



EmpowerMed

Incentives for new
devices, RES and EE
investments
Training module







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PREAMBLE

In the following report all types of national and European incentives addressed to the needs of the consumers are described.

1 European actions

1.1 Rules to make household appliances more sustainable

It is estimated that about half of the greenhouse gas emissions from a household appliance are due to its production process, and the remaining half from its use in a life cycle.

In a continued effort to reduce Europe's carbon footprint and to make energy bills cheaper for European consumers, the EU has put in place regulations and directives, particularly for energy labelling and ecodesign for products.

The Commission is improving the ecodesign of products thus contributing to the implementation of the *Energy efficiency first* principle of the EU's Energy Union priority. For the first time the measures include requirements for repairability and recyclability, contributing to circular economy objectives by improving the life span, maintenance, re-use, upgrade, recyclability and waste handling of appliances.

The Commission estimates that these measures, together with the energy labels adopted on 11 March, will deliver 167 TWh of final energy savings per year by 2030, the reduction of over 46 million tonnes of CO₂ equivalent and the saving for the European households of 150 Euro per year.

These savings come on top of those achieved by the existing eco-design and energy label requirements, which will bring a yearly energy saving of around 150 Mtoe (million tonnes of oil equivalent) by 2020. For consumers, this means an average saving of up to €285 per year on their household energy bills.



1.2 The new Regulations laying down ecodesign requirements

On 1st October 2019 the European Commission adopted new eco-design measures for products, which set out energy efficiency and other requirements for the following product groups: refrigerators; washing machines; dishwashers; electronic displays (including televisions); light sources and separate control gears; external power supplies; electric motors; refrigerators with a direct sales function (e.g. fridges in supermarkets, vending machines for cold drinks); power transformers; and welding equipment.

The EU legislation on ecodesign is an effective tool for improving the environmental performance of products by setting mandatory minimum standards for their energy efficiency. This eliminates the least performing products from the market, significantly contributing to the EU's energy efficiency objective.

The 10 regulations are:

- 1) Ecodesign for household refrigerators - C(2019) 2120
- 2) Ecodesign for light sources - C(2019) 2121
- 3) Ecodesign for electronic displays - C(2019) 2122
- 4) Ecodesign for dishwashers - C(2019) 2123
- 5) Ecodesign for washing machines and washer-driers - C(2019) 2124
- 6) Ecodesign for motors - C(2019) 2125
- 7) Ecodesign for external power supplies - C(2019) 2126
- 8) Ecodesign for refrigerators with a direct sales function - C(2019) 2127
- 9) Ecodesign for power transformers - C(2019) 5380
- 10) Ecodesign for welding equipment - C(2019) 6843

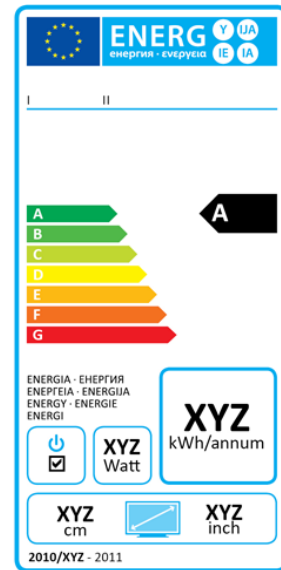
1.3 Energy labels

The EU energy labels provide a clear and simple indication of the energy efficiency of products at the point of purchase. This makes it easier for consumers to make more accurate choices when buying appliances and save money on their household energy bills, while reducing greenhouse gas emissions across the EU.

The concept has been a key driver for helping consumers choose products which are more energy efficient. At the same time, it also encourages manufacturers to drive innovation by using more energy efficient technologies.

The Commission adopted on 11th March 2019 a final format and visual identity of the new labels for the following product groups:

- 1) refrigerators, including wine storage fridges
- 2) dishwashers
- 3) washing machines and washer-driers
- 4) electronic displays including televisions
- 5) lamps
- 6) refrigerating appliances with a direct sales function



The labels were rescaled and the energy scale moved to an A to G one, which is simpler and well understood by consumers.

These new labels will be visible for European consumers in physical stores and on-line as of March 1st 2021.

2 Incentives in the case study areas

2.1 Italy

In Italy, the incentives for the purchase of new devices can be summed up by the following table, according to three kind of interventions.

Energy saving	Refurbishing	Furnishing
	<i>Building renovation, Bonus mobili (forniture) e elettrodomestici (house appliance).</i> Deduction of 50% of the expenses incurred for building renovation and for the purchase of furniture and large appliances	
<i>Energy requalification of buildings (Ecobonus)</i> Tax deduction of 50% - 65% for some energy redevelopment interventions on the individual real estate units and on the common parts of the condominium buildings.		

The facilitations can be find on the web site of Agenzia delle Entrate, or the Italian Revenue Agency, which is the Italian governmental agency that enforces the financial code of Italy and collects taxes and revenue.

Online portal - Agenzia delle Entrate

To achieve a clear information, the consumer can access the online portal of the Revenue Agency (Agenzia delle Entrate), where he can freely get information about financial issues home related.

More information at the following link:

<https://www.agenziaentrate.gov.it/portale/web/quest/aree-tematiche/casa/agevolazioni>

Bonus mobili e elettrodomestici

It is a deduction for the purchase of furniture and large appliances of a class not lower than A+ (A or higher for ovens and washer dryers), intended to furnish a property under renovation. The buyer can benefit from a 50% deduction calculated on a maximum amount of 10 000 Euro, referring to the expenses incurred for the purchase of furniture and large appliances, for the single real estate unit, or the common part of the building being renovated.

Ecobonus

Taxpayers who carry out interventions that increase the level of energy efficiency of existing buildings can deduct part of the costs incurred for the work.

The amount to be deducted from taxes can vary from 50% to 85% of the expenditure based on the characteristics of the intervention.

In general, deductions are recognized for the reduction of energy needs for heating, the thermal improvement of the building (insulation - floors - windows, including fixtures), the installation of solar panels and the replacement of winter air conditioning systems.

2.2 Spain

In Spain, each region activates on their own some financial incentives for costumers. In Catalunya, autonomous region in which Barcelona is sited, there is:

- **Plan Renove Electrodomésticos:** incentives for household appliance depending on the appliance and starting from A++ or A+++ label.

2.3 France

In France there are no incentives at national or regional level for buying any energy efficient devices. Some local authorities can support vulnerable households through social actions in case of this kind of purchase.

In France exist a national support for low income households, **MaPrimeRenov**, for one energy efficiency devices as:

- up to 1 200 Euro for boiler replacement.
- up to 4 000 Euro for heat pump (air-water system) and 10 000 Euro for geothermal heat pump.

For more information:

<https://www.cohesion-territoires.gouv.fr/sites/default/files/2019-12/MaPrimeRenov-Pr%C3%A9sentationdetaill%C3%A9e.pdf>

2.4 Croatia

In Croatia there have been some incentives in the past: the Fund for Environment Protection and Energy Efficiency managed subsidies for the citizens who bought energy efficient household appliances. In 2015 a call was opened, based on the principle "the first come, the first is served" and the subsidies were all taken by the citizens who had applied first. Ministry and Fund allocated 16 mil kuna (around 2.1 mil Euro) to this programme. Citizens could receive up to 800 kuna (approximately 105 Euro) per appliance categorized as A+++.

After the funds were spent programme received no additional funding and it is currently closed.

2.5 Albania

In Albania there aren't any bonus or incentives provided to clients. There are only soft loans provided from the banks for EE devices, boilers and heat pumps.

The Ministry of Infrastructure and Energy with the assistance of EBRD is reviewing the existing Law No 124/2015 of 12.11.2015 "On energy efficiency" aiming its full approximation with the provisions of the Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC.

2.6 Slovenia

In the following table are presented the incentives for the household appliances and devices according to Slovenian normative.

Devices	Incentives
Oven	Favourable loan for household appliances of A+ or higher class: https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/gospodinjski-aparati-a-ali-visjega-razreda
Washing machine	Favourable loan for household appliances of A+ or higher class: https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/gospodinjski-aparati-a-ali-visjega-razreda
Dishwasher	Favourable loan for household appliances of A+ or higher class: https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/gospodinjski-aparati-a-ali-visjega-razreda
Boiler	Condensation boiler - individual investments: up to 50% or 2000 Euro, investments in multi-flat buildings: 25 % of investment; also favourable loans are available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/kondenzacijski-kotli ; biomass boilers - individual investments: from 20-60% or 2000-5000 EURO, investments in multiflat buildings: 25 %, households in energy poverty: 100%; also favourable loans are available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/kurilne-naprave-na-lesno-biomaso ; optimisation of heating system in multi-flat buildings: up to 20%; more info at: https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/optimizacija-sistema-ogrevanja-v-vecstanovanjski-stavbi
Heat pump	individual investments: from 20-60% or 2000-5000 Euro, multiflat buildings: 25 %; favourable loans available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/toplotne-crpalke

3 Feasibility of RES and EE investments

The renewable energy transition will entail many changes to various aspects of the energy sector. If proper measures are not adopted, the changes to the energy sector may increase the number of energy vulnerable, or energy-poor, households.

Tariff increases due to RES support schemes can become an additional burden for the energy vulnerable population. Closing the financial gap or paying increased energy bills may be infeasible for vulnerable households. In fact, low-income individuals often remain outside the scope of energy efficiency measures. Where there are many energy-vulnerable households, energy efficiency solutions should specifically target vulnerable customers too. Rapid change in the energy system calls for a new way of understanding renewable energy policies. For this reason, the policies to support the transition need to adopt a holistic approach that accounts for these elements. The policies that drive the transition must cover not just the deployment of renewables, but also their integration into the broader energy system and economy-wide policies that affect the sustainability and pace of the transition (IRENA/IEA/REN21, 2018). Consequently, the design of supportive policies for renewable energy deployment in a situation of diffuse energy vulnerability or poverty must address energy affordability, which in turn depends on consumption patterns and the price of energy, and should be long-term solutions to energy poverty issues and energy efficiency measures.

Energy efficiency measures are necessary in most energy-poor and energy-vulnerable households. Energy efficiency reduces energy consumption and improves the quality of life in dwellings (decreasing humidity and internal air pollution). Energy efficiency solutions do not refer solely to dwellings, but also to energy appliances. Energy efficiency measures also reduce the need for tariff subsidies, opening the fiscal space for greater investment in renewable energy and other clean technologies.

Modern biomass technologies can assist in reducing the exposure to power and fuel price variability, while improving indoor air quality and reducing the amount of biomass needed to heat a dwelling. Similarly, solar water heaters reduce exposure to fuel prices for the production of hot water, improving the livelihood of households.

Financial subsidies may be needed to make modern renewable heating technologies affordable. Identifying hotspots of energy poverty and vulnerability allows for more targeted efforts that could result in more effective, tailored policies focused on the most significant issues, which may differ from region to region.

(Source: IRENA International Renewable Energy Agency, "Renewable energy market analysis - Southeast Europe", 2019)

4 RES and EE investments in the case study areas

4.1 Italy

The facilitations can be found on the GSE web site, energy services sector company, controlled by the Ministry of Economy and Finance, which task is to pursue and achieve the objectives of environmental sustainability in the two pillars of renewable sources and energy efficiency.

Online portal - GSE

For a clear information, the consumer can access the online portal of GSE, where he can find all the information relating to the benefits in terms of energy efficiency. More information at the following link: <https://www.gse.it/>

Renewable energy sources

With the Ministerial Decree 04/07/2019, some plants can benefit of a financial incentive, such as newly constructed photovoltaic systems, on shore wind turbines, hydroelectric, purification gas.

Energy efficiency

The Thermal Account encourages interventions for the increase of energy efficiency and the production of thermal energy from renewable sources for small plants.

Thanks to the Thermal Account it is possible to requalify buildings to improve their energy performance, thereby reducing consumption costs and quickly recovering part of the expenses incurred.

The appliances that have access to the incentive are heat pumps, biomass boilers, solar heating systems, PDC water heaters, hybrid systems.

4.2 Spain

In Spain, each region activates on their own some financial incentives for costumers. In Catalunya, autonomous region in which Barcelona is sited, there are:

- **Incentives from IDEA (Agència d'Energia de Barcelona):** public aid programs to promote energy efficiency and renewable energy projects and projects. They are, normally, first in-first served (no social).

In addition, for the 2014-2020 period, the IDAE develops intermediate agency work for the management of ERDF Funds dedicated to the low carbon economy, within the Multiregional Operational Program of Spain. For more information: <https://www.idae.es/ayudas-y-financiacion>

- **Incentives from ICAEN (Instituto Catalán de Energía):** The Catalan government and the Metropolitan Consortium of Housing (Agència de l'Habitatge) offer programs of buiding renovation. For more info: <https://www.cmh.cat/home>

Edificios

- Agència de l'Habitatge de Catalunya: rehabilitación de edificios de tipología residencial
- Consorci Metropolità de l'Habitatge: ayudas a la rehabilitación de edificios de tipología residencial colectiva y viviendas
- Consorci de l'Habitatge de Barcelona: ayudas a la rehabilitación de elementos comunes
- Consorci de l'Habitatge de Barcelona: Rehabilitación de edificios de personas en situación de vulnerabilidad
- Consorci de l'Habitatge de Barcelona: ayudas a la rehabilitación de viviendas para incorporar a la bolsa de vivendas de alquiler de Barcelona y para el arreglo de viviendas de personas en situación de vulnerabilidad
- [CERRADA] IDAE: Proyectos de rehabilitación energética de los edificios (PAREER II)
- [CERRADA] ICAEN: Sistemas de almacenamiento de energía eléctrica con baterías asociadas a instalaciones fotovoltaicas de autoconsumo 2018
- [CERRADA] ICAEN: Sistemas de almacenamiento de energía eléctrica con baterías asociadas a instalaciones fotovoltaicas de autoconsumo 2017

Figure 1- <http://icaen.gencat.cat/es/energia/ajuts/>

4.3 France

Habiter Mieux is a national support mechanism for global renovation targeting low income households. The support is up to 70% of the total amount of the measures with a maximum of 19.000 €, depending on the households resources and on the level of energy (in)efficiency of the dwelling. This is available for owner occupiers, an improvement of more than 40% of energy efficiency is needed. Landlords can benefit from national support for retrofitting if they engage to sign an agreement and to apply a low rent.

Another national support for low income households is **MaPrimeRenov** for one energy efficiency measure:

- up to 100 Euro / m² for wall insulation,
- up to 100 Euro / window for a replacement of single glazed windows,
- up to 4 000 Euro for solar water heater,
- up to 4 000 Euro for airing system with heat recuperation.

For more information:

<https://www.cohesion-territoires.gouv.fr/sites/default/files/2019-12/MaPrimeRenov-Pr%C3%A9sentationdetailede.pdf>

4.4 Croatia

In 2019, the **Fund for Environment Protection and Energy Efficiency** opened a call for citizens to apply for grants for the installation of thermal energy or for heating and cooling appliances in family households. This call included installation of heat pumps, pyrolytic and biomass furnace and solar thermal panels. The total available budget of the program was 11 mil kuna (approximately 1.5 mil Euro) and citizens could apply for grants maximal total value of which should not have exceed 75 thousand kuna (approximately 10 thousand Euro).

According to renovation of residential buildings and family households, the Fund announced several calls in the programming period 2014-2020.

Citizens could apply to open call and receive a grant for renovation of the building (the cost covering insulation, installation of new windows and doors, new roofs and similar energy efficient measures). The value of the subsidies could vary from 29 to 95% of the total value of the project.

4.5 Albania

In Albania can only be detected this form of financial support:

- **Community Fund** from the Municipality of Tirana, which supports 50% of the fund needed for dwellings to invest in thermoisolation of blocks of building.
- **Fond for Energy Efficiency**, at the moment are only provisions, not in operation.

4.6 Slovenia

In the following table are presented the incentives for the energy efficiency, house renovation and renewable sources incentives according to Slovenian regulations.

Devices	Incentives
Insulation	Facade insulation: individual old buildings - up to 20% or max 12 Euro / m ² ; multiflat buildings - up to 20% or max 16 Euro / m ² ; also favourable loan available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/izolacija-fasade ; basement and floor insulation: individual old buildings - up to 20% or max 12 Euro / m ² ; multiflat buildings - up to 20% or max 12 Euro / m ² ; also favourable loan available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/izolacija-kleti-in-tal ; roof or ceiling insulation: individual old buildings - up to 20% or max 12 Euro / m ² ; multiflat buildings - up to 20% or max 16 Euro / m ² ; also favourable loan available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/izolacija-strehe-ali-stropa-proti-neogrevanemu-prostoru
Windows and fixtures	Changing old windows with new wooden windows: individual old buildings - 20% or max 150 Euro /m ² of changed window; also loan available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/zunanje-stavbno-pohistvo
Solar panels	Solar heating system: 30% or max 300 Euro/m ² , also favourable loan available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/solarni-ogrevalni-sistem ; micro photovoltaic powerplants: up to 180 Euro for 1 kva for both individual and multiflat buildings; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/mikro-soncne-elektrarne
Airing system with heat recuperation	Local or central system for airing with heat recuperation: for individuals - up to 20% or 2000 EURO; for multiflat buildings: 30%; also favourable loan available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/sistemi-za-prezracevanje-z-vracanjem-toplote-rekuperacija
Connecting to local district heating system	individual connection: up to 50% or 3000 EURO; multiflat buildings: 25%; also favourable loan available; more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/priklop-na-omreje-daljinskega-ogrevanja-3

Deep renovation of building	individual buildings: 170 EURO/m ² of heated space or 200 EURO/m ² of heated space (depending on what kind of insulation is used); more info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/celovita-obnova-stanovanjske-stavbe/celovita-obnova-stanovanjske-stavbe-sbvencija
Subsidy for buying a flat in a new or nearly zero energy building	buying a flat in multiflat building: up to 80 m ² with subsidy of EURO 100 per m ² of net heated area of the dwelling in the newly built multi-dwelling building and the new extension to the completely renovated older multi-dwelling building; or 150 EURO per m ² of net heated area of the apartment in a completely renovated older multi-dwelling building
Subsidy for low energy or nearly zero energy buildings	from 65-135 EURO/m ² of net heated and aired surface, also favourable loan available; info at https://ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/skoraj-nic-energijske-in-nizkoenergijske-stavbe/skoraj-nic-energijske-in-nizkoenergijske-stavbe-sbvencija

ANNEXES

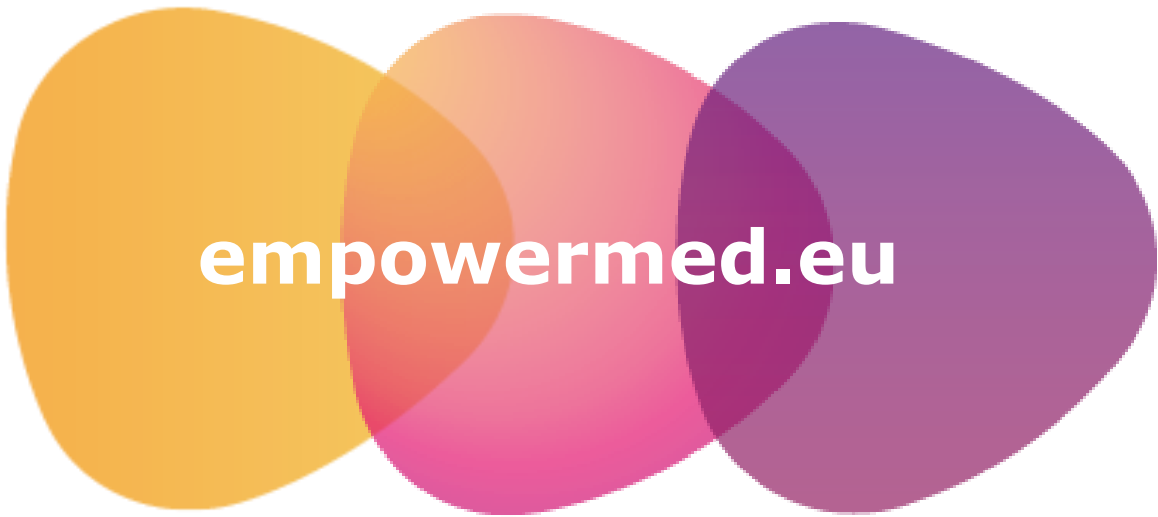
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Annex 1 - Table of the incentives

Table 1- Sumarize of incentives and financial supports in the case study areas

New devices	Features					
	Italy	Spain	France	Croatia	Albania	Slovenia
Fridge	Bonus elettrodomestici: tax relief for those who carry out building renovation works. Energy efficient devices, class equal to or higher than A+.	Plan renove electrodomésticos.	There are no incentives at national and regional level. Maybe some at local level.	At the moment there are no additional funds from the Fund for Environment Protection and Energy Efficiency.	Soft bank loans for EE devices.	Favourable loan for household appliances of A+ or higher class
Oven						
Washing machine						
Dishwasher						
Boiler	Ecobonus for interventions that increase energy efficiency in existing buildings.	Each region activates their specific field on energy efficiency. Catalunya does not fund these kind of services to boilers or heat pumps.	MaPrimeRenov: up to 1 200 Euro for boiler replacement	Open call for the citizens who install a renewable energy sources for production of thermal energy or for heating and cooling. Total available budget of the program = 11 mil kuna; Citizens can receive maximum 75 thousand kuna.	Green loans from banks.	Individual investments: up to 50%; investments in multi-flat buildings: 25 % of investment
Heat pump			MaPrimeRenov: up to 4 000 Euro for heat pump (air-water system) and 10 000 Euro for geothermal heat pump.			Individual investments: from 20-60%; multiflat buildings: 25 %
Insulation	Ecobonus: those who carry out energy redevelopment of buildings can	The Catalan government (Generalitat) offers yearly helps through IDAE.	MaPrimeRenov for one energy efficiency measure: up to 100 Euro / m ²	Several open calls for renovation of residential buildings and family households.	Community Fund from the Municipality of Tirana	Individual old buildings - up to 20% or max 12 Euro / m ² ; multiflat buildings -

	benefit from tax deductions of up to 75%.		for wall insulation	Citizens can receive for the renovation of their buildings a value from 29 to 95% of the total value of the project.		up to 20% or max 16 Euro / m2
Windows and fixtures			MaPrimeRenov for one energy efficiency measure: up to 100 Euro / window for a replacement of single glazed windows.			Individual old buildings - 20% or max 150 Euro /m2 of changed window
Solar panels	Conto termico 2.0: support for the increase of energy efficiency and the production of thermal energy from renewable sources.	IDAE and ICAEN provide yearly subventions.	MaPrimeRenov for one energy efficiency measure: up to 4 000 Euro for solar water heater.	Same fund as for boiler and heat pumps.	Provisions in the Fond for Energy Efficiency, but still not in operation.	30% or max 300 Euro/m2



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