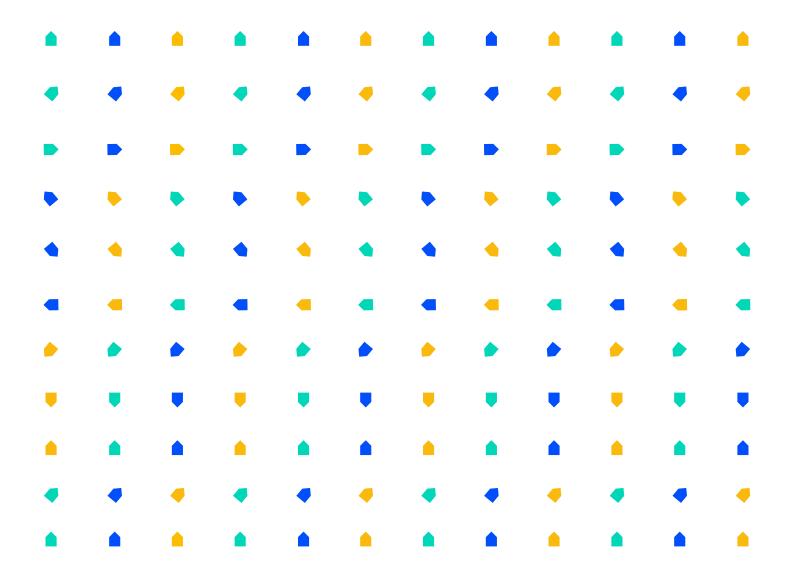


## Creating Proactive Solutions to Tackle Energy Poverty

A Toolkit for Local Governments



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## 1 What is this toolkit about?

This Sun4All Toolkit serves as **a guide** for a range of stakeholders, including local and regional governments, public and private utilities, energy agencies, civil society organizations, social housing associations, energy cooperatives, and Energy Service Companies.

The Sun4All Toolkit is specifically designed to help stakeholders better understand and address energy poverty using the Sun4All framework. It provides **a step-by-step approach to empower stakeholders** in comprehending, implementing, and replicating effective strategies for reducing energy poverty.

As both informative and practical, the Sun4All Toolkit introduces stakeholders to the Sun4All framework and equips them with the **knowledge needed** to implement and replicate successful approaches to energy poverty reduction. It integrates societal context, policy insights, methodologies, and practical examples to guide stakeholders in engaging with the Sun4All project.

## 2 How can this toolkit be helpful for your city or region?

Addressing energy poverty is a **key social policy priority** within the European Union (EU). Numerous initiatives and efforts are in progress to engage and empower vulnerable households by promoting renewable energy and enhancing energy efficiency across Europe. However, the true drivers of effective action planning and efficient resource allocation are **capacity building and knowledge development**, both critical for tackling energy poverty and ensuring a fair and just energy transition throughout Europe.

The Sun4All Toolkit offers significant advantages to local and regional governments, public and private utilities, energy agencies, and other stakeholders seeking solutions to promote renewable energy access and address energy challenges at the local level.

Here are several ways this Sun4All Toolkit can benefit your city or region:

• **Deepen** your understanding of the energy poverty issue.

- **Broaden** your knowledge of the EU policy, financial, and knowledge framework for addressing energy poverty.
- **Help** you grasp the Sun4All project's approach to combating energy poverty.
- **Support** the practical adoption and replication of key strategies, aiding vulnerable households and fostering a just energy transition at the local level.
- **Provide** valuable insights into the realworld application of the Sun4All project through an exploration of the pilot sites and the initiatives underway in four targeted regions.

The primary goal of the Sun4All Toolkit is to help cities and stakeholders more effectively understand and address energy poverty, ensuring a fair and equitable energy transition across Europe.

## 3 What is the current state of energy poverty in the European Union?

Energy poverty occurs when energy bills represent a high percentage of consumers' income or when they must reduce their household's energy consumption to a degree that negatively impacts their health and well-being.

There are three primary root causes to energy poverty:

- A high proportion of household expenditure is spent on energy.
- Low income.
- Low energy performance of buildings and appliances.<sup>1</sup>

Eurostat data reveals that approximately 42 million people across Europe – 9.3% of EU citizens – could not adequately warm their homes in 2022. That is a sharp increase from 2021 when energy poverty affected 6.9% of the population. It has more than doubled for people in lowerincome categories.<sup>2</sup> These issues highlight the pressing matter of energy poverty within the EU.

#### What are the effects of energy poverty in Europe?

Energy poverty negatively impacts Europeans' health, well-being, social inclusion, and

quality of life. People affected by energy poverty suffer from inadequate comfort and sanitary conditions, such as unsuitable indoor temperatures (too hot or too cold), deficient air quality, and exposure to harmful chemicals and materials, which may lead to lower productivity, health problems, and higher mortality. Energyvulnerable people also experience significant psychological stress due to unaffordable energy bills.<sup>3</sup>

#### Who is most at risk of energy poverty in Europe?

Energy poverty is a complex issue influenced by a range of factors. Geographic and climate factors, household characteristics, gender, health, and specific household energy and transportation needs all play a role.<sup>4</sup> This complexity highlights the need for a comprehensive understanding of the issue.

For example, families with children have higher frequencies of energy poverty.<sup>5</sup> People with disabilities and older people are more susceptible to energy poverty and its effects as well. Women, particularly those who are single parents and older women, are also particularly affected by energy poverty due to structural inequalities in income distribution, socioeconomic status, and the gender care gap.<sup>6</sup>



# 4 What is the European Union's policy framework on tackling energy poverty?

The EU is **committed to the green transition being fair and just**. Thus, the availability of a clear, specific, relevant, and applicable political and regulatory framework is an essential precondition to tackling energy poverty and protecting vulnerable consumers.

In December 2019, the European Commission (EC) launched the European Green Deal (EGD) – a package of policy initiatives – which aims to **make Europe climate neutral by 2050**. The EGD offers hope by supporting the green transformation of the European Union into a fair and prosperous society with more environmentally friendly production and consumption behaviours and lifestyle. The need to ensure renewable energy access for all members of the EU's society, leaving no one behind, is in the centre of attention, promising a brighter, greener future for all.

The EU has established a **comprehensive policy and regulatory framework** to tackle energy poverty, which focuses on understanding, measuring, and addressing the issue through a combination of research, policy, and collaborative initiatives. The key components of this framework include the following key elements:

#### 2010

Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings [More information]

#### 2012

Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency [More information]

#### 2015

Energy Union Package. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions, and the European Investment Bank. A Framework Strategy for a Resilient Energy Union with a Forward – Looking Climate Change Policy [More information]

#### 2017

The European Pillar of Social Rights Action Plan [<u>More information</u>]

#### 2019

Directive 2019/944/EU of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity [More information]

#### 2009

Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC [More information]

#### 2019

Clean energy for all Europeans package [More information]

#### 2019

European Green Deal, the EU's overarching growth plan to reach climate neutrality by 2050 [**More information**]

#### 2020

A Renovation Wave for Europe – greening our buildings, creating jobs, improving lives. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions [**More information**]

#### 2020

Commission Recommendation 2020/1563/ EU of 14 October 2020 on energy poverty [More information]

#### 2021

Proposal for a Council Recommendations on ensuring a fair transition towards climate neutrality [More information]

#### 2021

European Commission "Fit for 55" package [More information]

#### 2021

Communication from the Commission to the European Parliament, the European Council, the Council, The European Economic and Social Committee and the Committee of the Regions "Tackling rising energy prices: a toolbox for action and support" [More information]

#### 2022

Handbooks: a Guide to Understanding and Addressing Energy Poverty [<u>More information</u>]

#### 2023

Regulation 2023/955/EU of the European Parliament and of the Council of 10 May 2023 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060 [More information]

#### 2023

Revised Directive 2023/1791/EU of the European Parliament and of the Council of 13 September 2023 on energy efficiency [More information]

#### 2023

Commission Recommendation 2023/2407/ EU of 20 October 2023 on energy poverty [More information]



## 5 What is the European Union's knowledge framework on tackling energy poverty?

Capacity building and knowledge development are essential for better understanding the complex nature of the energy poverty phenomenon and selecting more appropriate solutions to address it locally. Thus, in addition to policy and regulatory support, the EU is implementing different learning, knowledge-sharing, and research initiatives to support local and regional governments in addressing energy poverty.

#### **European Union Initiatives**

#### How does the European Union support cities or regions in tackling energy poverty?

#### What is the Energy Poverty Advisory Hub?

The <u>Energy Poverty Advisory Hub</u> (EPAH) is the leading EU initiative aiming to eradicate energy poverty and accelerate the just energy transition of European local governments. It was launched by the EC in 2021 at the request of the European Parliament and builds on the "European Union Energy Poverty Observatory" project (2016-2020).

The EPAH offers a space for collaboration and exchange between local and regional authorities to tackle energy poverty while accelerating the just energy transition.

The initiative provides a range of resources, including technical assistance, video learning material, and online courses. Most importantly, it offers a dedicated help desk, ensuring that no one is left behind in the pursuit of ending energy poverty.<sup>7</sup>

#### What is the Energy Communities Repository?

The <u>Energy Communities Repository</u> (ECR), a collaborative initiative by the EC, is here to assist and unite local actors (including citizens, local authorities, and businesses) in setting up and

advancing clean energy projects driven by energy communities in urban areas across Europe.

This initiative not only contributes to a just transition to climate neutrality but also enables citizens to take ownership of their energy consumption and production, fostering a sense of shared responsibility and unity in our common goal of a sustainable future.

The ECR has collected data from the EU Member States on their existing policies and regulations for energy communities. The information is published in an openly accessible database. Seen as a 'onestop-shop,' the repository offers actors various support paths, such as a comprehensive toolbox, a database of EU projects and initiatives, and an EU Policy map.<sup>8</sup>

#### What is the European Covenant of Mayors for Climate & Energy?

The <u>EC supports the EU Covenant of Mayors for</u> <u>Climate & Energy</u>. It brings together thousands of local governments that want to secure a better future for their citizens. By joining the initiative, they voluntarily committed to implementing EU climate and energy objectives.

From the beginning, the Covenant of Mayors -Europe initiative has been designed to provide local governments in highly diversified national contexts with a framework for their local energy and climate action. The Covenant acts through initiatives such as practice-sharing, knowledge resources, funding opportunities, and events such as workshops and summits to help cities tackle energy poverty.<sup>9</sup>

Various EU programmes offer technical assistance and capacity-building initiatives to help EU Member States and local authorities design and implement effective energy poverty measures.

## 6 What is the European Union's financial framework on tackling energy poverty?

The EGD tackles energy poverty by offering investments in energy efficiency and renovation of buildings, access to renewable energies, direct income support for vulnerable households and help to finance zero-and-low emission mobility.<sup>10</sup>

The EU's financial framework for tackling energy poverty involves a comprehensive approach that integrates various funding mechanisms, initiatives, and programmes. These efforts are designed to support vulnerable households, promote energy efficiency, and encourage the adoption of renewable energy sources. Here are the key components of the EU's financial framework for addressing energy poverty:

#### 1. Structural and Investment Funds

- <u>European Regional Development Fund</u> (ERDF): Supports projects that promote energy efficiency, renewable energy, and energy infrastructure in less-developed regions.
- <u>European Social Fund Plus</u> (ESF+): Finances programmes aimed at improving social inclusion, including measures to address energy poverty.

#### 2. Cohesion Fund

 <u>Cohesion Fund</u> (CF): Targets the EU Member States with a Gross National Income (GNI) per inhabitant below 90% of the EU average, funding projects that improve energy efficiency and reduce energy poverty.

#### **3. Just Transition Mechanism**

Just Transition Mechanism (JTM): Aims to mitigate the socio-economic impact of transitioning to a climate-neutral economy, providing support for regions and workers affected by the transition. It includes the Just Transition Fund (JTF), which finances investments in energy efficiency, renewable energy, and social infrastructure.

#### 4. European Energy Efficiency Fund

• <u>European Energy Efficiency Fund</u> (EEEF): Provides financing for energy efficiency and renewable energy projects, targeting municipalities, public institutions, and private entities.

#### 5. Horizon Europe

 Horizon Europe: The EU's research and innovation programme funds projects that develop new technologies and solutions to combat energy poverty, including innovative energy efficiency measures and renewable energy systems.

#### 6. LIFE Programme

 <u>LIFE Programme</u>: Focuses on environmental and climate action projects, including those that address energy poverty by promoting sustainable energy practices and energy efficiency improvements.

#### 7. InvestEU Programme

• InvestEU Programme: Offers vital long-term funding for the EU by harnessing both private and public resources to support Europe's sustainable recovery, including the green and digital transitions, innovation, and social investments in skills development.

#### 8. Modernisation Fund

 Modernisation Fund: Supports investments in modernising energy systems and improving energy efficiency in lower-income EU Member States, with a focus on reducing energy poverty.

#### 9. Energy Performance Contracting

• Energy Performance Contracting (EPC): Encourages private investment in energy efficiency by allowing repayments through the cost savings achieved by the energy improvements.

#### **10. National Energy and Climate Plans**

• <u>National Energy and Climate Plans</u> (NECPs): Each EU Member State develops an NECP, outlining how they will achieve their energy and climate targets, including measures to address energy poverty. These plans often include national funding programmes and incentives for energy efficiency and renewable energy.

#### 11. Renewable Energy Sources and Energy Efficiency Obligations

• Renewable Energy Sources (RES) and Energy Efficiency Obligations: The EU mandates that energy providers invest in energy efficiency measures and renewable energy projects, some of which are targeted at reducing energy poverty.

#### **12. Social Climate Fund**

• <u>Social Climate Fund</u> (SCF): Proposed as part of the "Fit for 55" package, this fund aims to support vulnerable households and microenterprises in coping with the costs of the energy transition.

By leveraging these diverse funding sources and initiatives, the EU aims to create a robust financial framework that supports the reduction of energy poverty across its member states. This comprehensive approach ensures that financial resources are available to support vulnerable populations, improve energy efficiency, and promote the adoption of renewable energy solutions.



## 7 What is the Sun4All project approach to tackle energy poverty?

The "Sun4All – Eurosolar for All: Energy Communities for a Fair Energy Transition in Europe" (Sun4All) project, funded by the European Union's Horizon 2020 research and innovation programme, sets-up **a financial support scheme** that is already running with success in the United States of America. The existing New York State initiative – utility bill assistance programme named "Solar for All" is now adapted into the European context, as depicted in the Figure 1 below.

The adaptation process lies primarily on a direct liaison and peer learning process with the New York State Energy Research and Development Authority (NYSERDA). For that purpose, Sun4All has developed several interactions including a large webinar held at the beginning of the project. At this event, all partners and pilots had the opportunity to identify critical issues and pros and cons of the Solar for All Programme considering their local context. These peer learning activities also allowed the evaluation of shortcomings identified in the implemented program and the new strategies to address them.

The Sun4All project focuses on **proactive solutions** to help vulnerable households to break the energy cycle. The Sun4All project engages and empowers people in vulnerable situations towards renewables and better energy efficiency.

The project seeks to make renewable energy generation, along with its economic and

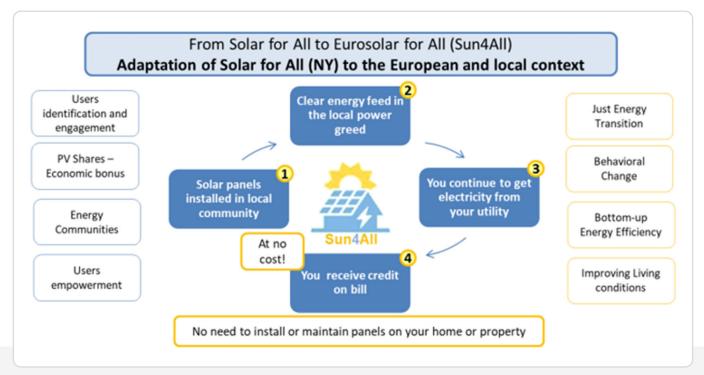


Figure 1: General concept for the adaptation of the Solar for All programme to the European Sun4All Solar Power to the People

environmental benefits, **accessible to vulnerable households** that suffer from energy poverty and lack the resources to invest in solar installations.

As part of the Sun4All project, households receive support in managing their home energy use. This allows eligible households to **actively participate in the energy transition process**, save energy and money, and improve their living conditions. Figure 2 below presents the Sun4All financial support scheme key principles.

Beneficiaries of the Sun4All project receive both **financial and non-financial support**. The solar

energy generated by the project's photovoltaic installations is evenly credited to participants' energy bills, reducing their actual energy costs.

Following the concept of the "energy communities" **project** participants receive advice on efficient energy management at home and can attend workshops on energy rights and efficiency. Through knowledge transfer and a vital community program, the project promotes the empowerment of its participants. In this way, the Sun4All project supports an inclusive energy transition towards sustainable energy production in Europe.



Figure 2: The Sun4All financial support scheme key principles



### 8 What are the Sun4All Pilot Sites?

Four European cities and regions (Figure 3) are pioneering the Sun4All project's financial support scheme for renewable energy access. This scheme has been tailored to the **specific characteristics of each pilot location**, ensuring that all activities are oriented towards local needs. [More information: Almada, Barcelona, Coeur de Savoie, Rome]



Figure 3: The Sun4All Pilots Sites

#### Almada Pilot (Portugal)

Data provided by the National Statistics Institute of Portugal in 2019 revealed that 19 % of the Portuguese population lives in households without the ability to keep the house adequately warm. One reason for this is the **low energy efficiency of many buildings**. Almada's building stock has significant energy efficiency issues, with an assigned energy class (EU energy label) equal to C or even lower for most buildings.

Therefore, within the scope of the Sun4All program, the city of Almada aims at **supporting** 

**residents of social housing buildings**, with a special focus on residents with a monthly income below the Social Support Index, as well as elderly inhabitants.

In Almada, photovoltaic (PV) panels are **installed on roofs owned by the municipality**. The energy generated is shared among the users of the buildings and common areas, which allows for a **reduction of the electricity bills of the households**.

The localised Sun4All financial support scheme model used in <u>Almada</u> is summarised in Figure 4 below.

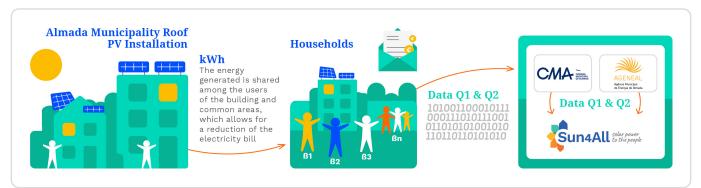


Figure 4: Almada's Pilot scheme



#### **Barcelona Pilot (Spain)**

From a climate justice perspective, **the City of Barcelona considers energy poverty to be one of its biggest challenges**. This is why 'energy poverty' is addressed as a major issue in Barcelona's Climate Action Plan. The city of Barcelona pursues the target of eliminating the issue of energy poverty by 2030, whereas at present 10.6 % of Barcelona's inhabitants are suffering from energy poverty, which represents more than 69,000 households.

Achieving a just energy transition, leaving no one behind, is one of the main goals of the city's Climate Action Plan. **The Sun4All** 

#### support scheme contributes to the achievement of this goal.

In Barcelona, the energy generated by the roof PV installation on the apartment building is shared among its users, which allows for a reduction of the electricity bill. **Each household has a contract indicating the share of generation**. In turn, data is collected on the power consumption, the savings, and the social economic profiles of the households. They are then anonymised and used to advise them best.

The localised Sun4All financial support scheme model used in <u>Barcelona</u> is summarised in Figure 5 below.

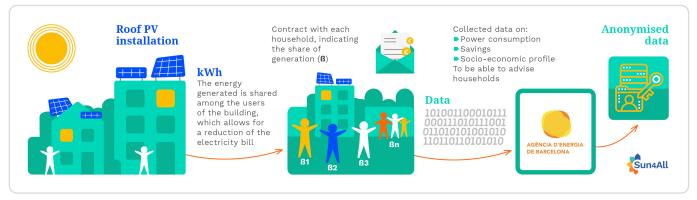


Figure 5: Barcelona's Pilot scheme

#### **Coeur de Savoie Pilot (France)**

<u>Cœur de Savoie</u> is affected by the issue of energy poverty due to multiple reasons. **Housing in the Auvergne-Rhône-Alpes region is known to be very energy intensive**, due to the specific geographical and climatic conditions in the region. This leads to expenditures for energy being 6 % higher in this area, compared to the French metropolitan average. Approximately 50 % of the households of the municipality have incomes, which fall below the threshold for social housing. Therefore, the social housing stock of the Community of Communes Cœur de Savoie lies above the average of the Savoie department.

With the "**Sustainable Energy Action Plan**" which was released in December 2020, the region expresses its will to locally react to climate change issues.

The Sun4All project offers the opportunity **to link the region's existing and planned solar installations with the topic of energy poverty**. The Community of Communes Cœur de Savoie aims at providing sufficient renewable energy resources to be able to effectively act against energy poverty.

In Cœur de Savoie, two different Sun4All financial support scheme localised models were used.

In the first one, the energy generated by the roof PV installation owned by the Communauté de Communes Cœur de Savoie was sold to EDF-OA. **35 owners benefited from a subvention to change their heating system, and fifteen vulnerable tenants received support to finance their energy bills**. Local associations and social workers made the link between the vulnerable households and the Sun4All pilot partners (Figure 6).

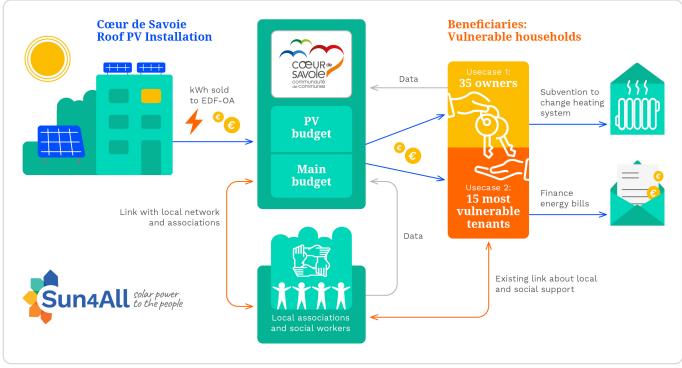
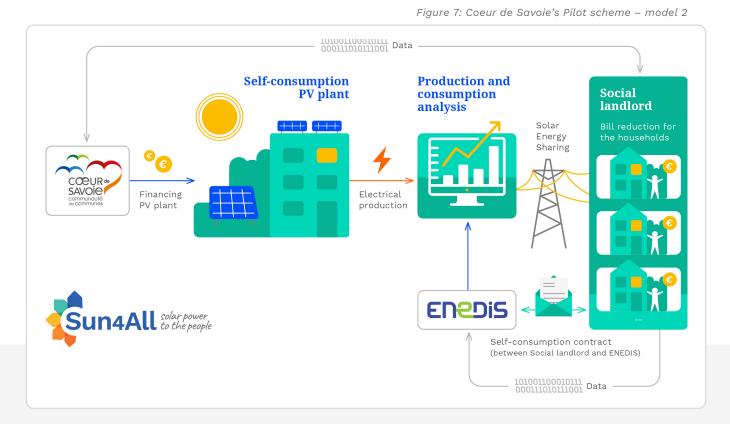


Figure 6: Coeur de Savoie's Pilot scheme – model 1

In the second model, the Communauté de Communes Cœur de Savoie financed a PV plant for selfconsumption. **The produced energy was shared with households in the form of bill reduction via a social landlord**. A self-consumption contract was concluded between the social landlord and ENEDIS (Figure 7).



14



#### **Rome Pilot (Italy)**

According to its local Energy and Climate Action Plan (PAESC – Piano d'Azione per l'Energie e il Clima), **around 100,000 households, located in Rome and its suburban area, are affected by energy poverty**. Therefore, the City of Rome, one of four pilot locations of the Sun4All support scheme, aims at complementing **already existing measures against energy poverty** by establishing the Sun4All program.

In <u>Rome</u>, Sun4All's financial scheme follows the model of a Renewable Energy Community for Solidarity (RECS). **Fifteen public schools were equipped with PV plants**, generating public incentives and savings for municipal plants. Sun4All pilot partners (the City of Rome and the Sapienza University cooperated with third parties belonging to the third sector and with local associations (Forum Terzo Settore Lazio and Federconsumatori Lazio) **to distribute the benefits to the households, in the form of services and/or bills payment**.

The Sun4All project will complement existing energy social bonuses and contribute to the **reduction of energy expenditures of vulnerable households**. Within the scope of the project, the City of Rome ensures that part of the solar energy produced by publicly owned PV installations are shared amongst eligible beneficiaries of the project, providing an energy share of at least 0.5 kW per year for each participating household, **which are credited on the participants' energy bills** and lead to a reduction of their actual energy costs (Figure 8).

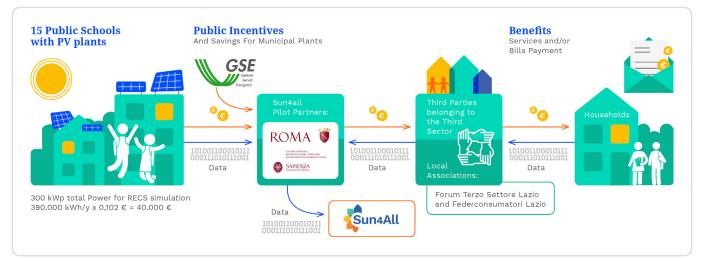


Figure 8: Rome's Pilot scheme



# 9 What are the key steps to replicate the Sun4All project approach?

Sun4All is "**Open to the World**" project. Over the course of the project, the Sun4All team paid great attention to the promotion of the exchange of ideas, information, and best practices among cities and other stakeholders interested in tackling energy poverty.

To make the Sun4All financial support scheme adoption and replication planning process userfriendly, the Sun4All project team developed the **8-Step Pathway** (Figure 9). This pathway outlines the eight key steps for **practically applying** the Sun4All approach to address energy poverty and improve access to renewable energy for vulnerable households.

The purpose of the Sun4All replication and expansion is to ensure that Sun4All remains as a **stable programme** to tackle energy poverty and ensure vulnerable consumers participation in the energy transition in Europe.

<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>
To understand	To develop political	To built
energy poverty at	support for tackling	a team and
the local level	energy poverty	partnerships
<b>Step 8</b> To define procedures for developing the energy production system	Sun4All	<b>Step 4</b> To design the legal and administrative framework
<b>Step 7</b>	<b>Step 6</b>	<b>Step 5</b>
To plan stakeholder	To specify	To define targets
engagement	financial and	and specify
activities	technical models	needs

Figure 9: Sun4All 8-step replication Pathway

**Digitally available resources** from the Sun4All project – Knowledge and Experiences Assets – provide support for implementing the relevant steps.

The **Sun4All Knowledge Assets** presents the intellectual Sun4All project resources that may help you to better understand the phenomenon

of energy poverty and start working on planning adoption and replication of the Sun4All approach to tackle energy poverty in your city or region.

The Sun4All Knowledge Assets are covering the following three groups of the Sun4All project knowledge resources (Figure 10).

#### Sun4All Policy Documents

- Policy brief: Fleshing out energy community legislation in EU Member states for a fair energy transition [More information]
- Policy brief: Highlighting effective ways for local governments to support energy communities and socially inclusive renewable energy projects [More information]
- Policy brief: The EU framework on energy communities [More information]
- Comparative analysis of the regulatory framework in Sun4All pilot cities [More information]
- Policy Action Report: Sun4All Project [More information]

#### **Sun4All Communication resources**

- Dissemination and Communication Strategy [More information]
- Sun4All Visual Identity [More information]
- Sun4All Flyer in English [<u>More information</u>], in Catalan [<u>More information</u>], in French [<u>More information</u>], in Italian [<u>More information</u>], in Portuguese [<u>More information</u>], in Spanish [<u>More information</u>]
- Sun4All Replication Flyer in English [More information] and in French [More information]
- Sun4All Project Report on Communication Activities [More information]
- Local voices for sustainability podcast episode "Harnessing Energy on Barcelona's Rooftops"

#### Sun4All Learning resources

- Sun4All Project presentation video [More information]
- Sun4All Infographic in English [<u>More information</u>], in Catalan
  [<u>More information</u>], in French [<u>More information</u>], in Italian [<u>More information</u>],
  in Portuguese [<u>More information</u>], in Spanish [<u>More information</u>]
- Sun4All Glossary [More information]
- Comic strip Emma's Destiny [More information]
- Factsheets on home energy efficiency in English [<u>More information</u>] and in Italian [<u>More information</u>]
- Sun4All interview with Max Joel, Director at New York State Energy Research & Development Authority (NYSERDA) in charge of Solar for All, the inspiration for Sun4All [More information]





The **Sun4All Experiences Assets** presents the intellectual Sun4All project resources and insights derived from practical experiences of the pilots – <u>Almada</u> (Portugal), <u>Barcelona</u> (Spain), <u>Coeur de Savoie</u> (France) and <u>Rome</u> (Italy). These resources can be beneficial for your city and

region in planning adoption and replication of the Sun4All approach to tackle energy poverty without having to go through the same challenges. The Sun4All Experiences Assets are covering the following three groups of the Sun4All project experiences resources (Figure 11).

#### Sun4All Pilot interviews

- Sun4All Pilot Video: Sun4All in Almada, Portugal [More information]
- Sun4All Pilot Video: Sun4All in Barcelona, Spain [More information]
- Sun4All Pilot Video: Sun4All in Coeur de Savoie, France [More information]
- Sun4All Pilot Video: Sun4All in Rome, Italy [More information]

#### **Sun4All Experiences reports**

- Sun4All Project Report "Blueprint model for the Sun4All programme" [More information]
- Sun4All Project Report "Revised version of Blueprint model for the Sun4All programme" [More information]
- Sun4All Project Report "Local requirements to benefit from Sun4All programme" [More information]
- Sun4All project Report "Local work plans of community work" [More information]
- Sun4All project Report "Impact Assessments Indicators and Guidelines"
  [More information]
- Sun4All project Report "Impact Assessment of the Sun4All programme in Pilot in Cities" [More information]
- Sun4All project Report "Implementation Plan of Sun4All programme" [More information]
- Sun4All project Report "Monitoring Report on implementation" [More information]
- Sun4All project Report "Final Report on Implementation" [More information]

#### **Sun4All Training resources**

- Sun4All publication "Sun4All Capacity and Training Package" [More information]
- Sun4All publication "Guidebook to integrate Sun4All in Cities Sustainable Energy and Climate Action Plans" [More information]
- Sun4All knowledge and experiences collection "Sun4All Sustainable Adoption Plans for Pilot Cities (4 Plans)" [More information]
- Sun4All knowledge and experiences collection "Sun4All Sustainable Implementation Plans for nine Community of Practice Observers" [More information]
- Sun4All knowledge and experiences collection "Community of Practice Observer Group Activities Report" [More information]
- Sun4All Sustainable Adoption Roadmap [More information]





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