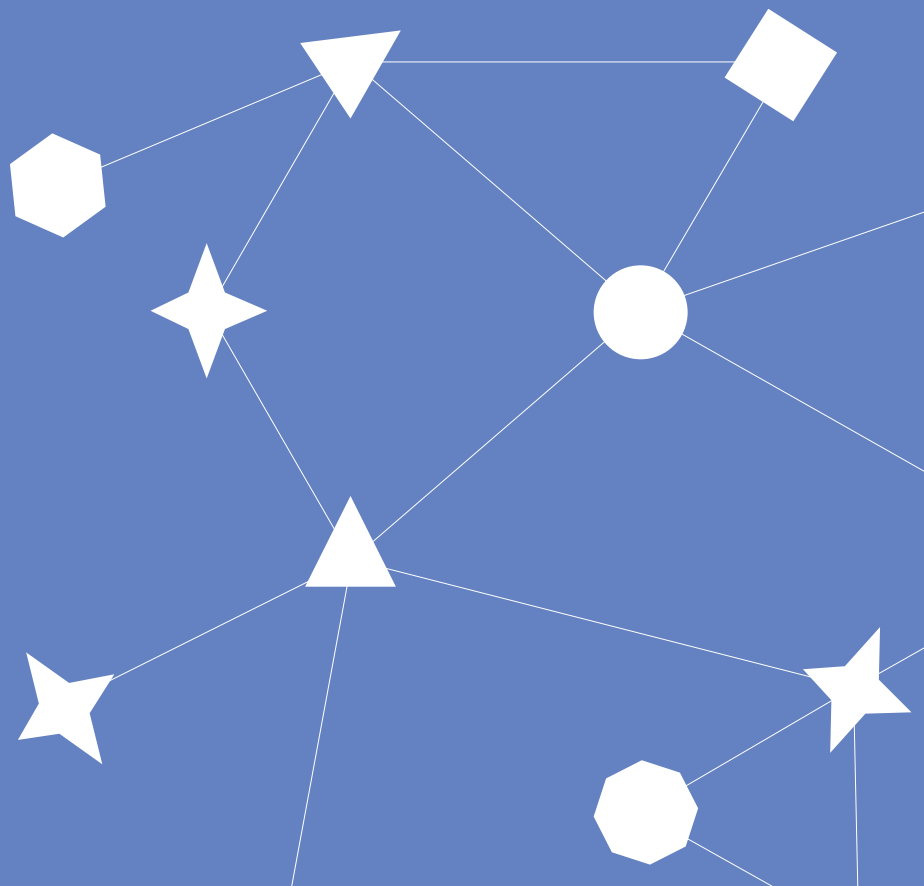
Implementation phase – Overview of vulnerability and equity integration

📌 Implementation Steps	Vulnerability & equity lens Focus of this guideline	Related Challenge
STEP 1 Taking stock of diagnosis and planning	Not explicitly revisited. This step remains applicable as set out in the EPAH Handbook and ensures continuity between planning decisions and implementation.	—
STEP 2 Developing the operational plan	Not explicitly revisited. This step remains applicable as set out in the EPAH Handbook; relevant aspects are addressed through subsequent steps where delivery choices affect access and outcomes.	—
STEP 3 Designing a financial plan	Revisited. Adapt financial design to remove upfront cost and administrative barriers (e.g. advance payments, direct-to-contractor payments, simplified eligibility checks, assisted completion), enabling participation by priority households.	5 Complex administrative procedures 6 Limited financial capacity
STEP 4 Establishing a monitoring plan	Not explicitly revisited. This step remains applicable as set out in the EPAH Handbook; relevant aspects are addressed through evaluation and monitoring considerations in later steps.	—
STEP 5 Applying the energy poverty lens	Revisited. Adapt delivery to real-life conditions through tailored outreach, accessible communication and simplified procedures, working with trusted intermediaries to reduce non-take-up linked to mistrust, language, digital or administrative barriers.	2 Limited outreach capacity 4 Limited trust in institutions 5 Complex administrative procedures
STEP 6 Evaluating the impact	Revisited. Evaluate effectiveness and distributional outcomes (who benefits, who does not and why) using quantitative results and qualitative feedback, and feed lessons learned into future diagnosis and planning cycles.	4 Limited trust in institutions 6 Limited financial capacity

04

Diagnosis

Integrating vulnerability and equity into the EPAH diagnosis phase



As set out in *EPAH Handbook 1 – A Guide to Energy Poverty Diagnosis*, the diagnosis phase helps local governments understand the scale, drivers and territorial distribution of energy poverty. It combines data analysis with stakeholder engagement and local knowledge to identify who is affected and why.

Applying a vulnerability and equity lens at this stage makes differences in exposure needs and capacity explicit. It reduces reliance on averages and income-based proxies alone, and supports a more accurate picture of uneven risks and access barriers across the population.

Building on this, the following section revisits Diagnosis Steps from 3 to 7, where vulnerability and equity considerations most clearly shape how energy poverty is analysed, interpreted and communicated. Steps 1 and 2 remain applicable as set out in the EPAH Handbook and are not explicitly revisited here.



Why this matters:

A vulnerability and equity informed diagnosis ensures local energy poverty strategies are grounded in a realistic understanding of who is affected and why. Moving beyond average indicators and income-based proxies helps reveal hidden needs and access barriers that might otherwise remain invisible. This strengthens the evidence base for decision-making and provides a clearer foundation for prioritisation and action in subsequent planning and implementation phases.

STEP 3 Establish and analyse a hypothesis

This step formulates initial hypotheses about the drivers, affected groups and spatial patterns of energy poverty in the local context.

From a vulnerability and equity perspective, hypotheses should consider how contextual factors (e.g. housing quality, local infrastructures, energy price dynamics) interact with personal and social factors (e.g. age, health conditions, disability, household composition, energy literacy). This interaction-based framing helps surface differentiated risks that may be missed when hypotheses rely on single variables.

Actions to be carried out include:

- Frame hypotheses that explicitly consider priority households and groups facing intersecting vulnerabilities.
- Avoid one-dimensional explanations based solely on income, consumption level or dwelling type.
- Anticipate how administrative, informational or institutional barriers may shape risk and access to support for different groups.

Example: Municipalities start hypothesis-building by jointly reviewing energy, social, health and housing information with social and health services and housing departments. This helps identify groups exposed to multiple vulnerabilities (for example, tenants in inefficient dwellings with health-related needs, limited digital access or language barriers) that may not emerge from income-based hypotheses alone.

STEP 4 Define relevant indicators and other sources

This step identifies indicators and data sources to test hypotheses and describe local energy poverty.

A vulnerability and equity lens supports selecting indicators that reflect multiple dimensions of vulnerability, in line with the EPAH methodology (e.g. sociodemographic characteristics, household composition, health-related constraints, energy literacy, and cultural or contextual factors). Where feasible, disaggregation helps avoid masking unequal situations behind aggregated averages.

Actions to be carried out include:

- Prioritise indicators that can be disaggregated by relevant characteristics (e.g. tenure, age, disability, neighbourhood, household type) where possible.
- Combine statistical data with administrative records and, where possible, qualitative inputs to capture access barriers and non-take-up drivers.
- Use EPAH tools (Indicators Dashboard, ATLAS, TA outputs) to support evidence-based analysis.

Example: Municipalities complement statistical indicators with administrative information from social services, housing providers or health departments to better identify priority households experiencing intersecting vulnerabilities that are not visible in aggregated datasets.

STEP 5 Collect data and additional evidence

This step collects quantitative and qualitative evidence to test hypotheses and build the diagnosis.

From a vulnerability and equity perspective, data collection should go beyond aggregated datasets and include evidence that captures lived experience, access barriers and situations of social or health-related fragility. Qualitative evidence is particularly important to understand non-take-up, mistrust and administrative exclusion.

Actions to be carried out include:

- Combine quantitative datasets with interviews, consultations and service-level insights. Where appropriate, complement quantitative data with input from organisations working directly with priority households and, where feasible, from people experiencing vulnerability, using safe and accessible formats.
- Pay particular attention to groups under-represented in official statistics.
- Validate emerging findings through local stakeholder knowledge.

Example: Municipalities complement quantitative data with inputs from frontline services and community organisations to understand why some eligible households do not access support. Participant selection reflects the diagnosis objective (e.g. geographic focus, household composition, health-related constraints, tenure conditions), ensuring qualitative evidence helps explain access barriers and non-take-up.



Interactive section

Identifying missing evidence

Review the data sources currently used for your local energy poverty diagnosis and reflect on:

- ▶ **Which vulnerability dimensions are not adequately captured by available quantitative data?**
- ▶ **Which groups or situations may remain invisible in administrative or statistical sources?**
- ▶ **Which qualitative sources (e.g. frontline services, community organisations, outreach activities) could complement existing data, and how could they be used in practice to fill evidence gaps?**

This reflection helps identify blind spots in the evidence base and supports a more comprehensive local diagnosis.

STEP 6 Processing all information and data

This step analyses and interprets collected information in relation to the initial hypotheses.

A vulnerability and equity lens supports interpretation by highlighting unequal exposure to risks and unequal capacity to cope, helping explain why similar dwelling conditions or income levels may lead to different energy poverty outcomes.

Actions to be carried out include:

- Analyse how vulnerability factors interact and accumulate over time.
- Identify groups facing compounded or persistent risks.
- Avoid conclusions based solely on averages or single indicators.

Example: Municipalities organise joint interpretation sessions involving energy, health, social and housing departments to identify intersecting vulnerabilities and to translate findings into implications for targeting and delivery.

STEP 7 Define your local energy poverty and communicate it

This step formalises the diagnosis outputs and communicates them to support planning and action.

Embedding vulnerability and equity at this stage helps ensure the diagnosis clearly identifies who is most affected, which barriers exist and which groups may not be reached by standard measures. This clarity strengthens the link between diagnosis and prioritisation in planning.

Actions to be carried out include:

- Clearly describe priority households and key access barriers in diagnostic outputs.
- Communicate findings in accessible formats for different audiences.
- Use diagnostic outputs to justify prioritisation and targeted delivery choices in the planning phase.

Example: Municipalities share concise, accessible diagnostic outputs with internal departments and external partners involved in the diagnosis (e.g. social services, health actors, housing providers, NGOs). This supports alignment and helps translate evidence into planning decisions and delivery expectations.



A common pitfall in the diagnosis:

Relying solely on economic indicators

Without integrating social, health, tenure and demographic variables, municipalities risk overlooking priority households who are not income-poor but remain highly exposed, such as tenants in overheated top-floor apartments, older adults living alone with health-related needs or households facing language/digital barriers that limit access to support.



Interactive section

Grounding the knowledge for the diagnosis process

Scenario:

Imagine a household living in a rented, poorly insulated apartment, experiencing high energy expenditure due to housing inefficiency and facing constrained working hours and limited flexibility linked to caregiving responsibilities. The household is eligible for energy support, but:

- the application requires digital access,
- key documentation is only available in the national language,
- the landlord does not carry out basic repairs,
- the household must make trade-offs between paying energy bills and replacing essential appliances.

Reflection question:

Which vulnerability factors affect access to support in this situation? How could a municipality detect these risks through diagnosis?



Ready-to-use tool

Vulnerability dimensions checklist

- ▶ **Where to use:** Diagnosis phase – cross-cutting (supports Steps 3–7)
- ▶ **Purpose:** To help municipalities systematically check whether key vulnerability dimensions and access barriers are reflected in the local energy poverty diagnosis.
- ▶ **Tool:** Vulnerability dimensions checklist

When reviewing or validating the local energy poverty diagnosis, consider the following questions:

- Are sociodemographic factors (age, disability, gender, migration background, social isolation) reflected in the analysis?
- Are household characteristics (size, composition, dependency ratios) considered when interpreting energy needs and risks?
- Are health-related vulnerabilities (chronic illness, sensitivity to cold/heat, disability-related needs) explicitly taken into account?
- Does the diagnosis consider differences in energy literacy and access to information?
- Are cultural, linguistic, digital or tenure-related barriers reflected in the evidence base?
- Are dynamic factors (income loss, health shocks, energy price increases, extreme weather) considered alongside more structural vulnerabilities?

This checklist helps ensure vulnerability is understood as multidimensional and dynamic, supporting a more comprehensive and equitable diagnosis.

Case Study

LIFE ASSERT PROJECT: Disability and Vulnerability



Context and rationale

The LIFE ASSERT project addresses energy poverty among people with physical disabilities, for whom energy needs may be **structurally higher** due to the use of medical and assistive devices, more time spent at home, and specific thermal comfort requirements linked to health protection. The [*“Report on the state of the art on energy poverty and disability and relevant indicators”*](#) highlights that disability can increase exposure to energy poverty through a combined effect of higher electricity demand, low or unstable incomes, inaccessible housing and gaps between social and energy policy support.

Human-centred evidence collection

To complement statistical and administrative evidence with lived experience, the [*“Report on needs, comfort expectations and energy practices of energy poor disabled people”*](#) draws on focus groups, interviews and surveys conducted across the participating pilot countries (Cyprus, France, Greece, Italy and Spain). This qualitative approach supported the collection of individual and household level insights on everyday practices, comfort and health needs, housing constraints and financial pressures that are often not visible in aggregated statistics.

Key findings

- Electricity can be essential for mobility aids, medical equipment, communication and safety devices.
- Maintaining stable indoor temperatures may be a health requirement, not only a comfort preference.
- Summer heat stress and unaffordable cooling are widespread.
- Many participants reported living in old, poorly insulated buildings and having limited control over heating and cooling systems.
- Existing disability benefits and social tariffs rarely cover the additional energy costs linked to disability.
- Administrative complexity and inaccessible information can restrict access to support schemes.

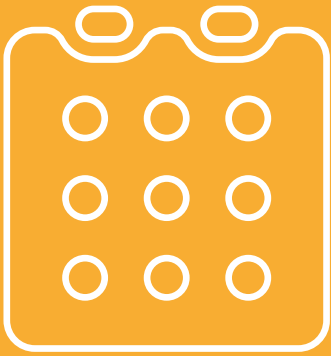
Policy relevance

ASSERT illustrates that energy poverty affecting people with disabilities may not be adequately addressed through generic measures alone. It points to the need for **tailored, preventive and accessible approaches** that reflect higher energy needs, health protection, housing accessibility and financial vulnerability. The project demonstrates how **vulnerability and equity lenses** can be operationalised at household level to support a **just and inclusive energy transition**.

05

Planning

Integrating vulnerability and equity into the EPAH planning phase



As outlined in *EPAH Handbook 2 – A Guide to Planning Energy Poverty Mitigation Actions*, the planning phase translates diagnosis findings into concrete, prioritised and feasible actions by defining objectives, selecting measures, coordinating stakeholders and allocating resources.

Applying a vulnerability and equity lens at this stage helps ensure that differentiated risks, needs and access barriers identified during the diagnosis are reflected in priorities, action design and delivery mechanisms.

Building on this framing, the following section revisits EPAH Planning steps through a vulnerability and equity lens, highlighting practical implications for inclusive design and delivery. In particular, the vulnerability and equity lenses are applied in depth to those steps that directly influence **who is targeted, how measures are designed, how impacts are distributed and how results are monitored**, namely: Step 3 – Evaluating options, Step 4 – Defining barriers and opportunities, Step 6 – Social factors, Step 7 – Economic factors, Step 9 – Prioritising, Step 10 – Developing a local social climate plan. These are the stages where the risk of exclusion, mis-targeting or unintended inequalities is highest, and where a preventive and human-centred approach can most effectively be embedded.

By contrast, Step 1 – Taking stock of the diagnosis, Step 2 – Building a vision, Step 5 – Policy and legal factors, and Step 8 – Technological and environmental factors are treated as **enabling steps**. While they do not directly shape distributive or accessibility outcomes, they are essential for creating the strategic, institutional and financial conditions for applying vulnerability and equity in practice. The first two steps of the planning phase provide the strategic foundation for equity-oriented action. They ensure continuity between the energy poverty diagnosis and planning decisions, while establishing a shared vision that explicitly recognises unequal starting points across households.

Together, these steps help municipalities reassess priorities in light of evolving vulnerabilities, align objectives with local capacities and constraints, and build a common understanding of who should be prioritised, why, and over what timeframe. This creates a coherent basis for designing and selecting actions that respond to real needs and barriers identified at local level. Further, where policy, legal, technological or environmental conditions (Steps 5 and 8) affect feasibility, access or suitability for priority households, these aspects are addressed through other planning steps that more directly influence prioritisation, measure design and delivery conditions.



Why this matters:

Embedding vulnerability and equity throughout the planning phase helps align priorities, actions and resources with households’ lived realities. This strengthens the link between diagnosis and implementation and increases the likelihood that local energy poverty actions deliver fair, inclusive and effective outcomes.

STEP 3 Evaluating options

This step aims to identify and assess potential actions that can address the diagnosed energy poverty challenges.

From a vulnerability and equity perspective, actions should be evaluated not only for technical effectiveness, but also for accessibility, relevance and feasibility for priority households. Uniform measures may fail to reach groups facing health constraints, low literacy, tenure barriers or administrative exclusion.

Actions to be carried out include:

- Specify which priority groups each action is expected to reach, and through which access routes.
- Identify likely barriers to uptake and participation and assess both scale (how many households are reached) with equity (who benefits and who is left out).
- Identify complementary measures needed to make access feasible.

Example: Municipalities assess proposed actions for technical performance and for delivery feasibility for priority households. They identify likely uptake barriers (e.g. documentation, digital-only access, co-funding, landlord consent) and add complementary measures such as assisted applications, targeted outreach through trusted intermediaries or simplified procedures. They also check that mainstream programmes (e.g. renovation schemes) include targeting and facilitation features that prevent the exclusion of priority households.



Interactive section Equity-proofing a planned measure

Select one planned or existing energy poverty measure (e.g. renovation programme, financial support scheme, energy advice service).

Reflect on the following questions:

- ▶ **Which households are most likely to benefit from this measure as currently designed?**
- ▶ **Which priority households may face barriers to access or participation?**
- ▶ **Which design or delivery features could unintentionally exclude households with lower capacity to navigate the process?**

Based on this reflection, identify one or two adjustments that could improve accessibility, relevance and fairness.

STEP 4 Defining barriers and opportunities

This step identifies external and procedural factors that may affect future implementation.

Opportunities and barriers do not affect all households equally. External factors (political, economic, social, technological and environmental) can create differentiated impacts and exclusion risks for households in situations of vulnerability and at-risk households. The aim is to anticipate these effects early and define mitigation strategies that protect access, uptake and outcomes.

Actions to be carried out include:

- ➔ Assess political, economic, social, technological and environmental factors through an equity lens.
- ➔ Identify barriers that may reduce access, uptake or benefits for priority households. Consider administrative and procedural barriers (e.g. eligibility rules, documentation, digital-only processes, co-funding requirements) that can exclude priority households.
- ➔ Define mitigation strategies early (e.g. alternative access routes, targeted support, trusted intermediaries).

Example: Municipalities use structured analyses (e.g. PESTLE)¹ to anticipate factors that could limit reach and uptake among priority households and to define mitigation strategies in advance. Common barriers include digital exclusion and language barriers, which can be addressed through assisted access points, multilingual communication and support delivered via trusted intermediaries.



Interactive section Equity-proofing a planned measure

Select two measures:

1) a mainstream measure (not energy poverty-specific) and 2) an energy-poverty specific measure. For each, identify barriers that may limit access for priority households.

Consider in particular:

- ▶ **Administrative and procedural barriers;**
- ▶ **Financial requirements and upfront costs;**
- ▶ **Information, language and digital barriers;**
- ▶ **Trust, stigma and engagement with institutions.**

This exercise supports early mitigation planning to reduce exclusion risks during implementation.

² A PESTLE analysis examines how Political, Economic, Social, Technological, Legal, and Environmental external factors affect a process.

STEP 6 Social factors

This step aims to identify relevant stakeholders, governance structures and implementation capacities.

An equity-oriented approach recognises the importance of actors working directly with vulnerable households and highlights the need to address institutional capacity gaps that may hinder inclusive delivery.

Actions to be carried out include:

- Map stakeholders beyond the energy sector.
- Involve social services, housing providers and community organisations.
- Strengthen coordination and clarify roles across departments.

Example: Municipalities conduct a structured mapping of local actors that work directly with vulnerable and at-risk households, documenting their mandate, services offered, target groups, geographic coverage and referral criteria. Based on this mapping, they establish a coordination set-up (e.g. a working group and regular check-ins) that enables continuous exchange between energy, social, housing and health actors, clarifies roles and responsibilities, and sets up practical referral pathways to reduce fragmentation and improve reach. EPAH Technical Assistance can support municipalities in strengthening cross-sector cooperation, formalising governance arrangements and translating coordination into actionable, inclusive delivery processes.

STEP 7 Economic factors

This step aims to assess financial resources, funding sources and economic feasibility.

An equity lens requires that funding design and cost-sharing arrangements do not exclude priority households with limited financial buffer or administrative capacity. Upfront costs and complex procedures are common barriers and can drive non-take-up even when support exists.

Actions to be carried out include:

- Allocate budgets in line with identified priority households and the support intensity required, including delivery and facilitation costs.
- Reduce financial and administrative barriers (e.g. co-funding requirements, complex documentation, digital-only processes).
- Provide complementary support where needed (e.g. assisted applications, trusted intermediaries).

Example: Municipalities combine funding sources to cover both (i) delivery costs (e.g. outreach, case management, assisted applications) and (ii) beneficiary-facing financial support (e.g. grants, advance payments, direct payments to contractors, zero-interest loans where appropriate). This reduces upfront cost and administrative barriers and improves access for priority households.

STEP 9 > Prioritising

This step aims to define priorities among possible actions, target groups and geographic areas, and to sequence interventions based on local needs, feasibility and expected impact.

From a vulnerability and equity perspective, prioritisation should explicitly consider unequal starting points, access barriers and the risk of exclusion. Without a deliberate equity approach, measures may be taken up first by households with higher capacity (time, literacy, digital access, stable tenure), reinforcing existing inequalities.

Prioritisation should therefore ensure that actions and resources reach households facing the greatest barriers and risks, and that delivery intensity is aligned with different levels of need and capacity.

Actions to be carried out include:

- Apply prioritisation criteria that include severity of need, access barriers and risk of non-take-up (not only cost-effectiveness or technical potential).
- Prioritise measures and delivery routes that can realistically reach priority households (e.g. targeted outreach, facilitated access, trusted intermediaries).
- Sequence interventions to avoid “better-off first” dynamics, allocating early capacity to actions that remove barriers and support uptake among those most at risk.

Example: Municipalities use the diagnosis to identify neighbourhoods with high energy poverty risk and low uptake of existing support. They prioritise a package combining targeted outreach, assisted applications and grants with simplified procedures, delivered through trusted intermediaries. More technically complex measures are scheduled later, once enabling support and access routes are in place.

STEP 10 Developing a local social climate plan

This step aims to consolidate planning outputs into a coherent local social climate plan that sets objectives, measures, governance, funding arrangements and monitoring to support an inclusive and just transition.

A vulnerability and equity lens ensures the plan translates diagnostic evidence into targeted measures and delivery arrangements that effectively reach priority households. It should also include safeguards to prevent unintended negative impacts and to ensure that resources reduce inequalities rather than reproduce them.

To strengthen accountability, the plan should clearly state who it is designed to reach, how access barriers will be addressed, and how progress will be tracked.

Actions to be carried out include:

- Translate diagnosis and prioritisation into targeted measures, specifying priority households, access routes and support intensity (including outreach and facilitation).
- Define governance and delivery roles for actors working directly with priority households, and ensure coordination across social, housing, health and energy services.
- Specify funding routes and monitoring indicators that track reach and distributional outcomes, including mechanisms to adjust implementation based on evidence and feedback.

Example: Municipalities integrate energy and social measures into a local social climate plan that combines building-level interventions with household-level support. The plan defines priority households and neighbourhoods, establishes partnerships with social services and community organisations for outreach and facilitated access, and allocates funding to reduce upfront costs. Monitoring includes indicators on who is reached and who is not, allowing delivery to be adjusted to address unequal uptake early.



A common pitfall in planning:

Planning is developed in administrative silos

Energy teams, housing offices, social departments, and public health services need to work together; otherwise, actions risk being fragmented, duplicated or inaccessible to priority households.



Interactive section

Grounding the knowledge

Scenario:

You are designing a municipal renovation programme intended to support low-income households. The current eligibility and access conditions include proof of ownership, a digital-only application, and co-financing from applicants.

Questions to reflect on:

- Which households are most likely to access the programme as currently designed, and who may be excluded?
- How would households in rental or insecure tenure situations access support?
- What barriers could arise for people with limited digital access, limited time availability, language barriers, or health-related constraints?
- Which design or delivery changes would make access simpler, safer and more equitable (e.g. assisted applications, alternative access routes, tailored communication, direct payments to contractors)?



Ready-to-use tool

Equity quick-check for action design

- ▶ **Where to use:** Planning phase – supports Step 3 (Evaluating options)
- ▶ **Purpose:** To quickly check whether a planned or existing measure risks excluding priority households.
- ▶ **Tool:** Equity quick-check

Before finalising a measure, reflect on the following questions:

- Does the measure require upfront payments, co-financing, or reimbursement-only models?
- Are application and communication channels accessible (not digital-only; available in appropriate languages and formats)?
- Do eligibility rules assume home ownership, stable tenure, or landlord cooperation?
- Is the process manageable for households with limited time, or administrative capacity?
- Are facilitation mechanisms in place (e.g. mediation, accompaniment, trusted intermediaries)?
- Is the measure accessible to households with health, mobility, sensory or cognitive constraints?

If several answers raise concerns, adapt the measure to reduce barriers and prevent non-take-up among priority households.



Ready-to-use tool Barrier mapping template

- ▶ **Where to use:** Planning phase – supports Step 4 (Defining barriers and opportunities)
- ▶ **Purpose:** To systematically identify access barriers and define mitigation measures before implementation.
- ▶ **Tool:** Barrier mapping template

Barrier type	Who is affected	Where it appears	Possible mitigation
Administrative			
Financial			
Digital Language			
Housing Tenure			
Trust Engagement			

Use this template to anticipate exclusion risks and plan mitigation early.

Case Study

THE GENDER4POWER PROJECT

Integrating a gender perspective in energy poverty action



Context and rationale

The LIFE project GENDER4POWER focuses on citizen engagement, multi-stakeholder collaboration, and community-driven renewable energy and renovation initiatives aimed at empowering vulnerable households and strengthening participation in local energy transitions.

The GENDER4POWER project addresses energy poverty through a gender equity lens, recognising that women and gender-diverse people may face structurally higher risks due to unequal income and employment conditions, caregiving responsibilities, housing constraints and limited influence over energy-related decisions. These factors can increase exposure to energy poverty while simultaneously reducing access to support measures and participation in energy-related initiatives.

The project aims to support more equitable and inclusive energy poverty action by involving vulnerable people, especially women, in energy communities focused on renovation or renewable electricity generation, while at the same time strengthening the capacity of a variety of local actors to integrate gender considerations into policy design, delivery and evaluation. GENDER4POWER focuses on embedding gender equity within existing energy poverty frameworks rather than creating stand-alone measures, ensuring that actions respond to differentiated needs and lived realities.

Approach

GENDER4POWER adopts a multi-level approach combining capacity building, stakeholder engagement and the development of gender-equal energy communities for local implementation. The project works with municipalities, social services, civil society organisations and energy actors to improve understanding of how gender intersects with other vulnerability dimensions, such as income, health, household composition, housing conditions and care responsibilities.

A key component of the approach is the use of gender-disaggregated data and qualitative evidence to complement standard diagnostic indicators, as well as ensuring equal participation of women in energy communities. Participatory and inclusive processes are promoted to ensure that the perspectives of women and gender-diverse groups inform planning choices, delivery arrangements and evaluation practices.

Relevance for vulnerability and equity

The project demonstrates how a gender perspective strengthens vulnerability and equity analysis by making visible forms of disadvantage that are often overlooked in gender-neutral approaches. It highlights how standard energy poverty measures may unintentionally favour households with greater economic resources, time availability or decision-making power, while excluding women facing multiple and intersecting constraints.

By addressing gender-related barriers to access, participation and benefit distribution, GENDER-4POWER illustrates how equity-oriented approaches can reduce non-take-up, improve targeting and support fairer outcomes. The project is particularly relevant for local authorities seeking to integrate gender equity into energy poverty action through adaptations in prioritisation, delivery and monitoring.

Key lessons

- Gender is a cross-cutting vulnerability dimension that influences exposure to energy poverty and access to support.
- Gender-disaggregated data and qualitative insights are essential to capture intersecting and less visible vulnerabilities.
- Inclusive and participatory governance processes improve the relevance and effectiveness of local energy actions.
- Integrating a gender equity lens supports fairer access and a more balanced distribution of benefits.

Why this matters for local action

The GENDER4POWER project shows that addressing gender inequality is a practical and necessary component of effective energy poverty action. For municipalities, applying a gender-informed vulnerability and equity lens helps ensure that measures reflect unequal starting points, respond to real-life conditions and contribute to more inclusive and resilient outcomes. The project demonstrates how gender equity can be embedded within energy communities and in existing local energy poverty strategies through targeted adaptations to planning, delivery and evaluation processes.

06

Implementation

**Integrating vulnerability
and equity into action
delivery**



The implementation phase translates the priorities and measures defined during diagnosis and planning into concrete action on the ground. As outlined in *EPAH Handbook 3 – A Guide to Implementing Energy Poverty Mitigation Actions*, this phase is critical to ensure that measures are delivered effectively and that intended social outcomes are realized in practice.

Integrating vulnerability and equity at this stage means ensuring that implementation choices, procedures and delivery mechanisms reflect households' differentiated needs, capacities and constraints. This reduces the risk of exclusion during delivery and increases the likelihood that actions reach and benefit those most in need.

Building on this framing, the following section revisits EPAH Implementation steps through a vulnerability and equity lens, focusing on those **steps where decisions most directly shape access, uptake and distributional outcomes**. In particular, vulnerability and equity considerations are applied in depth to Step 3 – Designing a financial plan, Step 5 – Applying the energy poverty lens, and Step 6 – Evaluating the impact. These steps represent critical points where financial conditions, delivery practices and evaluation choices can either mitigate or reinforce exclusion, non-take-up and unequal outcomes for vulnerable and at-risk households.

By contrast, Step 1 – Taking stock of diagnosis and planning, Step 2 – Developing the operational plan, and Step 4 – Establishing a monitoring plan are treated as **enabling steps**. While essential for ensuring coherence, feasibility and coordination, the guidance provided in the EPAH Handbook remains applicable. Where operational or monitoring arrangements affect accessibility, participation or outcomes, these aspects are addressed through the three revisited steps, which more directly influence financial accessibility, lived experience during delivery and the assessment of distributive impacts.



Why this matters:

Embedding vulnerability and equity throughout the implementation phase helps ensure that delivery choices, procedures and support arrangements reflect households' lived realities. This helps ensure that findings from the diagnosis and priorities defined during planning are effectively translated into concrete action during implementation, increasing the likelihood that local energy poverty actions deliver fair, inclusive and effective outcomes.

STEP 3 Designing a financial plan

This step defines the financial structure of the action, including costs, funding sources, timing and long-term sustainability.

Financial planning should account for limited financial and administrative capacity among priority households. Upfront costs, co-financing requirements or delayed reimbursements can prevent participation even when support exists. Addressing these barriers is essential to ensure equitable access.

Actions to be carried out include:

- Assess how financial conditions affect participation across household situations (e.g. tenure, income stability, digital access, ability to pre-finance).
- Integrate funding mechanisms that reduce or remove upfront costs where possible (e.g. grants, advance payments, direct-to-contractor payments). Evaluate budget for delivery support that may be necessary for equitable uptake (e.g. assisted applications, accompaniment, interpretation/translation).
- Ensure financial sustainability for actions intended to continue over time.

Example: Municipalities remove upfront cost barriers by combining grants with advance payments and direct-to-contractor payments, rather than reimbursement-only schemes. They simplify documentation requirements where possible and reserve a dedicated budget line for delivery support (e.g. home visits, accompaniment, interpretation/translation) to enable access for priority households.



Interactive section

Who benefits from implementation?

Review the indicators used to monitor the implementation of energy poverty measures specifically for vulnerable groups.

Reflect on the following questions:

- ▶ **Which groups are currently benefiting from the measures?**
- ▶ **Which priority households show lower uptake, completion or participation?**
- ▶ **Are there early signs of unequal outcomes, drop-out or non-take-up?**

This reflection supports early identification of distributional effects and helps inform adjustments during implementation.

STEP 5 Applying the energy poverty lens

This step focuses on adapting delivery so that actions work under real-life conditions and effectively support households affected by energy poverty.

Rather than creating new measures, this step emphasises adapting communication, procedures and support arrangements so that access is feasible for priority households. Vulnerability analysis helps identify where and why barriers arise, while an equity lens ensures that operational and organisational choices translate into fair access, consistent support and meaningful outcomes for households with different needs and capacities.

Actions to be carried out include:

- Adapt outreach, communication and delivery channels to different needs and capacities, ensuring continuity with priority households identified during diagnosis and planning.
- Work with trusted intermediaries (e.g. social services, community organisations, housing actors) to reach households that standard channels may miss and to support engagement and trust.
- Reduce operational barriers during delivery, including administrative burden, procedural complexity and constraints linked to health, language, digital access or tenure.

Example: Municipalities partner with community organisations and frontline services to deliver tailored outreach. They offer multiple access routes (walk-in support points, phone support, home visits where feasible) and simplify procedures through “assisted journeys”, where a caseworker supports the household from first contact to completion. This approach helps maintain continuity with planning priorities while reducing drop-off linked to administrative burden, language barriers, digital exclusion or low trust.



Interactive section Learning from frontline experience

Engage with frontline staff, community organisations or intermediaries involved in delivery.

Reflect on the following questions:

- ▶ Which barriers do households most frequently encounter during implementation?
- ▶ Which delivery mechanisms work well for priority households, and which do not?
- ▶ What practical changes could improve trust, accessibility or completion rates?

This exercise supports continuous learning and adaptation of implementation practices.

STEP 6 Evaluating the impact

This step assesses whether implemented actions deliver the intended results and inform future adjustments.

From a vulnerability and equity perspective, evaluation goes beyond measuring overall outputs to examine how outcomes are distributed across different household groups. It focuses on whether priority and at-risk households are effectively reached, whether barriers persist during implementation and whether unintended or unequal effects emerge. Monitoring data and qualitative feedback are used together to support learning, accountability and adaptive improvements.

Actions to be carried out include:

- Use monitoring evidence and qualitative feedback to assess access, uptake and outcomes for priority and at-risk households.
- Identify unequal or unintended effects, including non-take-up, drop-out or imbalances across groups or areas.
- Use evaluation findings to adapt measures and delivery practices, improving accessibility, targeting and effectiveness.

Example: Municipalities review monitoring data alongside feedback from frontline staff and community organisations and observe lower uptake among older tenants and households with limited digital access. In response, they adjust delivery by extending application support, simplifying procedures and reallocating resources to outreach activities, improving participation among previously underrepresented groups.



A common pitfall in implementation:

Relying on standard delivery channels and procedures

Without tailored outreach, accessible communication and practical support, municipalities risk low uptake, drop-off and unequal outcomes, as priority households may not be reached or may be unable to complete the process.



Interactive section

Grounding the knowledge

Exercise: Mapping barriers from frontline experience

Purpose:

Identify the most frequent barriers that prevent priority households from accessing or completing support measures.

Organise a short working session with frontline staff and intermediaries (e.g. social workers, energy advisors, NGOs, housing mediators). Ask participants to:

- list the main barriers encountered during outreach, application/enrolment, delivery and follow-up;
- classify barriers into: *administrative/procedural, financial, digital, health-related, housing/tenure-related, trust-related, communication-related*;
- note whether barriers disproportionately affect specific groups or situations (e.g. renters, people with disabilities, digitally excluded households, households with caring responsibilities).

Output:

A local “barrier map” that links each barrier to (i) where it appears, (ii) who it affects most, and (iii) practical mitigation options (e.g. assisted applications, alternative access routes, simplified documentation, trusted intermediaries).



Ready-to-use tool

Equity monitoring indicators selection guide

- ▶ **Where to use:** Implementation phase – supports Step 4 (Establishing a monitoring plan)
- ▶ **Purpose:** Integrate equity considerations into monitoring without overburdening existing systems.
- ▶ **Tool:** Equity monitoring indicators – selection guide

When defining monitoring indicators, consider including at least one indicator from each category below:

Reach and inclusion

- Does the measure require upfront payments, co-financing, or reimbursement-only models?

Accessibility and completion

- Share of applications receiving assisted support (e.g. in-person / phone support)
- Drop-out rate between application and delivery completion
- Median time from first contact to support received (where feasible)

Distribution of outcomes

- Differences in uptake, completion, or benefits across population groups or areas

Qualitative feedback

- Recurring barriers / facilitators reported by beneficiaries, intermediaries, or frontline staff (captured through short feedback loops)

Selecting a limited number of equity-focused indicators helps identify unequal uptake early and supports adaptive implementation.



Ready-to-use tool

Triggers for adapting implementation

- ▶ **Where to use:** Implementation phase – can be checked throughout implementation Steps 4-6
- ▶ **Purpose:** Help municipalities recognise when adjustments are needed during or after implementation.
- ▶ **Tool:** Triggers for adapting implementation

Consider adapting implementation if one or more of the following signals emerge:

- Low uptake among priority households
- High drop-out rates during application or delivery
- Strong territorial imbalances in participation or completion
- Repeated feedback from intermediaries indicating exclusion, confusion, or mistrust
- Recurrent barriers reported by frontline staff

This tool supports adaptive management and continuous improvement across policy cycles.

Case Study

ENERGY POVERTY IN CHILDHOOD

Context

Energy poverty is widely recognised as a major social and public health issue across Europe, affecting access to adequate heating, cooling and essential energy services. Children are particularly vulnerable to these conditions, as they are more sensitive to inadequate indoor environments and spend a significant amount of time at home.

Despite this, research and policy frameworks continue to rely predominantly on household-level approaches, implicitly assuming that energy deprivation affects all members equally. This perspective obscures important differences within households and limits understanding of how children's health, wellbeing and development are specifically affected.

The research "Growing up in Energy Poverty" aims to address this gap by developing a child-centred understanding of how energy poverty impacts children's health, everyday lives and recognition within policy frameworks.

As a result, children are rarely recognised as subjects of concern in their own right, and their experiences remain largely invisible within energy poverty research and policy. Addressing this gap is essential to developing more inclusive and effective responses to energy poverty.

Human-centred evidence collection

This research "Growing up in energy poverty" adopts a mixed-methods and child-centred approach to capture the multiple dimensions of energy poverty in childhood.

Quantitative analysis examines associations between energy poverty and children's physical and mental health outcomes. This is complemented by a review of European and national policy frameworks to assess the extent to which children are recognised within energy poverty governance.

To incorporate lived experience, participatory workshops and child-centred research methods have been conducted in Barcelona, enabling children to express how they understand and navigate energy poverty in their everyday environments.

Key Findings

Energy poverty is associated with negative physical and mental health outcomes in children.

- Children are particularly vulnerable to inadequate indoor temperatures, dampness and overheating.
- Existing policy frameworks rarely recognise children explicitly, treating them as indirect beneficiaries rather than subjects of concern.
- Household-level approaches obscure inequalities within families and overlook children's specific needs.
- Children are aware of energy constraints and actively adapt their behaviours and routines.
- Care dynamics within households often prioritise children's comfort, masking the extent of deprivation.

Delivery implications

This study shows that energy poverty affecting children cannot be adequately addressed through household-level or adult-centred approaches alone. It highlights the need for policies that explicitly recognise children as subjects of concern, taking into account their specific health, developmental and emotional needs.

The findings support the development of more child-sensitive indicators, targeted support measures and improved integration between energy, housing and child wellbeing policies. By combining structural analysis with children's lived experiences, the study demonstrates how justice and care perspectives can be operationalised to support more inclusive and equitable energy policy frameworks.



How this guideline builds on the EPAH methodology

Experience from local practice, including EPAH support activities and wider EU initiatives, suggests that actions are most effective when they combine technical solutions with social and institutional approaches that reflect the multidimensional and dynamic nature of vulnerability.

Integrating diagnosis, planning and implementation

More effective local action maintains a clear link between diagnosis, planning and implementation. Diagnosis informs who is affected and why; planning translates this into prioritisation, access routes and delivery design; implementation adapts delivery to real-life constraints and feeds learning back into subsequent cycles. Treating the phases as an iterative process helps reduce gaps between intent and outcomes.

Strengthening multi-actor governance

Coordinated governance involving local government, social services, housing actors, energy agencies, NGOs, health providers and community organisations can reduce fragmentation and strengthen delivery. These actors bring complementary expertise and channels to reach households, support referrals and enable problem-solving when barriers arise.

Embedding equity into programme design

Equity works best when built in from the outset. Clear prioritisation, inclusive eligibility and access conditions, simplified procedures, trusted intermediaries, and targeted outreach reduce the risk that measures are taken up mainly by households with higher administrative capacity. A practical check throughout delivery is: Who is benefiting? Who is not being reached? What is preventing access or completion?

Using both quantitative and qualitative evidence

Quantitative indicators are essential for diagnosing patterns and tracking reach, while qualitative evidence (e.g. interviews, community engagement, and frontline insights) helps explain barriers such as non-take-up, mistrust, digital exclusion or tenure constraints. Using both strengthens targeting and improves delivery.

Monitoring processes and outcomes

Monitoring should track implementation progress and whether measures reach priority households in practice. Disaggregated indicators (where feasible), combined with feedback loops from intermediaries and frontline staff, help identify unequal uptake early and enable adjustments.

Key recommendations for municipalities

At the end of this guideline, several overarching recommendations can be summarised:

- 1** Adopt a multidimensional understanding of vulnerability, combining economic, housing/tenure, health, demographic and social factors.
- 2** Embed equity in prioritisation, access routes and delivery design, so support is proportionate to need and responsive to barriers.
- 3** Strengthen cross-departmental coordination and partnerships with actors who work directly with households.
- 4** Design measures that lower barriers and provide practical support throughout the pathway.
- 5** Monitor both technical results and distributional outcomes to understand who benefits, who does not, and why.



Conclusion

A fair and inclusive energy transition requires placing vulnerability and equity at the centre of local energy poverty action. This guideline has shown how municipalities can integrate these considerations into diagnosis, planning and implementation so that measures reflect lived realities, address structural inequalities and reduce barriers to access.

By strengthening cross-sector coordination, combining quantitative and qualitative evidence, and designing delivery models that are accessible to priority households, local authorities can improve both the effectiveness and fairness of their actions.

Municipalities are encouraged to draw on EPAH resources (including the Handbooks, Technical Assistance, the ATLAS of local actions and training materials) to support continuous learning, adaptation and implementation over time.



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