

### **Energy Poverty Mitigation in Europe** Potential Role for Renewable Energy Communities

14 March 2023, 10h00 CET







Steering Committee: ADENE, AEA, EST, ENEA, CRES, ADEME, RVO, dena



Surveys: KlimaAgence, SEDA, EIHP, IDAE, SEA, ENA





### **Energy Poverty Mitigation in Europe** Potential Role for Renewable Energy Communities



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Results

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 Benchmarking existing measures and legislation in Europe to tackle energy poverty, with a relevant contribution of renewable energies.

Recommendations

Conclusions

Case Studies

- ✓ Analyzing the main aspects that renewable energies can influence to reduce energy poverty.
- Identifying barriers and opportunities and propose recommendations for future measures and projects.
- ✓ Role of energy agencies on energy poverty mitigation.





### Countries with different conditions regarding energy poverty!

Country	HS021 - Arrears on utilities bills (population %)	HH050: Inability to keep home adequately warm (population %)	M/2: Low absolute energy expenditure (population %)	2M: High share of energy expenditure in income (population %)
Portugal	5,3%	16,4%	6,7%	15,1%
Netherlands	1,2%	2,4%	4,4%	10,7%
Italy	6,0%	8,3%	11,8%	14,2%
Spain	9,6%	10,9%	10,31%	16,8%
Sweden	2,2%	1,7%	24,2%	28,7%
UK	9,2%	5,4%	9,2%	18,8%
Bulgaria	19,2%	23,7%	9,3%	11,5%
France	5,4%	6,5%	19,5%	15%
Austria	2,4%	1,7%	14,9%	15,9%
Greece	33%	17,5%	12,8%	16,2%
Croatia	15,2%	7,7%	7,5%	12 %
Luxembourg	2,9%	3,6%	8,8%	11,2%
Slovakia	5,2%	5,8%	7.9%	9,3%
Lithuania	7,27%	30%	14,3%	13,8%



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8 out of 14 countries **do not have a definition** of energy poverty.

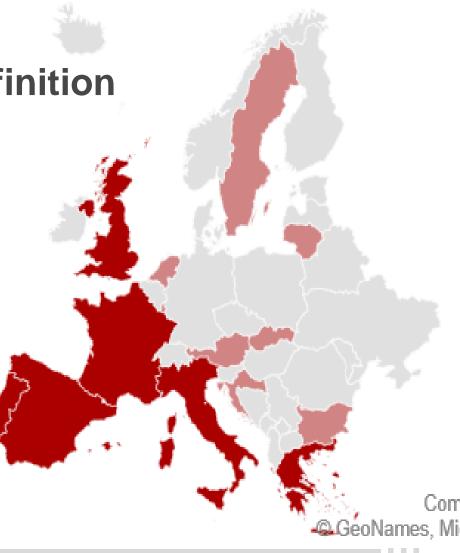
# 4 out of 6 countries with a definition of energy poverty are located in **Southern Europe**.

Is there a definition of energy poverty in your country?

No No

Yes





Survey

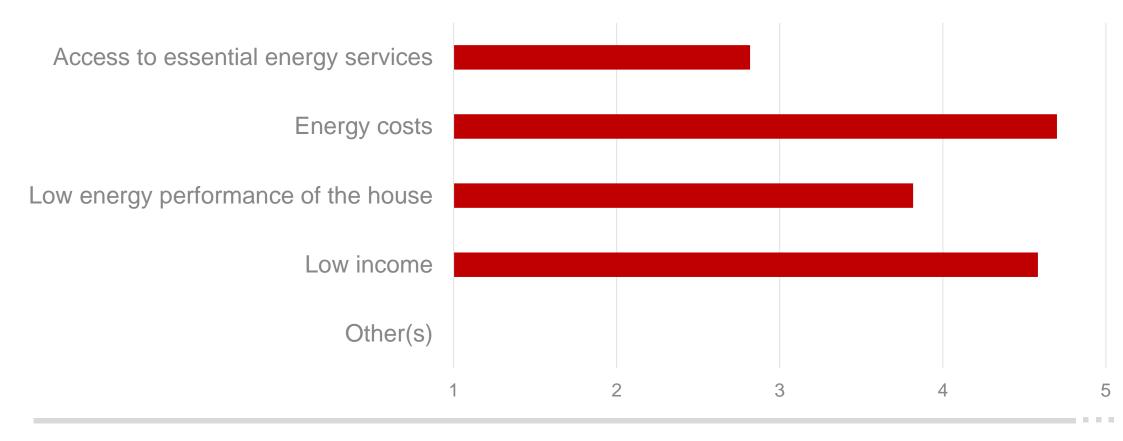
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11 out of 14 countries considered **low income** as the main issue related to energy poverty, followed by **energy costs**.



(Average score, on a scale of 1 to 5, where 5 represents the most important issues, 1 the less important ones.)



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7 out of 14 countries have more up-to-date information regarding primary indicators used in the Energy Poverty Observatory.

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7 out of 14 countries have other indicators to describe energy poverty.

9 out of 14 do not have a national strategy or plan to mitigate energy poverty.



4 out of 4 countries identified that their plans or strategies are related with information provision, renewable energies, energy saving, financial intervention and consumer protection.

10 out of 14 countries have activities/programs already implemented to mitigate energy poverty.



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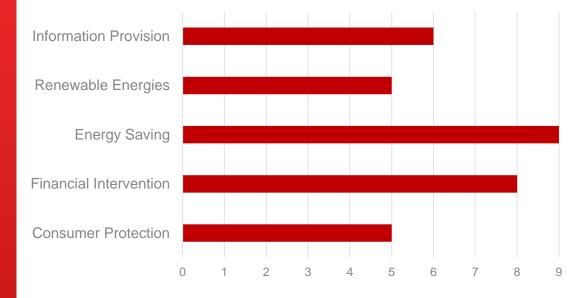
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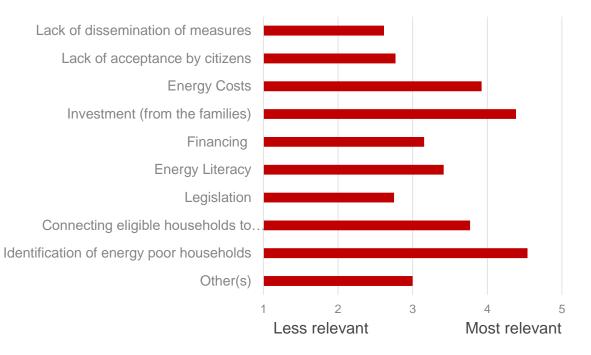
Recommendations

5 out of 9 countries considered **energy saving** measures as the most relevant type of initiatives already being implemented.



(Number of countries implementing each typology of measures, out of the 9 which responded)

13 out of 14 countries stated that the **identification of energy poor households** is the **main barrier** to implement the national strategy or plan.





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8 out of 10 EnR agencies state that subsidies are the most implemented funding and financing sources.



7 out of 14 countries have Renewable Energy Community (REC) projects directly connected to energy poverty mitigation.



5 out of 7 countries referred that REC present additional benefits to lower energy prices, the main type identified is thermal comfort, due to the possibility to use HVAC systems.



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### **Role of energy agencies**

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10 out of 14 countries have **EnR Members agencies** involved in the design of the national strategy or plan to mitigate energy poverty, assuming as their main roles technical support for policy design and promotion/dissemination in the implementation phase.

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10 out of 14 EnR agencies do not have a department/area responsible for energy poverty in the EnR Members agencies.



Energy agencies also have a role helping on the implementation of financing schemes.



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All 14 responding countries have implemented special measures to attend to COVID-19 recovery and the energy crisis.

## **Case Studies**



Case Studies

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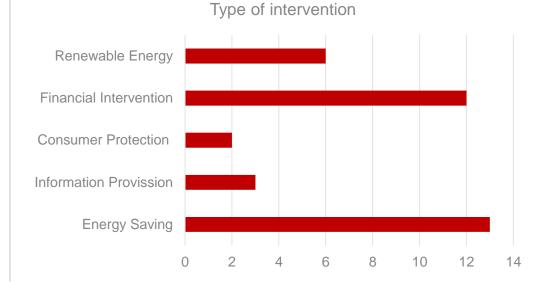
In this study's sample, the main **geographical scope** is **national** (13/16 case studies).

The main stakeholders that participate in the case studies are **central government** and **consumers**.

The main types of interventions are related to **energy saving** and **financial support**.



Case studies were characterized regarding stakeholders (one or multiple types)



Case studies were characterized with one type of intervention or a combination of several types.

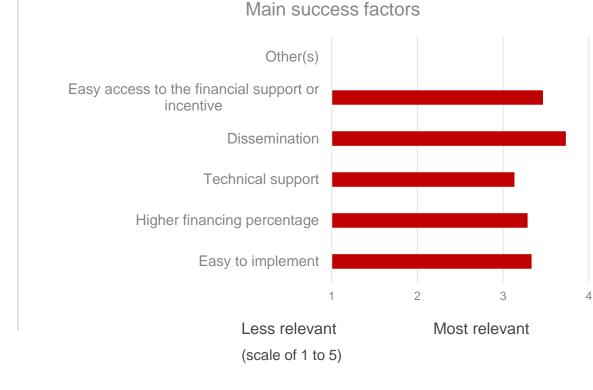


**Case Studies** 

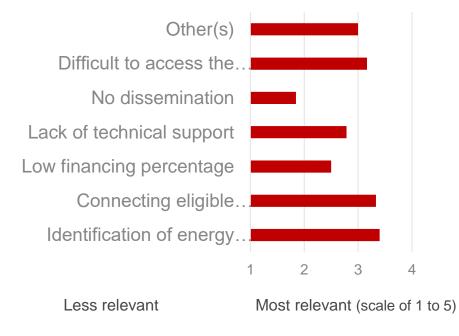
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The <u>main barriers</u> identified in case studies are related to **connecting eligible households to existing programs** and **identification of energy poor households**.

The <u>successful characteristics</u> of the case study are related to the **dissemination** and easy access to financial support or incentive.



#### Main barriers



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Survey Results

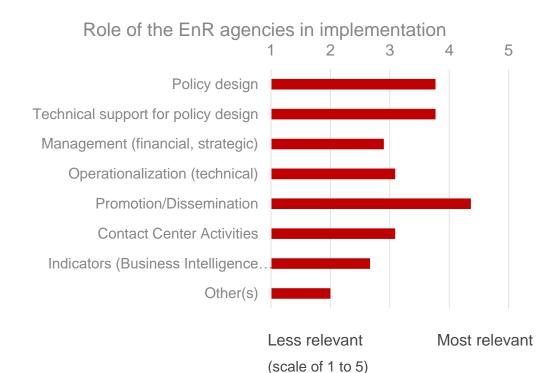
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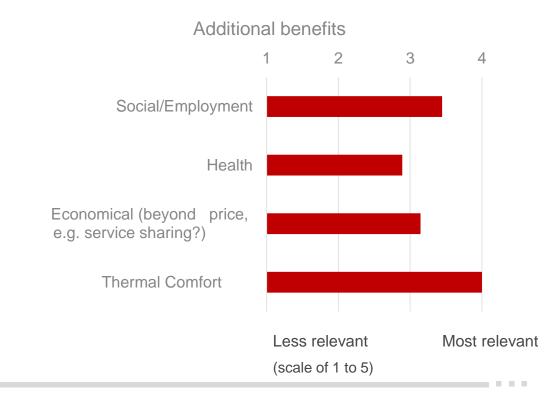
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The main roles of the EnR Members in the implementation of the case study are **promotion / dissemination**, **technical support for policy design**, and **policy design**.



The main additional benefit that the families obtained was thermal comfort.



## Conclusions





**Defining** energy poverty is important to determine, design and implement targeted energy poverty solutions.

Households considered energy poor are not easy to be identified and are not identical between countries.

Having up-to-date indicators of energy poverty allow the continuous improvement and monitoring of policy implementation effectiveness.

The energy agencies are important agents in the design and implementation of energy poverty policies.

The promotion and implementation of Renewable Energy Communities is essential to face energy poverty (reducing energy costs and enabling an easy access to other services as energy efficiency, e-mobility and smart building technologies).



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## Recommendations



Building Renovation Support mechanisms for deep renovations **Construction training and education Promote smart buildings** 

Initial investment

Conclusions

One-stop-shops Smart solutions

Energy Efficiency

**ESCOs and Energy Performance Contracts** Access to relevant information Support for energy efficiency in rented properties

Case Studies

- Monitoring indicators and
- Energy literacy
- Priority for vulnerable population

<u>Å</u> Renewable Energy Communities **Energy poverty strategy in line with REC** Support non-profit citizen energy communities Secure access to renewable energies

- Renewable energy communities
- Smart grids
- Affordable access to renewables

**Recommendations** 



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**ESCOs and Energy Performance Contracts** Access to relevant information Support for energy efficiency in rented properties



- Priority for vulnerable population
- Energy literacy
- Monitoring indicators and strategies



Energy Communities Energy poverty strategy in line with REC Support non-profit citizen energy communities Secure access to renewable energies

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Its Case Studies

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- Smart grids
- Affordable access to renewables







### Avaliable at EnR website > Publications

https://enr-network.org/energy-poverty-mitigation-ineurope-potential-role-for-renewable-energy-communities/





# Thank you for your attention

EnR Presidency 2022

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# Thank you!

