WELLBASED

TACKLING ENERGY POVERTY AS A PUBLIC HEALTH PRIORITY: POLICY RECOMMENDATIONS FROM WELLBASED PROJECT

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ACTION FIELD

Local action: urban programs to fight against energy poverty through health lenses

These recommendations guide local and other policymakers in shaping effective policies for a healthier, more equitable future. Local authorities play a key role in tackling energy poverty while improving public health. Although many strategies exist, this document focuses on bridging the gap between energy poverty and health—two interconnected fields but often separate policy areas. Drawing on insights from the EU-funded WELLBASED project, it highlights the need to integrate health considerations into energy poverty policies and vice versa. A holistic approach can lead to more effective and sustainable solutions that enhance the wellbeing of vulnerable populations.

WELLBASED Policy recommendations are divided into the following five actions fields[1]:

1	2	3	4	5
Local action: urban programs to fight against energy poverty through health lenses: key aspects to consider in urban programs to fight against energy poverty and its health effects.	**Governance:** suggestions on how to promote collaborative frameworks for multilayer and multidimensional action at local level to ensure urban programs implementation from a Health in All Policies (HiAP) approach.	**Capacity Building:** recommendations for developing training programs for different stakeholders to identify and address the health implications of Energy poverty.	**Monitoring and Evaluation:** guidelines to track Energy poverty and health indicators, as well as the effectiveness of integrated policies and interventions.	**Funding:** considerations about funding schemes to tackle Energy poverty considering health, mainly based on the financial models analyzed within WELLBASED.

This policy brief corresponds to the first action field, **Local action: urban programs to fight against energy poverty through health lenses.**

[1]*The first category summarizes the findings more directly linked with our project results and experiences, focused on replication of WELLBASED local urban programs (WUPs). The four last categories are based on the structure of the EU Policy Recommendations against Energy Poverty issued in 2023 (EC, 2023).*

Energy poverty is a complex Public Health problem affecting physical and mental health of most vulnerable groups

People in energy poverty often live in homes with poor indoor air quality, damp, mold or lack of ventilation, exposed to extreme temperatures that have these impacts:

- Aggravation of **respiratory diseases** (asthma, bronchitis and other chronic lung diseases) and favour the **development of respiratory infections**, especially in children and older people.
- Increased **risk of hypertension, heart attacks and strokes**, especially in older people or those with pre-existing conditions.
- Aggravation of **musculoskeletal problems**, such as **joint pain or arthritis**, especially in older people.
- Financial difficulties, high worries about the lack of thermal comfort in the home and the feeling of inability to improve one's personal situation which leads to **anxiety, depression and chronic stress.**
- **Social isolation and stigmatisation.**
- Poor **quality of sleep** that impacts on mental health, cognitive performance and physical health (increased risk of cardiovascular and metabolic diseases).
- **Nutrition and food security problems.** Increased risk of metabolic diseases such as **type 2 diabetes, hypertension and heart disease.**
- High risk of **frailty and dependency** for older adults.

Energy poverty amplifies existing health and social inequalities.

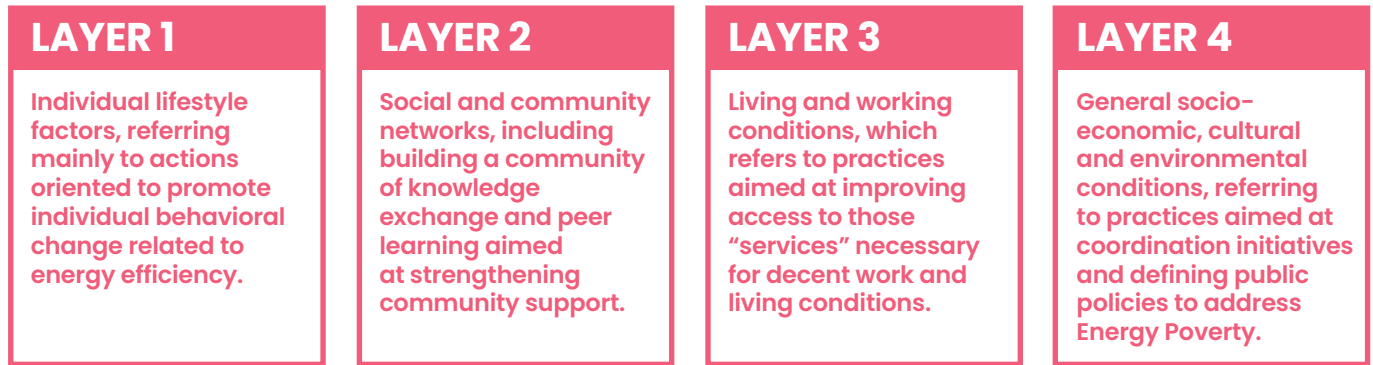## Gaps identified in EU energy poverty and Health policies

Health and energy policies are often addressed separately, preventing a comprehensive approach to tackling the health effects of energy poverty.

In Energy Policies: While there is a growing recognition of the intersection between energy efficiency and health, explicit integration of health considerations remains limited. Policies often acknowledge potential health benefits but lack specific measures or mandates to address health impacts directly related to energy efficiency improvements.

In Health Policies: There is a general lack of recognition of energy poverty as a significant social determinant of health. Current health policies and initiatives do not explicitly incorporate strategies to address the health impacts associated with energy poverty, leading to missed opportunities for comprehensive disease prevention and health promotion.

WELLBASED project and WELLBASED Urban Programmes (WUPs)

Horizon 2020 WELLBASED project aimed at designing, implementing, and evaluating a comprehensive urban programme: WELLBASED Urban Programmes (WUPs) that combine Energy Poverty and health action. The design of the programme was based on the social ecological model of health determinants (Dahlgren and Whitehead, 1991), to reduce Energy Poverty and its effects on the citizen's health and wellbeing. These programmes have been implemented and evaluated in six different pilot cities (Valencia – Spain, Heerlen – The Netherlands, Edirne – Turkey, Jelgava – Latvia, Obuda – Hungary, and Leeds – United Kingdom). WUPs contain interventions to act on health determinants at each Layer of the socio ecological model:

LAYER 1
Individual lifestyle factors, referring mainly to actions oriented to promote individual behavioral change related to energy efficiency.

LAYER 2
Social and community networks, including building a community of knowledge exchange and peer learning aimed at strengthening community support.

LAYER 3
Living and working conditions, which refers to practices aimed at improving access to those "services" necessary for decent work and living conditions.

LAYER 4
General socio-economic, cultural and environmental conditions, referring to practices aimed at coordination initiatives and defining public policies to address Energy Poverty.

WELLBASED provides evidence of the positive impact of health promotion interventions in the fight against Energy Poverty (Stevens, M., Van Grieken, A. et al. 2024)
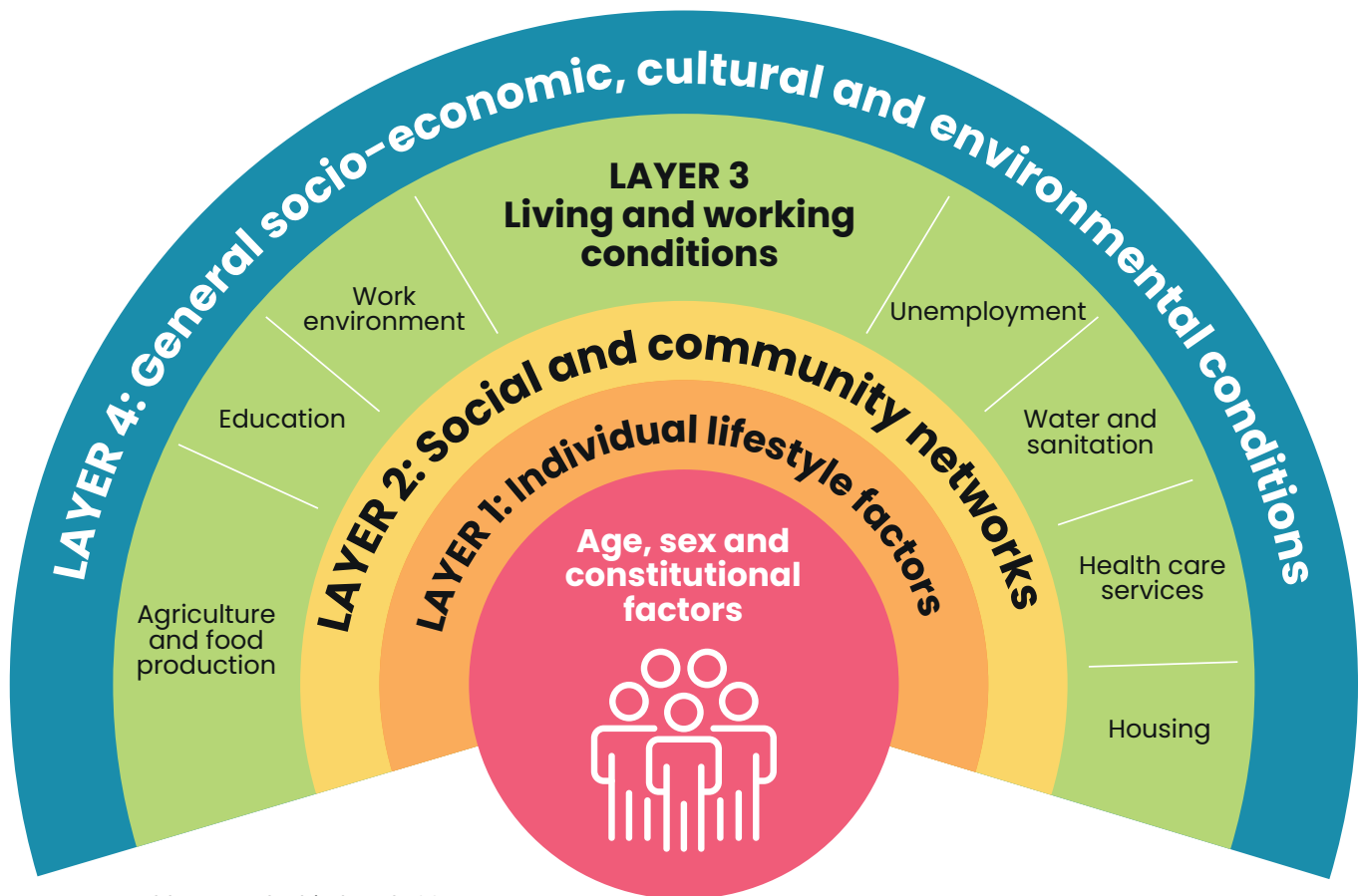
Source: Dahlgren and Whitehead, 1991

CONTEXT

The WELLBASED project provides valuable insights for local-level interventions, focusing on policymakers, stakeholders, and planning within municipalities. WUPs holistic approach, which integrates energy, health, wellbeing, and community participation, offers a comprehensive framework for addressing Energy Poverty and its health impacts. By leveraging these principles, local programs can be designed, implemented, and evaluated to promote health equity, improve wellbeing, and effectively combat Energy Poverty at the community level. These recommendations aim to guide local policymakers in creating impactful, sustainable solutions.

CONCRETE ACTION POINTS

① Integrate Health in All Policies (HiAP) from the start

Energy Poverty is a key determinant of health and must be addressed through a multidimensional and multilayer approach. Public policies should be developed collaboratively across sectors—health, energy, housing, social welfare, environment, and urban development—to effectively reduce social inequalities and improve well-being.
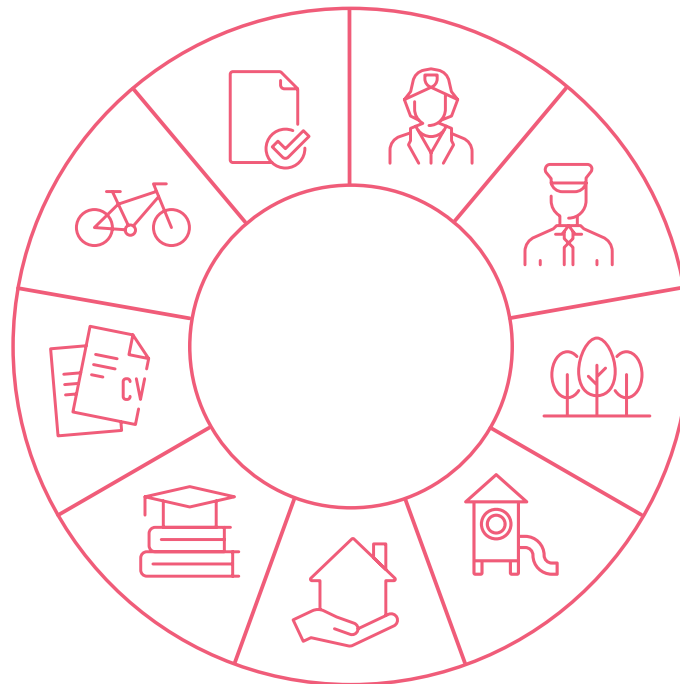
Based on: Public health post-2013 (UK Parliament) Open Government Licence v3.0

② Use WELLBASED Urban Programs (WUPs) as Strategic HiAP Tools

WUPs, based on the socio-ecological model, offer holistic solutions to Energy Poverty. This approach enables action at multiple levels—from individual to policy—fostering inter-institutional collaboration and community participation. A well-structured WUP should integrate interventions addressing health determinants across all layers of the socio-ecological model to achieve maximum impact. Interventions must be holistic, considering both living conditions and the psychological and physical factors that affect people's health.

CONCRETE ACTION POINTS

3 Recognize Energy as a Right, Not Just a Service

Reframing energy access as a fundamental right—rather than a response to Energy Poverty—reduces stigma and fosters empowerment. Engaging communities in advocacy and policy discussions strengthens participation, enhances social justice, and contributes to improved mental well-being.

4 Strengthening Local Community Participation

Communities must be at the center of interventions.

5 Identify and mobilize Health Assets within the community to implement effective, community-driven solutions against Energy Poverty

Mobilizing health assets[2] to combat Energy Poverty involves leveraging existing resources within communities and health systems to promote sustainable and effective interventions that improve the quality of life for those affected. The first step is identifying and mapping these assets in the target area. These assets may be social, community-based, institutional, or personal, and their mobilization should be guided by a comprehensive, collaborative vision that addresses the determinants of Energy Poverty from multiple perspectives.

Involving community assets such as community networks, NGOs, and cooperatives—ensure the active identification and involvement of vulnerable groups and will enhance intervention acceptance and effectiveness. They can be mobilized to provide social, educational, and emotional support.

INSPIRING PRACTICES BASED ON COMMUNITY HEALTH ASSETS TARGETED TO ADDRESS ENERGY POVERTY IMPACT ON HEALTH

- **Formation of community support groups** to assist families in managing energy costs, share best practices for improving energy efficiency, and provide psychosocial support.

- **Community wellbeing strategies:** Encourage the creation of social support networks and community groups that enable individuals to share resources, experiences and advice for coping with the difficulties associated with Energy Poverty.

- **Peer training programs** in vulnerable neighborhoods where residents become facilitators, helping others to access energy or health services.

  Similar programs have been implemented and promoted at the Citizen school for Right to Energy in València WELLBASED.

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[2] *A health asset can be defined as any factor (or resource) which enhances the ability of individuals, groups, communities, populations, social systems and/or institutions to maintain health and well-being and to help to reduce health inequalities. (Morgan and Ziglio, 2007)*

✳ CONCRETE ACTION POINTS

⑥ Enhance Intersectoral Collaboration

Building strong partnerships between sectors—public health, energy, housing, education, and social welfare—is crucial to developing integrated solutions. Policies should encourage cross-sector collaboration to tackle both energy and health challenges effectively.

💡 INSPIRING PRACTICES TO ENHANCE INTERSECTORAL COLLABORATION TO ADDRESS ENERGY POVERTY IN COMMUNITIES ←

- Include **Energy Poverty services or energy services as health assets** when mapping the health assets in the area of intervention.

- **Engaging and training professionals** from health, social services, energy, educational centers, and community representatives in identifying and acting against Energy Poverty through community support networks. Community assets must be part of the referral protocols. *Such as those implemented by València Citizen School for the Right to Energy.*

- **Cross-sectoral training:** Organize workshops and joint training activities where health social services and other sector professionals can learn about available energy solutions and energy experts can learn about the health impacts of Energy Poverty. S*uch as those implemented by València Citizen School for the Right to Energy.*

- **Launching pilot programs** combining home energy efficiency improvements with health monitoring in vulnerable areas, ensuring healthcare providers have access to health data of patients to assess the impact of energy efficiency interventions. *Such as the program implemented in Heerlen pilot site available in Petrova, E. et al. (2024).*

CONCRETE ACTION POINTS

⑦ Empower Health Professionals as Agents of Change

Healthcare providers play a critical role in detecting Energy Poverty-related health issues, from respiratory and cardiovascular conditions to mental health disorders. Establish referral protocols that connect patients to community and social resources through social prescribing.

INSPIRING PRACTICES TO EMPOWER HEALTH PROFESSIONALS TO ADDRESS ENERGY POVERTY

- **Integrating health professionals** into identifying households at risk of Energy Poverty during consultations, while providing them with training, information, and tools to guide patients on reducing Energy Poverty's health impacts.

- **Create a referral network within the community that connects patients to energy assistance services, social support or housing improvements to reduce Energy Poverty.** Primary care physicians collaborate with energy organizations and social services to provide patients with energy-health education, support from the community and referrals to appropriate resources for Energy Poverty alleviation.

- **Development of tailored capacity-building programs and action and referral protocols to follow in identifying and dealing with cases of Energy Poverty.** Those developed within València pilot provide health professionals with the necessary tools and knowledge to detect Energy Poverty signals and available resources to refer. Among the tools proposed, the professionals have identified specific questions to include at health questionnaires during the visit to help identification and subsequent referral to social services and energy services.

CONCRETE ACTION POINTS

8 Promote Energy and Health Education to Build individual and community Resilience

Raising awareness and increasing literacy on energy and health are essential. Programs should provide training on efficient energy use, bill optimization, self-care, disease prevention, and mental well-being. Initiatives such as the Valencia Citizen School for the Right to Energy should be expanded to empower vulnerable populations, including older adults, caregivers, and those with pre-existing health conditions.

VALÈNCIA CITIZEN SCHOOL FOR THE RIGHT TO ENERGY

The Citizen School of Right to Energy was created by the Municipal Foundation València Clima i Energia depending on its Municipal Energy Office in the framework of the implementation of València WELLBASED pilot. It aims to claim and raise awareness among all citizens about the Right to Energy. The Citizen School provides expert and tailored advice, training workshops, group meetings, open talks, activities to strengthen the city's associative fabric. In the pilot intervention area, it aimed at providing knowledge and community building around energy issues, promoting peer-to-peer learning, access to public resources and empowerment based on the concept of Energy Right.

Pilot participants were invited to regular group gatherings called "Berenars Energètics" ("Energetic Snack Time") at the local Energy Office to learn about energy efficiency, bill optimization, healthy habits, and other topics of their interest, including spaces of mutual support to relieve stress and share experiences. Capacity building included the impacts of energy poverty on health, self-care, physical activity, healthy eating habits, budget-friendly nutrition, and techniques to improve sleep quality and mental well-being

Equally, the Citizen School included specialized training targeted to key professionals such as healthcare professionals, social workers, education centers and local NGOs about how to identify, cope with Energy Poverty cases and resources for referral of people.

The initiative focused on capacity building and empowerment, aiming to enhance participants' sense of control over their lives and encourage behavioral changes towards healthier living patterns.

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9 Engage Affected Individuals as Change Agents

Actively involve individuals experiencing Energy Poverty in designing and evaluating interventions better tailored to their needs and local realities. Creating participatory spaces allows affected populations to voice their needs, share experiences, contribute ideas, and co-design solutions, enhancing the effectiveness and sustainability of interventions. Those people can afterwards become key agents identifying and training others in the same situation.
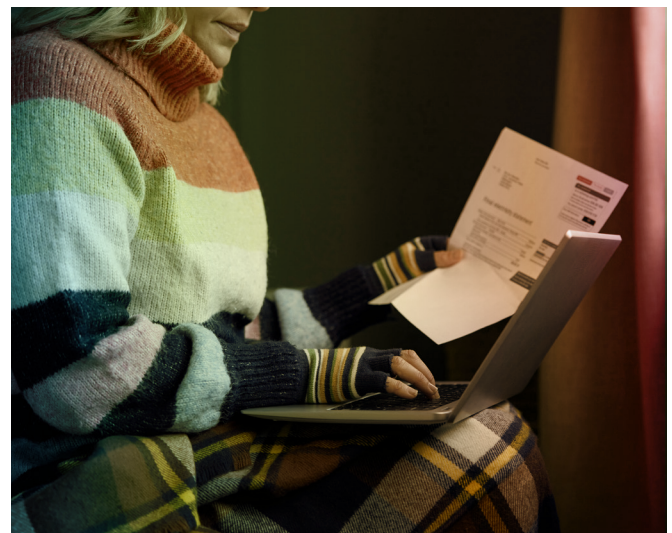
✳ CONCRETE ACTION POINTS

⑩ Apply a Gender Lens to Energy Poverty Policies

Women are disproportionately affected by inadequate housing conditions and lack of energy access. Policies must ensure their empowerment through targeted support, improved energy access, and training in health management.

⑪ Prioritize Mental Health in Energy Poverty Interventions

Energy Poverty is closely linked to psychosocial stress and mental health disorders. Integrating mental health support—such as psychological assistance and social connection programs—into interventions can mitigate these effects, particularly for chronically affected groups. Loneliness and degrees of social support are aspects to be monitored and considered at definition of interventions.

⑫ Develop Long-Term, Crisis Resilient Public Policies

Policy strategies should go beyond addressing immediate crises to include long-term resilience planning. This includes preparing communities for future energy crises, economic downturns, and environmental disasters through capacity-building, renewable energy adoption, and community solidarity initiatives.

⑬ Leverage Digital Technologies for Monitoring Energy Consumption and Health

Digital tools should be used to track energy consumption and health outcomes, ensuring data-driven decision-making. Implementing smart monitoring systems will enhance the efficiency and effectiveness of energy and health interventions.

⑭ Conduct Health Impact Assessments for Energy, Housing, and Social Welfare Policies

Health impact assessments should be systematically incorporated into energy, housing, and social welfare policies to identify disparities and take corrective actions. Introducing health impact measurement parameters in project and program designs (ex ante and evaluation) will help mitigate health inequalities.

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Dahlgren G, Whitehead M. 1991. **Policies and Strategies to Promote Social Equity in Health**. Stockholm, Sweden: Institute for Futures Studies.

European Commission (2023): **Recommendation (EU) 2023/2407 of 20 October 2023 on Energy Poverty.**

European Public Health Alliance (2024): **Powering Health Equity: Integrating Health for Effective Energy Poverty Policy.**

Morgan A , Ziglio E . (2007): **Revitalising the evidence base for public health: an assets model.** Promot Educ 2007;14:17–22.doi:10.1177/10253823070140020701x.

Petrova, E. et al. (2024): **Final report on the implementation of the urban programme**, Deliverable No. D3.4, Wellbased, Grant Agreement No. 945097.

Stevens, M., Van Grieken, A. et al. (2024): **Final Analysis Report**, Deliverable No. D4.3, Wellbased, Grant Agreement No. 945097.

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FURTHER READING:

D3.4. WELLBASED Final Report on the Implementation of the Urban Program

D4.2. WELLBASED Intermediate Analysis Report

D4.3. WELLBASED Final Pilot Sites Analysis Report

D4.5. WELLBASED Report from the qualitative study

D5.1. WELLBASED Analysis of existing and alternative financial models

D5.5. WELLBASED Policy Recommendations