



# Energy Poverty Policies and Measures in 2017 LTRSs and CoM

**Paolo Bertoldi** 

Barcelona January 30 2020



#### **Introduction: Energy poverty - 1**

- "a situation where a household or an individual is unable to afford basic energy services (heating, cooling, lighting, mobility and power) to guarantee a decent standard of living due to a combination of low income, high energy expenditure and low energy efficiency of their homes".
- European Commission, Citizens' Energy Forum 2016

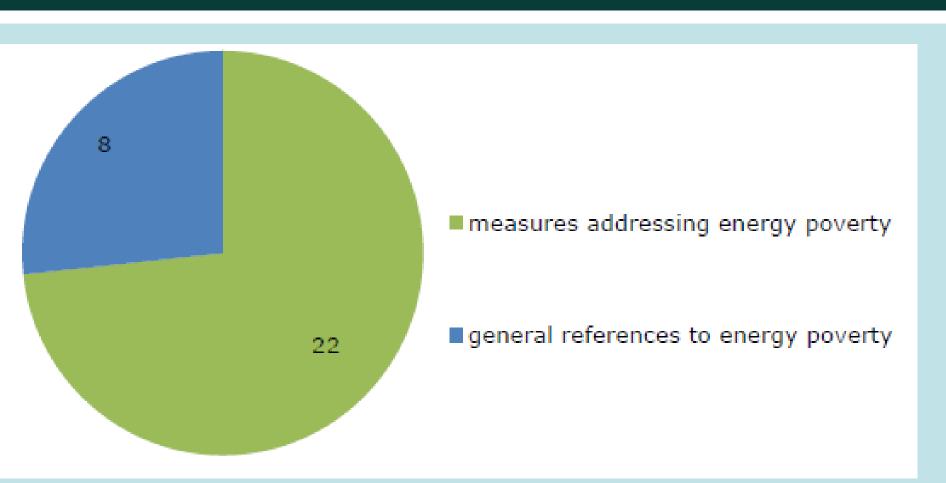


#### **Introduction: Energy poverty - 2**

- Energy poverty is recognised as an increasing socio-economic issue with severe consequences in terms of health, well-being, equity and justice and the environment.
- Various definitions are given in the literature and no single agreed EU-wide definition exists for energy poverty. However they all make reference to an unaffordable minimum level of energy service.
- Energy poor households experience inadequate levels of essential energy services (adequate warmth, cooling, lighting and the energy to power appliances) due to a combination of high energy expenditure, low household incomes, inefficient buildings and appliances, and specific household energy needs.
- It is estimated that more than 50 million households in the European Union are experiencing energy poverty.

- JRC analysis of the 2017 LTRSs revealed that energy poverty received increasing attention: it is well covered and addressed in the majority of the Strategies as the majority of Member States included in their reports one or more measures specifically addressing energy poverty issues.
- It is also explicitly stated in the amended EPBD that long-term renovation strategies must include national actions which contribute to the alleviation of energy poverty





Majority of the strategies include measures for alleviating energy poverty



- Various Member States have mentioned on-going or planned efforts related to alleviation of energy poverty. Table 9 of the JRC report summarises direct and indirect references identified in relation to actions addressing energy poverty issues at national level.
- **Direct** references include specific policies and measures targeting low-income households, while **indirect** references may refer to general strategies or initiatives which may also concern the social housing sector; however no specific measures are enacted through these latter strategies/initiatives.
- Many of the measures concern financial incentives targeting segments of the population considered under the energy poverty line, low-income households or social housing units.
- Some countries introduced specific actions targeting energy poverty under their energy efficiency obligation schemes, while other set up dedicated awareness raising and advisory services.



- In **France**, fuel poverty is addressed through actions of the national housing agency and its 'Habiter mieux' programme. France has also created a new obligation under its energy savings certificates scheme specifically aimed at combating fuel poverty. Actions funded by this scheme will be implemented among low-income households. A "Fuel poverty observatory" was also set up in France with the aim to measure fuel poverty situations and monitor public and private financial aid granted to disadvantaged households together with actions under local initiatives.
- Under the Government's Strategy to Combat Energy Poverty and the Healthy **Ireland** Framework, the Irish authorities have set up the Warmth and Wellbeing scheme, a pilot initiative to prove that homes warmer and more energy efficient can have a positive effect on the health and wellbeing of people in energy poverty. Ireland has also the Social Housing Investment Programme, local authorities are allocated capital funding each year in respect of a range of measures to improve the standard and overall quality of their social housing stock including retrofit measures aimed at improving energy efficiency.

- In **Austria**, a bonus factor is included in the energy efficiency obligation scheme (EEOS) whereby savings achieved in low-income households are weighted with a factor of 1.5. In addition, energy suppliers must make an information and advice centre available, including the provision of energy advice related to energy poverty. Other examples of dedicated regional/local programmes in Austria is the energy advice scheme in Vienna, and electricity-saving project for low-income households in the districts of Braunau, Freistadt & Linz-Land.
- The **Netherlands** has put in place the Energy Saving Agreement for the Social Rental Sector, setting the objective for the housing association sector to achieve an energy label B (equivalent to energy index 1.25) on average by 2020.
- Subsidies for implementation of individual energy efficiency measures in vulnerable households in Croatia, JESSICA programmes in Lithuania and Czech Republic, personalized advisory services for EE for households with low income in Luxembourg, etc. Italy and France have in place social bonus or discounts on energy bills for low income families.

## EU CoM approach: Energy Poverty - 1

#### Suggested criteria to assess availability of adequate energy services

Adequate energy services	Self-Assessment
Framework elements	
Availability of social housing	Low/Medium/High
Availability of public transport	Low/Medium/High
Electricity / gas / heating grid coverage	Low/Medium/High
Energy poverty policy share in municipal budget allocation	Low/Medium/High
Performance energy services	
Energy performances of the building stock (private housing)	Low/Medium/High
Energy performances of the building stock (social housing)	Low/Medium/High
Heating & cooling systems / comfort in households	Low/Medium/High
Households accessibility to public transport	Low/Medium/High
Social housing accessibility to public transport	Low/Medium/High





# **European approach: Energy Poverty - 2**

Framework elements  Cost of energy (services)  High share of energy costs  Available income after energy costs  Low/Medium/High  Lack of regional/national mechanisms to support energy poor households  Lack of regional/national subsidies for public transport  Population ability/inability  Age of population (presence of age groups: 18 < age >65)  Education level  Employment level  Low/Medium/High  Low/Medium/High  Low/Medium/High  Low/Medium/High  Low/Medium/High	Inability to afford	Self-Assessment		
Available income after energy costs  Low/Medium/High  Support mechanisms  Lack of regional/national mechanisms to support energy poor households  Lack of regional/national subsidies for public transport  Population ability/inability  Age of population (presence of age groups: 18 < age >65)  Low/Medium/High  Education level  Low/Medium/High  Low/Medium/High  Low/Medium/High	Framework elements			
Support mechanisms  Lack of regional/national mechanisms to support energy poor households  Lack of regional/national subsidies for public transport  Population ability/inability  Age of population (presence of age groups: 18 < age >65)  Low/Medium/High  Education level  Low/Medium/High  Low/Medium/High  Low/Medium/High  Low/Medium/High	Cost of energy (services)	High share of energy costs	Low/Medium/High	
support energy poor households Lack of regional/national subsidies for public transport  Population ability/inability  Age of population (presence of age groups: 18 < age >65) Low/Medium/High Education level Low/Medium/High Low/Medium/High Low/Medium/High		Available income after energy costs	Low/Medium/High	
Lack of regional/national subsidies for public transport  Population ability/inability  Age of population (presence of age groups: 18 < age >65)  Education level  Employment level  Low/Medium/High  Low/Medium/High	Support mechanisms	Lack of regional/national mechanisms to	Low/Medium/High	
public transport  Population ability/inability  Age of population (presence of age groups: 18 < age >65)  Education level  Employment level  Low/Medium/High  Low/Medium/High		support energy poor households		
Population ability/inability  Age of population (presence of age groups: 18 < age >65)  Education level  Employment level  Low/Medium/High  Low/Medium/High		Lack of regional/national subsidies for	Low/Medium/High	
Age of population (presence of age groups: 18 < age >65)  Education level  Employment level  Low/Medium/High  Low/Medium/High		public transport		
Education level  Employment level  Low/Medium/High  Low/Medium/High	Population ability/inability			
Employment level Low/Medium/High	Age of population (presence of age grou	Low/Medium/High		
	Education level		Low/Medium/High	
(Average) Monthly per capita income above national average  Low/Medium/High	Employment level		Low/Medium/High	
(Tiverage) Worthly per capita medite above national average 20w/Wediam/Ingi	(Average) Monthly per capita income above national average		Low/Medium/High	
Dwellings owned by the occupant  Low/Medium/High	Dwellings owned by the occupant	Low/Medium/High		



#### **Policies Considerations**

- Some policy instruments may be better suited than other.
- Energy Company Obligations with specific share of savings in energy poverty households, or uplift for energy savings seems to work.
- Targeted subsidies for energy poor households for insulation, efficient boilers and appliances. Better use of public money for investing in EE than subsidizing energy.
- Tax deduction schemes and zero interest loans not very effectives, unless provided to housing associations (in particular social housing).
- Energy tax could also be difficult to implement, as may have an heavy impact.
- Attention to distributional impact of current EE policies and the rebound effect after the EE measure has been implemented (EE measure increasing energy consumption).
- Energy refurbishment of rented apartments may lead to gentrification if rent is substantially increased,



#### Conclusions

- Energy poverty exist, but difficult to capture and measure, needs several indicators.
- Most MSs have measures in place and these are reported in the 2017 LTRSs, and will also feature in the 2020 LTRSs.
- Not all the EE policies work well for reducing energy policy
- Major focus so far on heating, but cooling could also be an issue.
- Energy poverty is now a new key pillar of the CoM, therefore more policies are expected at local level.





# Thanks

Contact paolo.bertoldi@ec.europa.eu



MS	Ref. type	Details on measures for addressing energy poverty
Austria	Indirect	Energy poverty is not directly mentioned in the LTRS, apart from the fact that part of the decrease in heating consumption could be due to "non-affordability of energy costs".  In parallel, several measures presented in the NEEAP include provisions for, or are focused on low income households. From the NEEAP:  - In the EEO scheme, savings achieved in low-income households are weighted with a factor of 1.5 (The eligibility criteria for the bonus in the EEO scheme is based on the eligibility to
Austria	Indirect	social tariff for electricity)  - Energy advice (+ financial support for EE actions) by the City of Vienna for low-income households;  - Scheme in Upper Austria (Braunau, Freistadt and Linz) to provide low income households with energy-efficient appliances (grants up to €250) and free energy advice (+ an "emergency assistance package");
Brussels Capital Region	Direct	Creation of the support centre SocialEnergie; Financial instrument to improve energy efficiency of social houses (PLAGE SISP); PLAGE SISP programme, coordinated by the Housing Company of the Brussels Capital Region, with the aim of continuing the momentum launched within the social housing sector by Bruxelles-Environnement in 2011
Belgium Flanders	Direct	Free of charge energy scans available for houses of vulnerable families since 2007, guidance scheme whereby vulnerable families inhabiting rental homes and related landlords receive financing and guidance from a series of promoters of energy efficiency actions implementation, 0% interest loans financed through public funds for energy efficiency investments by vulnerable families, action plan for the improvement of the energy performances of the social housing stock and pilot projects and policy measures for vulnerable families described under the section dedicated to Article 19, additional premiums distributed by electricity network operators for actions targeting social housing.
Belgium Wallonia	Direct	<ul> <li>PAPE programme (Subventions for public centres for social action - CPAS- to finance EE at low income households).</li> <li>PIVERT programme for social housing (Financing of social houses retrofit) - Provision of energy supply at social tariffs and enlargement of the categories of protected clients (described under EEAP section dedicated to EED Article 15) - Package of measures targeting low income households (Mesures sociales).</li> </ul>
Bulgaria	Direct	<ul> <li>Improving the energy performance of multifamily residential buildings will help improve living standards of vast groups of the national population (grant from Bulgarian Development Bank)</li> <li>Strengthen support polices and measures targeting households affected by energy poverty</li> <li>Develop and apply a socially-driven business model of entrepreneurship aimed at the construction and offering of social housing for the needy, branded as Social Enterprise Products; The mechanism supports start up enterprises and/or organisations in the construction sector established especially for the social purpose to build social housing.</li> </ul>
Croatia	Direct	- Subsidies for implementation of individual energy efficiency measures in vulnerable households. The measure shall also establish a system for following social and demographic and energy indicators describing energy poverty at a national level, through the existing system for compiling data on the consumption and habits of households (the Croatian Bureau of Statistics). The Programme shall also develop possible extension of criteria for gaining the status of vulnerable energy buyers.



MS	Ref. type	Details on measures for addressing energy poverty
		<ul> <li>Capacity building for combating energy poverty: The objective of the measure is capacity building for combating energy poverty within local self-government units and in to providing information on energy efficiency measures contributing to the combating of energy poverty, and the possibilities of co-financing in this area.</li> </ul>
Cyprus	Direct	<ul> <li>Ministerial Decree includes energy poverty measures for vulnerable groups such as (a) reduced prices on electricity tariffs, (b) financial incentives for participating in a scheme for installing a the net-metering Photovoltaic system with a capacity of up to 3kW, (c) financial incentives for upgrading the energy efficiency of their houses, and (d) uninterrupted supply of electricity, during critical periods for those vulnerable consumers that continuous power supply is essential for reasons related to their health.</li> </ul>
		- Energy Efficiency in Low Income Housing in the Mediterranean' (ELI-MED).
Czech Republic	Indirect	Long-term low-interest loans for the reconstruction and upgrading of multi-family buildings in deprived zones provided under JESSICA programme (cited in the NEEAP)
Denmark	Direct	<ul> <li>Reduce the financial uncertainty for residents of existing social housing when major energy renovations are carried out by developing a special model whereby the housing organisations' special reserve funds can be used to provide a guarantee for energy savings, in addition to a guarantee from a technical adviser or any other party to the building project.</li> <li>Promote energy renovation work in existing social housing by developing a flexible digital energy-renovation platform with a coordinated collection of instructions and planning and calculation tools that can be used to plan, project-manage, implement and operate major energy-saving exercises. The platform will be developed together with the social housing sector and will be continuously expanded on the basis of experience from e.g. trials and demonstration projects.</li> </ul>
Estonia	Direct	<ul> <li>Measure "providing maintenance allowances to people with low incomes";</li> <li>The loan guarantees offered by KredEx makes possible for owners who would not have access to credit (due to too low creditworthiness according to private bank criteria) to be able to beneficiate from a loan in case of a renovation of a multi-apartment building. Moreover KredEx can also offer solutions to owners who would face temporary difficulties to pay the loan reimbursements.</li> </ul>
Finland	Direct	<ul> <li>Energy subsidies for detached houses addressing low-income private householders;</li> <li>Social housing (interest subsidy loans for the renovation of rental and right-of-occupancy dwellings).</li> </ul>



MS	Ref. type	Details on measures for addressing energy poverty
France		<ul> <li>Creation of a new energy-saving obligation for households in fuel poverty: fuel poverty energy savings certificates;</li> </ul>
		<ul> <li>Support for low-income households in paying their energy bills with the creation of the 'energy cheque';</li> </ul>
	Direct	<ul> <li>From 2017 at least 250 000 occupied by low-income households must be renovated to improve energy efficiency each year;</li> </ul>
	Direct	<ul> <li>'Habiter mieux' (Living better) renovation programme: subsidies for expenses (capped at EUR 20,000) linked to refurbishment, the amount of which depends on household income (35% for low-income households, 50% for very low-income households);</li> </ul>
		<ul> <li>For low-income households, the Anah's digitisation programme will also enable better monitoring of renovations with the support of Anah operators;</li> </ul>
		- Establishment of the Fuel Poverty Observatory ONPE.
Germany	Indirect	Electricity-saving checks for low-income households (caritas).
Greece	Direct	The 'Saving at home II' programme and the scheme to replace oil boilers with gas boilers are focused on providing financial incentives to "low-income owners".
Hungary	Direct	<ul> <li>Some sub-programmes were explicitly announced for low-income social groups where energy efficiency investments often do not have enough resources", in particular programmes to replace appliances focused on retired persons and large families;</li> </ul>
		<ul> <li>A targeted energy savings information programme is under planning, with a particular focus on "households subject to energy deprivation in disadvantaged areas".</li> </ul>
Ireland	Direct	<ul> <li>Warmer Homes Programme and Wellbeing Pilot Scheme: free energy efficiency upgrades for people in or at risk of energy poverty, providing attic and cavity wall insulation, ventilation, draught proofing, lagging jackets, energy efficiency light bulbs and energy advice (Grant schema under Better Energy Programme);</li> </ul>
		- Adaptation of the Strategy to Combat Energy Poverty in 2016;
		- Social Housing Investment Programme;
		- Housing Aid for Older People;
		- Design Guidelines for Social Housing;
		- Social Housing Upgrades (DHPCLG).



MS	Ref. type	Details on measures for addressing energy poverty
Italy	Direct	<ul> <li>The Law 11 December 2016 has extended the 65% tax deduction on energy efficiency measures improving the energy class of buildings to December 2017 also allowing social housing buildings owners to take part to the scheme;</li> <li>"Bonus sociale" Discounted energy bills for low income families.</li> </ul>
Latvia	Direct	<ul> <li>Improvement of heat insulation of social residential buildings: 75% of total cost incentives if consumption reduced by 20% (activity 3.4.4.2.0, a European Structural Funds programme).</li> </ul>
Lithuania	Direct	<ul> <li>Reducing disparities in living conditions between major cities and other towns. Improving energy efficiency of buildings in low income households through EU funds and co-financing;</li> <li>'JESSICA Holding Fund' of Operational Programme for Promoting Cohesion administrated by the Ministry of the Environment (2007-2013) supporting renovations of public sector buildings and social housing in multi-apartment buildings.</li> </ul>
Luxemburg	Direct	<ul> <li>Personalised advisory services for EE for households with low income and subsidies (EE equipment) provided by Myenergy/KLIMABANK facility;</li> <li>Interest free loans to households with low income;</li> <li>"Klimawohngeld" Financial aid for low income households as compensation for incrase of rent.</li> </ul>
Malta	Direct	<ul> <li>Energy Efficiency for vulnerable households, a measure contributing towards Article 7, aims to replace appliances in a number of vulnerable households annually (Energy &amp; Water Agency visits vulnerable households to raise awareness on energy usage and provide energy saving tips);</li> <li>Technical personnel from the Energy &amp; Water Agency visit vulnerable households to raise awareness on energy usage and provide energy saving tips. The visit shall determine whether key appliances are in need of replacement with more energy-efficient appliances;</li> <li>Energy Efficiency in Low Income Houses in MED Grant Scheme.</li> </ul>
NL	Indirect	No reference to energy or fuel poverty, low income or vulnerable households in LTRS, but specific objectives for social housing and some measures listed in the 2017 NEEAP:  - Energy Saving Agreement for the Social Rental Sector with the objective for the housing association sector to achieve an energy label B by 2020;  - Revised Housing Valuation System to include energy label;  - Government subsidy (€ 400 million) for investments in energy-efficiency for social housing landlords.



MS	Ref. type	Details on measures for addressing energy poverty
Poland	Indirect	- "Thermomodernisation" actions contribute to reducing the risk of energy poverty and improve the building use conditions;
		- Some regional Operational Programmes support projects that combat energy poverty.
Portugal	Indirect	It is mentioned that PT is one of the countries with greater energy poverty levels.
		From the NEEAP:
Romania	Indirect	- Establishment of an objective to eradicate fuel poverty through enhancing energy performance of the building stock (Addressing the poor energy performance in the housing sector for many disadvantaged Romanian citizens would be a major boost to their quality of life);
		- Supporting the economic and social regeneration of disadvantaged communities in the urban area;
		- Facilitating the upgrade of all social housing to high energy performance levels.
Spain	Direct	Introduction of "bono-social", discount that acts as a mechanism to protect consumers who belong to certain groups defined as this type of vulnerable consumer. People have the right to apply to bono-social in their main residence if:  Having contracted power lower than 3 kW in their main residence;
		Being 60 years old or over and being a Social Security system pensioner due to retirement, permanent disability and widowhood, thereby receiving the minimum amount in force at any time for these types of pension with respect to pensioners with a dependent spouse or pensioners without a spouse living as single-person financial unit; Being 60 years old or over and being a beneficiary of pensions from the defunct Required Ageing and Invalidity Insurance and of non-contributory retirement and disability pensions; Being a large family;
		Being part of a family unit in which all the members are unemployed;
		The 'bono social' works by applying the relevant last-resort tariff (with or without time-of-day differentiation), calculated as a 25 % discount on the Voluntary Price for the Small Consumer.

MS	Ref. type	Details on measures for addressing energy poverty
Slovenia	Direct	<ul> <li>Assistance scheme for energy renovation for vulnerable population groups;</li> <li>New financing model (100% grant) for co-financing energy building renovations. Total value of 5 million EUR of subsidising measures on efficient use of energy for approximately 500 households with lower income in a single and two-apartment building.</li> </ul>
Slovakia	Direct/ Indirect	- Measures against poverty are in place under the National Framework Strategy Promoting Social Inclusion and Combating Poverty (2015) and its subsequent Update (2017); legislation that specifically addresses energy poverty, is Act NNo. 321/2014 and Act 417/2013 (on tariff structures and assistance in covering the cost of housing and energy services). In 2014 the Authority for the regulation of network industries published the strategic document: "Concept for Protecting Customers Eligible for the Measures of Energy Poverty", approved and adopted by the government.
Sweden	Direct	<ul> <li>Financial support was established in 2016 for renovation of rental accommodation in socio-economically vulnerable areas and to make that accommodation more energy-efficient;</li> <li>Aid for improvement and increases in energy efficiency of rental accommodation. The aid for energy efficiency measures is calculated on the basis of the energy saving achieved after the renovation. That part of the aid goes to the property owner. To obtain that part of the aid, the renovation must lead to an improvement in the energy performance of ≥ 20 %;</li> <li>Subsidies for improvement of energy efficiency in buildings containing residential apartments that are let with a right of tenancy and that are located in residential areas where more than 50 % of households have low purchasing power.</li> </ul>
UK	Direct	<ul> <li>Government's commitment to insulate one million more homes between 2015 and 2020 in support of its commitment to tackle fuel poverty through the Energy Company Obligation;</li> <li>Home Energy Efficiency Programmes for Scotland: Area Based Schemes designed to target fuel poor areas to provide energy efficiency measures to a large number of Scottish households and help reduce fuel poverty.</li> </ul>