Sun4All Capacity and Training Package

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Grizans, Jurijs (ICLEI – Local Governments for Sustainability)

www.sunforall.eu | info@sunforall.eu

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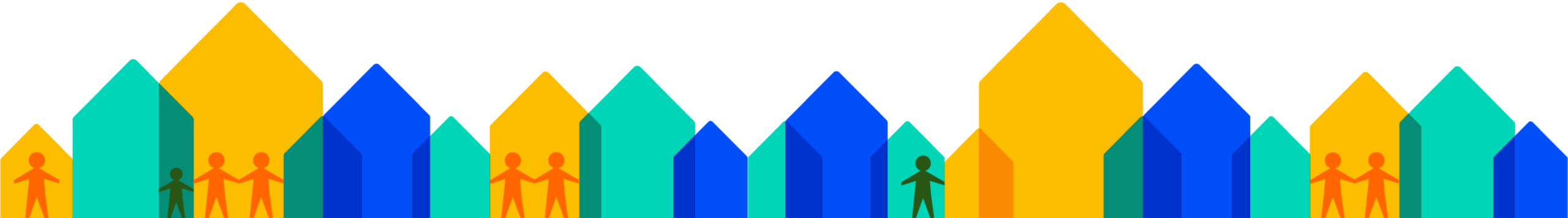

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Slogan	Solar power to the people
Web address	www.sunforall.eu
Contact	info@sunforall.eu

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Part 1

Get inspired

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Let's start with the key questions

1

What is the Sun4All project about?

Introduction to the Sun4All project

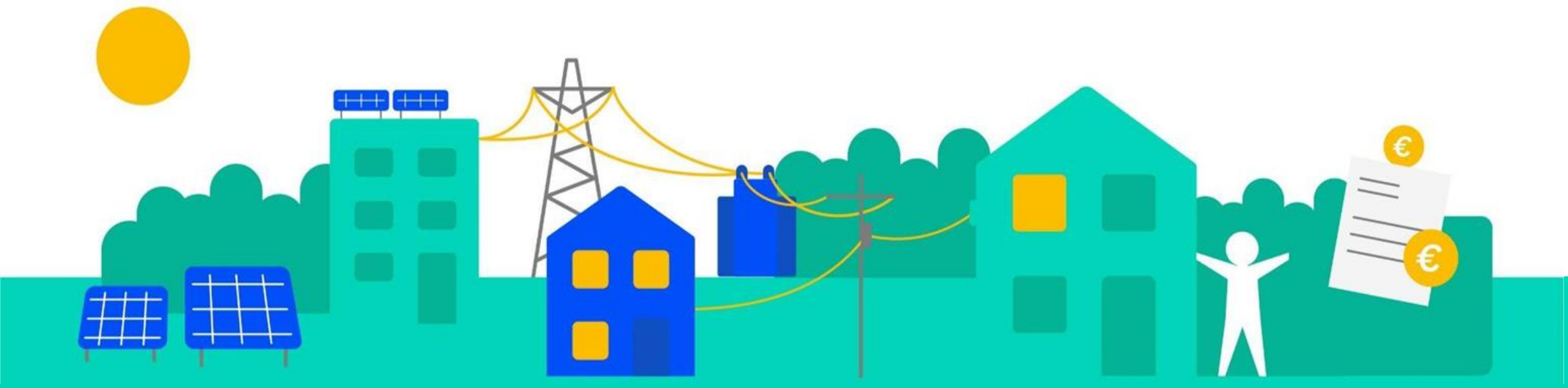
The full name of the project is “Eurosolar for all: energy communities for a fair energy transition in Europe”. The project acronym is **“Sun4All”.** Sun4All is a project funded by the European Union's Horizon 2020 research and innovation programme under grant agreement no. 101032239. The key words of the project are energy poverty, just energy transition, renewable energy sources, and financial support scheme. Duration of the project: October 2021 – September 2024.

Sun4All project aims at **facilitating access to renewable energy generation** (and its economic and environmental benefits) for vulnerable households, which suffer from energy poverty, and which otherwise would not have the capacity of investing in solar installations. [More information]

Sun4All project approach

The Sun4All project 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 adopted into the European context. [More information]

Get to know the Sun4All support scheme



Solar energy is generated by local photovoltaic installations, owned by the municipality and located near to where eligible participants live

Depending on the pilot use case, the renewable solar energy is either provided for direct consumption by Sun4All beneficiaries or fed into the local power grid

Sun4All beneficiaries continue to get electricity as usual, with no need to install or maintain solar panels

Through the financial support scheme and its redistribution mechanism, Sun4All participants financially benefit from the renewable energy produced and its value

Principles of the Sun4All support scheme

Beneficiaries of the Sun4All project will receive financial, as well as non-financial support. Financial support will be provided by **making participants co-owners of local photovoltaic installations** at no cost. The solar energy produced by the photovoltaic installations that are part of the project, will be evenly credited on the participants' energy bills and lead to a reduction of their actual energy costs.

Following the concept of "**energy communities**", participants of the project will complementarily receive advice on efficient energy management at home, as well as the possibility to participate in workshops related to the topics of energy rights and efficiency. Through knowledge transfer and an essential community programme, empowerment of participants will be promoted.

In that way, the Sun4All project supports **an inclusive energy transition process** towards sustainable energy production in Europe. Building on the results of the testing phase, the Sun4All support scheme will be scaled up across Europe. [More information]

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Who is the driving force of the Sun4All project?

The Sun4All project partners

The Sun4All project is driven by **11 European organizations.** Sun4All involves energy agencies at the pilot locations, which are using their expertise to ensure efficient energy management within the project. Public administrations and municipalities at the pilot locations are involved to ensure the establishment of the support scheme and to manage coordination between social services, residents or participants and the project partners. The association Ecoserveis is leading the project management, whereas the organization ICLEI European Secretariat, the universities of Rome and Stavanger, INES and the Jacques Delors Institute are supporting the Sun4All programme implementation. [More information]

AGÈNCIA D'ENERGIA DE BARCELONA

AGENEAL Agência Municipal de Energia de Almada

CMA CÂMARA MUNICIPAL DE ALMADA

CŒUR de SAVOIE communauté de communes

ecoserveis

ICLEI Local Governments for Sustainability EUROPE

ines INSTITUT NATIONAL DE L'ENERGIE SOLAIRE

NOTRE EUROPE JACQUES DELORS INSTITUTE PENSER L'EUROPE • THINKING EUROPE • EUROPA DENKEN

ROMA

SAPIENZA UNIVERSITÀ DI ROMA

Universitetet i Stavanger

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Who are testing and implementing the Sun4All scheme?

Sun4All project pilot locations

Four European cities and regions are acting as an early adopters of the Sun4All project financial support scheme for renewable energy access.

Almada (PT)

Barcelona (ES)

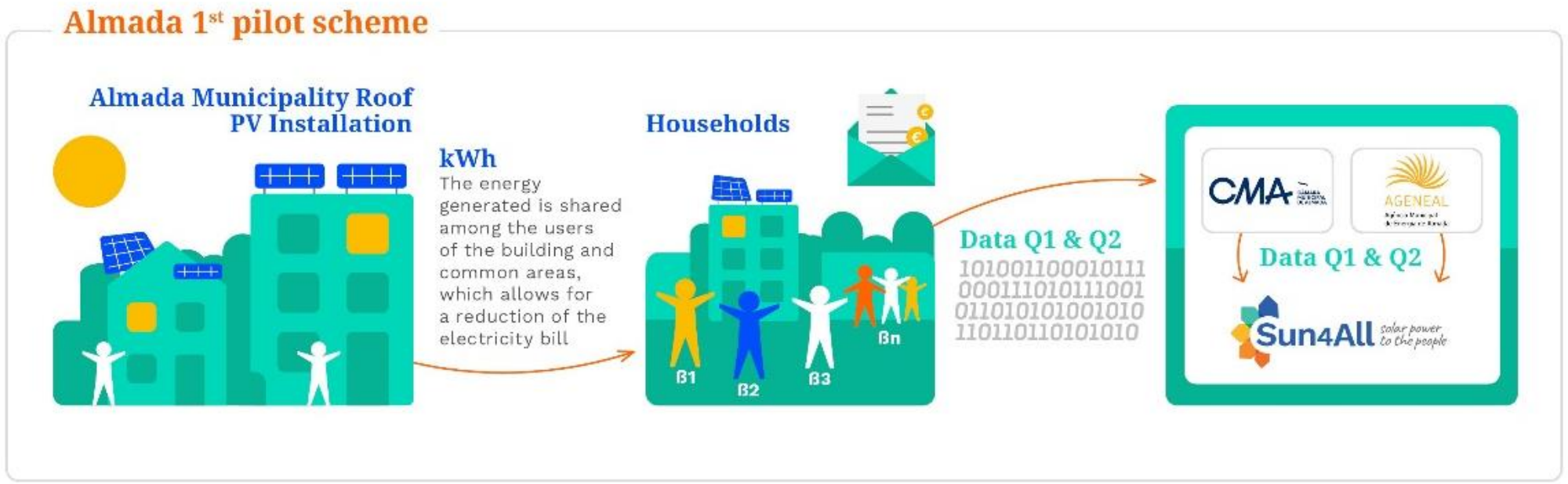
Coeur de Savoie (FR)

Rome (IT)

The Sun4All project financial support scheme has been adapted to the contextual characteristics of each of the pilot locations, ensuring that all implemented activities are local needs oriented. [More information: Almada, Barcelona, Coeur de Savoie, Rome]

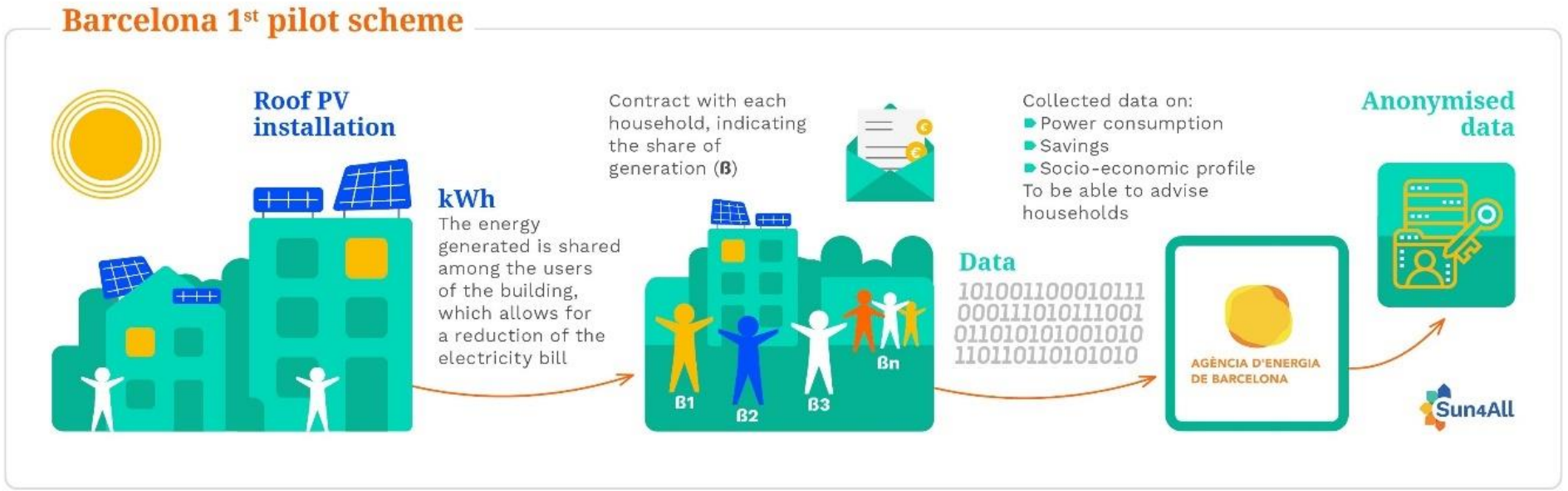
Sun4All pilot's localisation approach

In Almada, photovoltaic 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 Almada is summarised in figure below. More information [here] and [here]



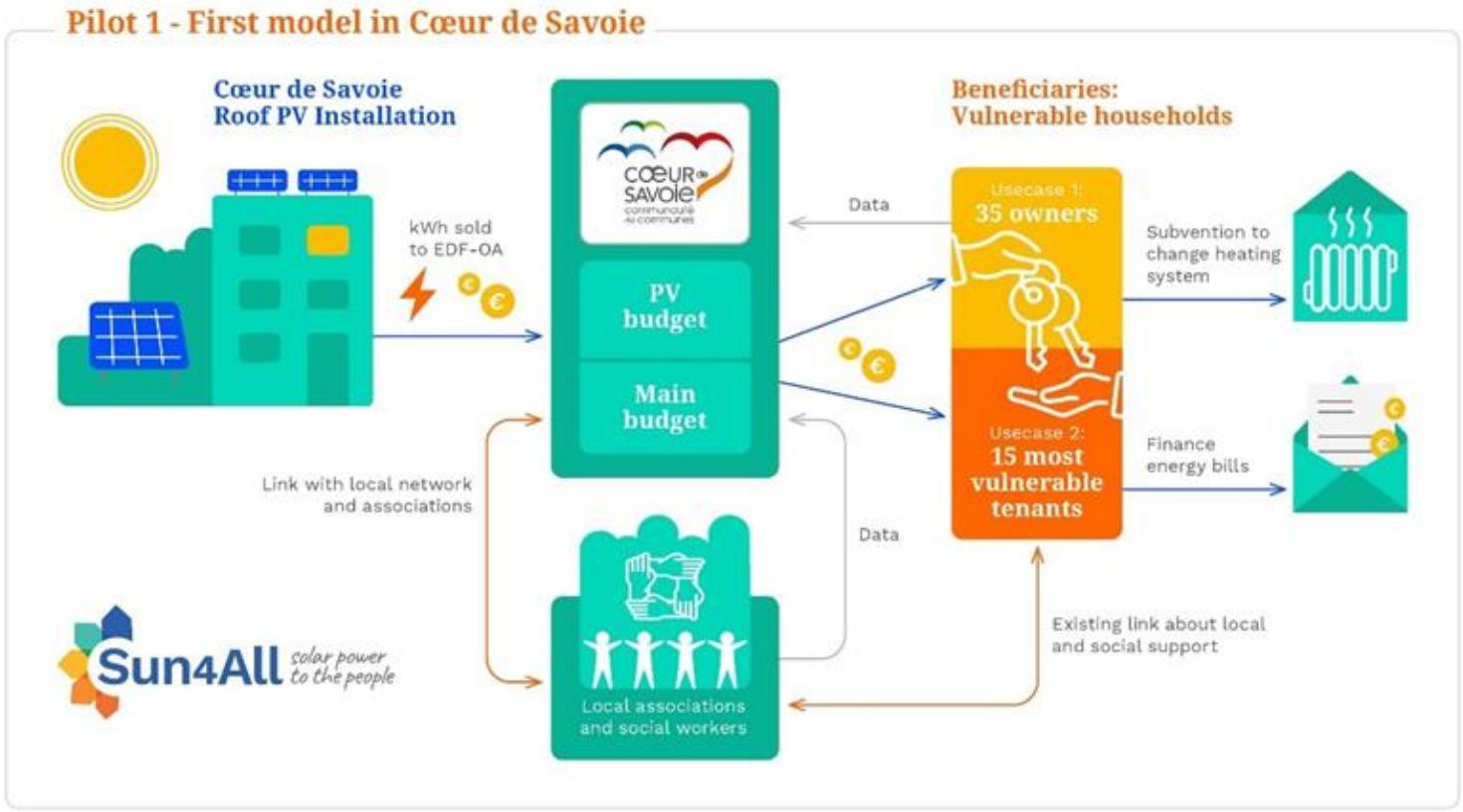
Sun4All pilot's localisation approach

In Barcelona, the energy generated by the roof photovoltaic 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.** The localised Sun4All financial support scheme model used in Barcelona is summarised in figure below. More information [here] and [here]



Sun4All pilot's localisation approach

In Cœur de Savoie, two different Sun4All financial support scheme localised models were used. In the first one (please see figure below), the energy generated by the roof photovoltaic installation owned by the Communauté de Communes Cœur de Savoie was sold to EDF-OA.

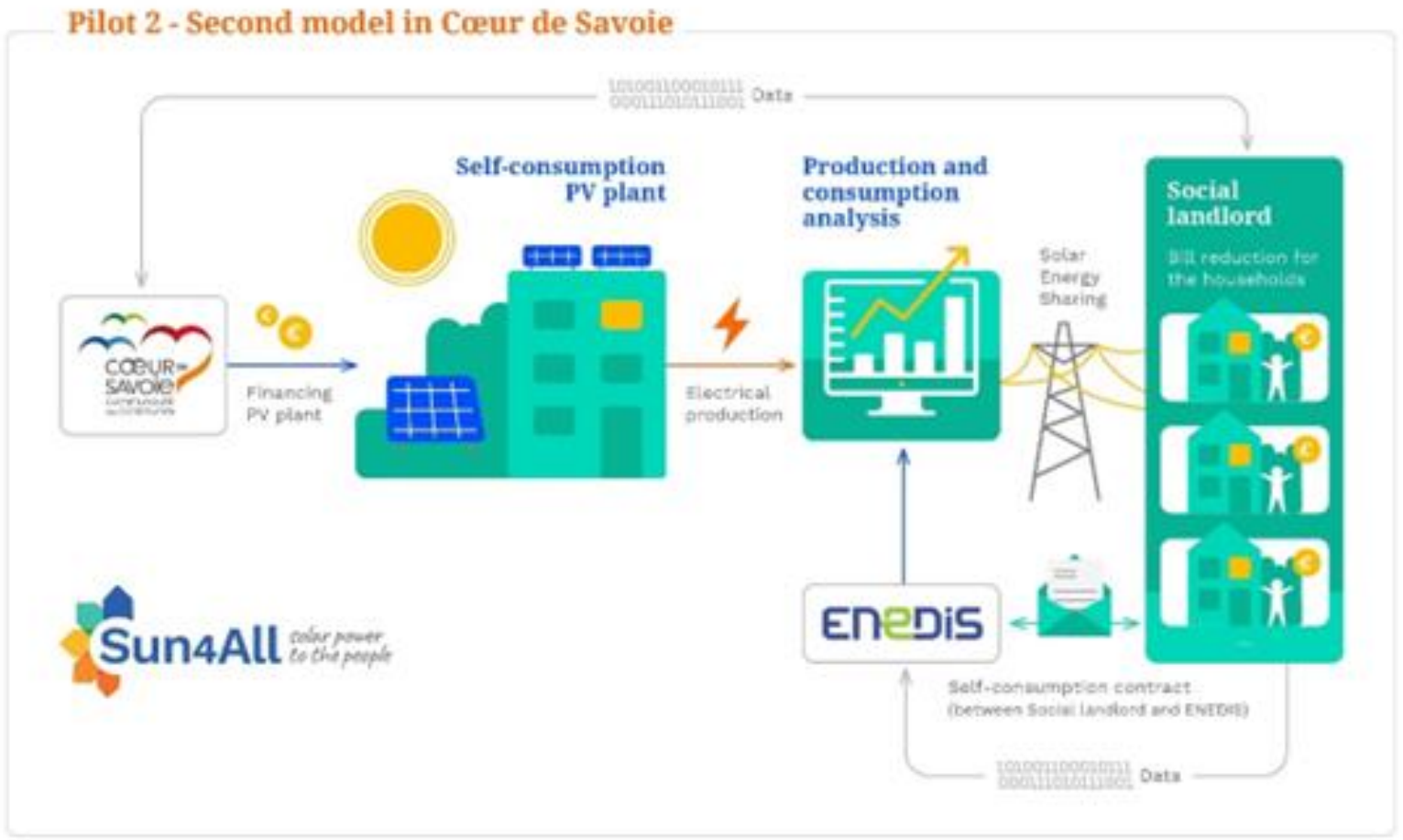


Sun4All pilot's localisation approach

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.

In the second model, the Communauté de Communes Cœur de Savoie financed a PV plant for self-consumption. **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 (please see figure below).

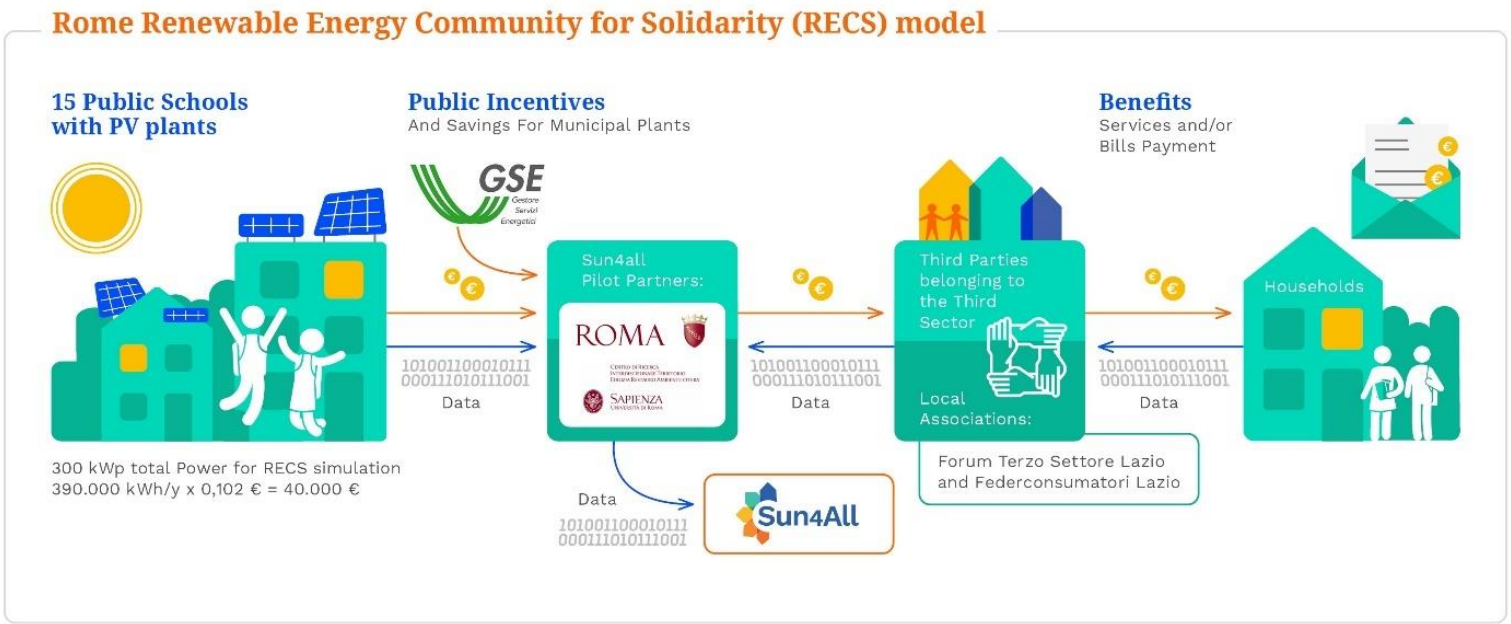
Sun4All pilot's localisation approach



More information [here] and [here]

Sun4All pilot's localisation approach

In Rome, Sun4All's financial scheme follows the model of a Renewable Energy Community for Solidarity. **Fifteen public schools were equipped with photovoltaic plants,** generating public incentives and savings for municipal plants. The localised Sun4All financial support scheme model used in Rome is summarised in figure below. More information [here] and [here]



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Who are planning adoption and replication of the Sun4All scheme?

Sun4All Community of Practice observers' group

Sun4All tackles energy poverty and facilitates vulnerable consumers' participation in a fair energy transition in Europe. One of the objectives of the project is to be sustainable and replicable throughout Europe. To ensure this goal, a **Community of Practice of the European cities** was established to follow the project and plan a **replication of the Sun4All schemes** in their regions. The Community of Practice observes the pilots' implementation to get some first-hand experience and work more effectively on their own specific energy poverty eradication plans and local business models. [More information]

Agència Local de l'Energia d'Osona
BRAGA Município
Consell Comarcal del Gironès
ENERGÍA BONITA
GRAND-PARADIS UNITÉ DES COMMUNES VALDÔTAINES
AJUNTAMENT DE VALÈNCIA
LAS NAVES
València Clima i Energia
Warsaw
Lumiar Junta de Freguesia

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What is the purpose of the Sun4All Capacity and Training Package?

Actuality of the Sun4All Capacity and Training Package

Tackling energy poverty is one of the social policy priorities in the European Union. Different initiatives and experiences are going on engagement and empowering vulnerable households towards renewables and better energy efficiency in Europe. **Capacity building and knowledge development is a key** for effective action planning and efficient resource allocation to address energy poverty and ensure a fair just energy transition across Europe.

Purpose of the Sun4All Capacity and Training Package

The main objective of the Sun4All Capacity and Training Package is to help cities and other stakeholders **to understand and address energy poverty** more efficiently, ensuring fair energy transition across Europe. This document aims to ensure that Sun4All financial support scheme remains as a stable programme to tackle energy poverty and ensure vulnerable consumers participation in the energy transition in Europe. This document compiles the key information about the Sun4All approach necessary **for planning its adoption and replication.**

Slogan of the Sun4All Capacity and Training Package

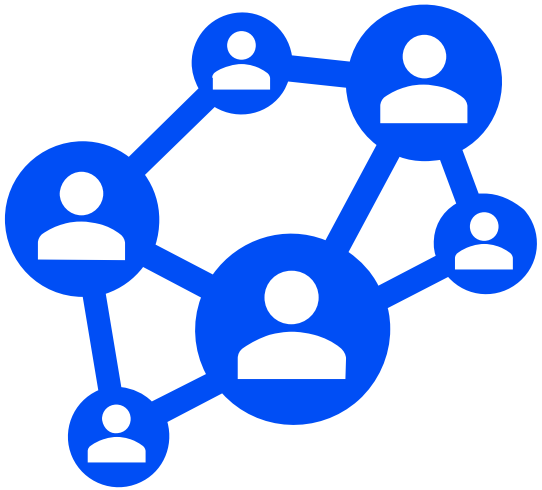
Sun4All Capacity Building and Training Package has the following slogan:

"Building capacity for tackling energy poverty. Building capacity for a fair energy transition in your city."

Target audience of the Sun4All Capacity and Training Package

Sun4All Capacity and Training Package targets the following stakeholders:

- Local and regional governments.
- Public and private utilities and energy agencies.
- Civil society organisations.
- Social housing associations.
- Energy cooperatives.
- Energy agencies.
- Energy service companies (ESCOs).
- Others.



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How was the Sun4All Capacity and Training Package created?

Development of the Sun4All Capacity and Training Package

Sun4All project team developed the Sun4All Capacity and Training Package in close collaboration between each of the members. The aim of co-thinking and co-creation process was to ensure that the Sun4All Capacity and Training Package is **constructive, insightful, and user-friendly to plan replication and adoption** of the Sun4All model in other cities and regions. Development of the Sun4All Capacity and Training Package consisted of the following sequential phases:

- Collective brainstorming and ideation about the learning objectives, structure, and content of the Sun4All Capacity and Training Package.
- Discussion on turning the key outcomes of the group brainstorming and ideation into effective Sun4All capacity building and training materials.
- Systematization and structuring of the Sun4All project experiences, practices, and learnings.

Content of the Sun4All Capacity and Training Package

The Sun4All Capacity and Training Package consists of a set of materials to be used in the different capacity building and knowledge exchange activities of Sun4All, e.g., study visits, exchange sessions, webinars, etc. It follows a practical approach, including materials that could support online and face to face training activities and could be used during and after the project lifetime.

Sun4All Capacity and Training Package **combines knowledge and experience of the Sun4All pilots:** Almada (Portugal), Barcelona (Spain), Coeur de Savoie (France), and Rome (Italy), acting as early adopters of the Sun4All financial support model for tackling energy poverty and ensuring renewable energy access, as well as of the **members of the Sun4All Community of Practice,** who are actively working on the adoption of the Sun4All financial support scheme for further implementation in other contexts.

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How is the Sun4All Capacity and Training Package organized?

Sun4All Capacity and Training Package framework

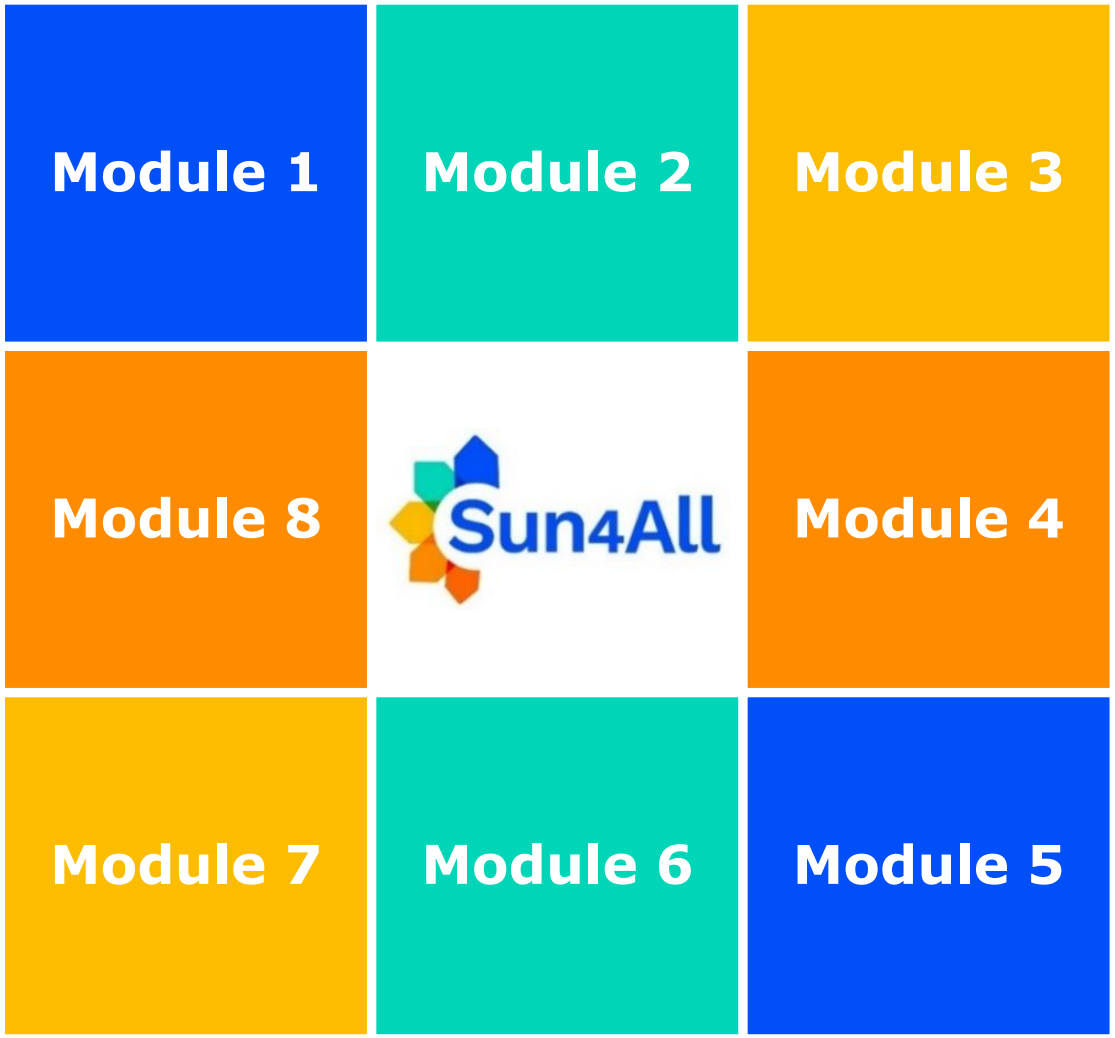
The Sun4All Capacity and Training Package is designed based on the circular capacity building and knowledge development approach **"Learn – Understand – Apply".**

Conceptual framework of the Sun4All Capacity and Training Package includes eight elements necessary for the capacity building and knowledge development in the focus area of the Sun4All project. Thus, getting better understanding of planning replication and adoption of the Sun4All financial support scheme at the local level.

Sun4All Capacity and Training Package structure

To ensure that users can easily understand and apply the practical experience and lessons learned by the Sun4All pilot cities and regions, as well as by the members of the Sun4All Community of Practice, the Sun4All Capacity and Training Package has a modular structure.

The Sun4All Capacity and Training Package consists of eight knowledge modules, covering key experiences and learnings of the Sun4All project.



The **objective** of the Sun4All Capacity and Training Package knowledge modules is to increase the understanding of the following topics:

- **Module 1** How to understand energy poverty at the local level?
- **Module 2** How to communicate energy poverty at the local level?
- **Module 3** What is the current energy poverty regulatory context?
- **Module 4** What is the knowledge basis for the Sun4All scheme?
- **Module 5** How to plan the implementation of the Sun4All scheme?
- **Module 6** How to define local requirements to benefit from the Sun4All scheme?
- **Module 7** How to engage the vulnerable families and build community?
- **Module 8** How to assess the impact of the Sun4All scheme?

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How to use the Sun4All Capacity and Training Package?

Principles for the use of the capacity and training materials

- **Principle 1:** Knowledge modules of the Sun4All Capacity and Training Package is an **educational tool to inform and engage** cities and other interested stakeholders, to support energy efficiency and just energy transition at the local level. Each of the knowledge modules can help to foster public discussion on the different aspects of the energy poverty, promoting stakeholder engagement and public awareness.
- **Principle 2:** Knowledge modules of the Sun4All Capacity and Training Package represent knowledge generated by the Sun4All project, summarizing the most relevant project findings to support cities and other interested stakeholders in planning **adoption and replication of the Sun4All model** to tackle energy poverty and make renewable energy more accessible for everyone.
- **Principle 3:** Knowledge modules of the Sun4All Capacity and Training Package are designed to cater to the different needs of cities and other interested stakeholders, offering exchanges that aim to **increase participants' capacity** to address and manage energy poverty more effectively and efficiently. Each knowledge module offers unique project pilots' experience-based knowledge.

Principles for the use of the capacity and training materials

- **Principle 4:** Knowledge modules of the Sun4All Capacity and Training Package are complemented by highly valuable **collection of resources** produced by the Sun4All project, i.e., Comparative analysis of the regulatory framework in Sun4All pilot cities, Video project presentation, Local work plans of community work, etc., that are available on the Sun4All project´s website in the section "Resources".
- **Principle 5:** Knowledge modules of the Sun4All Capacity and Training Package is developed as a harmonious part of the **Sun4All Capacity Building and Knowledge Sharing Programme.** To increase learning experience and to gain more courage and confidence with planning adoption and replication of the Sun4All model, it is recommended to the cities and other interested stakeholders to participate in the programme's activities.
- **Principle 6:** Knowledge modules of the Sun4All Capacity and Training Package are built expanding existing topically relevant Horizon2020 projects' and initiatives' achievements and results. The main goal of knowledge capitalization is to provide cities and other interested stakeholders with a wide range of tools and resources available for the alleviation of the energy poverty at the local level.

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How can the Sun4All Capacity and Training Package help your city?

Benefits of using the Sun4All Capacity and Training Package

The Sun4All Capacity and Training Package provides multiple benefits to the local and regional governments, public and private utilities, energy agencies, and other stakeholders interested in searching for the solutions for the promoting access to renewable energy and tackling energy at the local level.

Information that you will find in the Sun4All Capacity and Training Package can help you in the following ways:

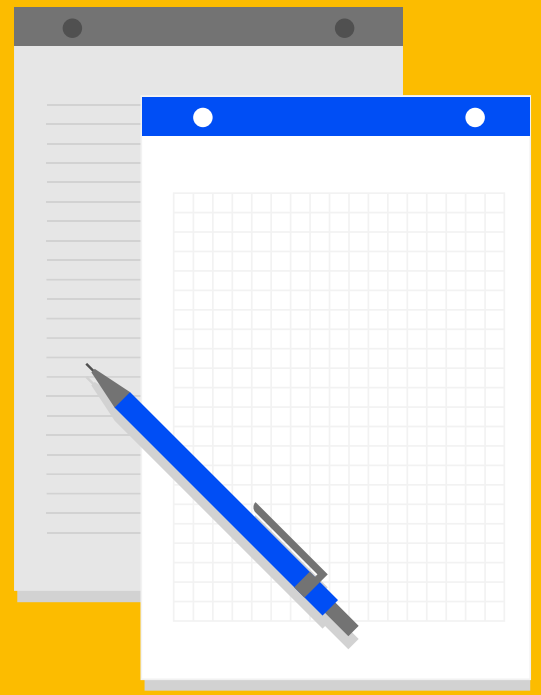
- To increase your understanding of the energy poverty phenomenon.
- To support you in communicating energy poverty at the local level.
- To help you understand better the current energy poverty regular context.
- To learn more about the New York State initiative to tackle energy poverty "Solar for All" and how it can help European cities through the "Sun4All" project.
- To plan replication and adoption of the Sun4All financial scheme to support vulnerable households and promote just energy transition at the local level.

Part 2

Learn faster

Module 1

How to understand energy poverty at the local level?



Learn

Understand

Apply

This section helps you to learn more about the role of energy for achieving the Sustainable Development Goals, interlinkages among energy, poverty, and inequalities, as well as about the current state of energy poverty in the European Union and at the local level.

Photo by the United Nations on the https://www.un.org/sustainabledevelopment/news/communications-material/

Access to energy

Sustainable Development Goal (SDG) 7 "Affordable and Clean Energy" calls for ensuring universal access to affordable, reliable and sustainable energy. This includes improving energy efficiency, increasing the share of renewables and further diversifying the energy mix while ensuring affordability of energy for citizens.

In everyday life, our well-being and the workings of the economy depend on reliable, affordable and sustainable energy services, such as electricity supply, heating and cooling, and transport services.

SDG 7 emphasises the need for affordable energy for reasons of social equality and justice. Principle 20 of the European Pillar of Social Rights also places energy among the essential services everyone should have access to. [More information]

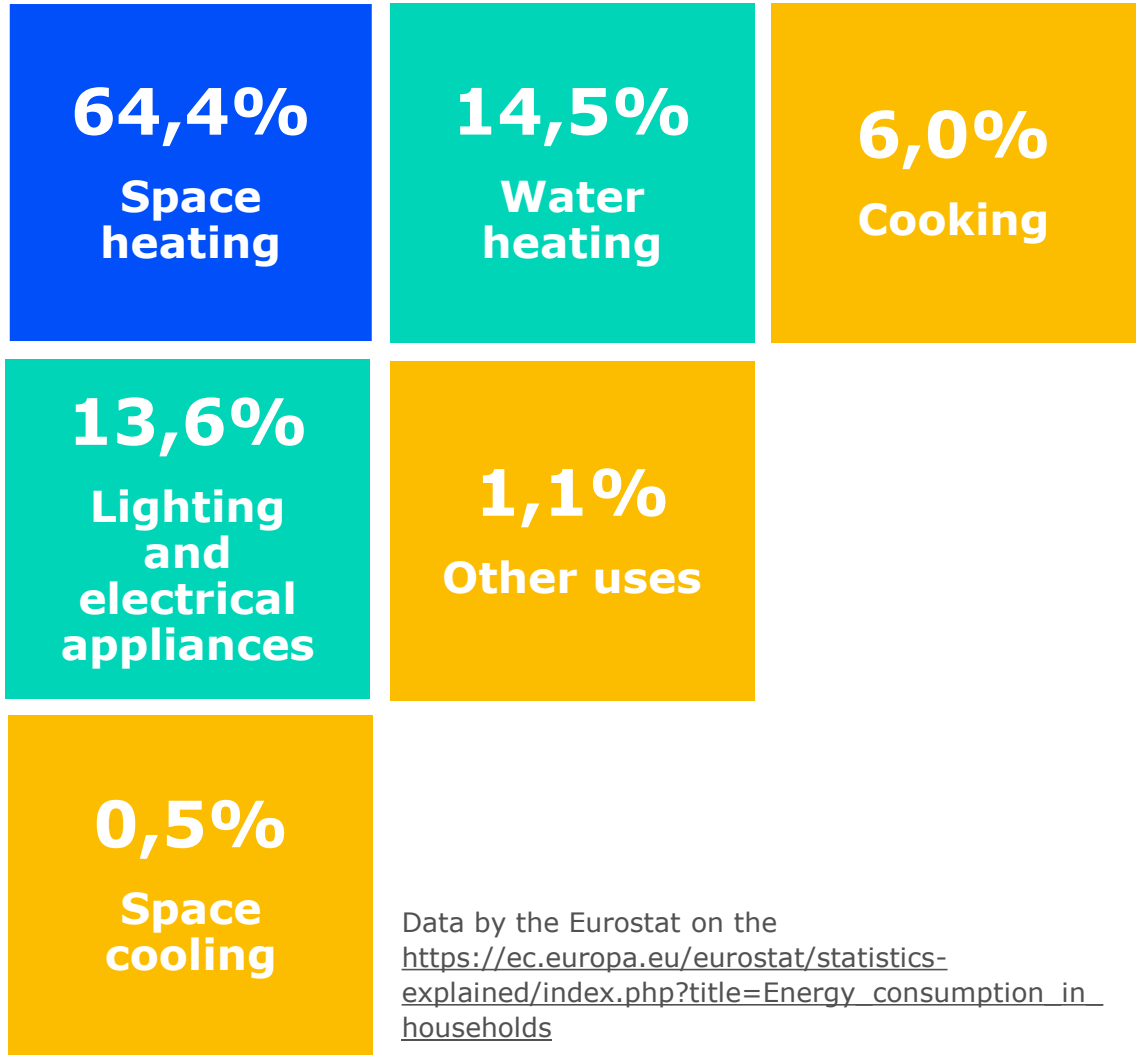
Photo by the United Nations on the https://www.un.org/sustainabledevelopment/news/communications-material/

Interlinkages among energy, poverty, and inequalities

Energy is an "intermediate" commodity. It is valued not so much for its own sake as for the services it enables. It powers appliances, equipment, and machinery, and has lighting and thermal applications.

In relation to the SDGs, one might say that SDG 7 is primarily useful in that it helps to achieve other SDGs. Thus, the success of SDG 7 is a precondition for the success of all other SDGs.

However, for several SDGs such as SDG 1 (No Poverty) and SDG 10 (Reduced Inequality) there is especially a strong link with SDG 7. Due to its instrumental value for improving the living conditions and capabilities of households, access to energy is also a means to achieve the principle "Leave no one behind". [More information]



Data by the Eurostat on the https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_consumption_in_households

Energy consumption in the European Union households (% share, 2021)

Households depends on energy in their everyday life. Households use energy for various purposes: space and water heating, space cooling, cooking, lighting and electrical appliances and other end-uses (mainly covering uses of energy by households outside the dwellings themselves).

In 2021, households, or the residential sector, represented **27%** of final energy consumption or **18,6%** of gross inland energy consumption in the European Union. [More information]

Approximately 42 million people across Europe – 9.3% of EU citizens – were unable to keep their homes adequately warm in 2022

Energy poverty in the European Union

(!) Energy poverty is a very serious challenge for many households in Europe today.

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. [More information]

According to Eurostat (June 2023), the situation was slightly better in 2020 and 2021, when energy poverty affected **8%** and **6.9%** of the population respectively, but over the past few months unprecedented surge in energy prices and geopolitical risks have made it more difficult for even more people. [More information]

Energy poverty factors and effects

Energy poverty has negative impacts on human health, wellbeing, 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.

The energy vulnerable people also experience significant psychological stress over unaffordable energy bills. [More information]

Energy poverty is linked to a combination of 3 factors: low income, high expenditure on energy, and poor energy efficiency in buildings

Energy poverty at the local level

The key issue at the local level remains access to essential energy services and products. Energy is an essential building block of our society and cannot be treated like any other commodity. [More information]

As energy is a public service, cities and other interested stakeholders must continue to explore how to tackle energy poverty at the local level. The good news is that much knowledge and expertise already exist, is ready to be replicated, and pairs energy poverty alleviation with a switch to renewable energy sources.

Sun4All is "Open to the World" project. This means that it encourages the exchange of ideas, information and working practices between cities and other stakeholders addressing energy poverty at the local level.

Sun4All project supports an inclusive energy transition process towards sustainable energy production in Europe

Learn

Understand

Apply

This section includes additional sources of information that may help you to understand better the phenomenon of energy poverty and to start working on its diagnosis in your city.

1. European Commission. Energy Poverty Advisory Hub. 7 practical steps to energy poverty diagnosis – Energy Poverty Advisory Hub learning guide. Please find the publication under the following **link.**
2. European Commission. Energy Poverty Advisory Hub. Introduction to the Energy Poverty Advisory Hub (EPAH) Handbooks: A Guide to Understanding and Addressing Energy Poverty. Please find the publication under the following **link.**
3. European Commission. Energy Poverty Advisory Hub. Energy Poverty Advisory Hub (EPAH) Handbook 1: A Guide to Energy Poverty Diagnosis. Please find the publication under the following **link.**
4. European Union. Energy Poverty Handbook. The office of Tamás Meszerics (Member of the European Parliament) via The Greens/EFA group of the European Parliament. Please find the publication under the following **link.**
5. POWERPOOR Project. Empowering Energy Poor Citizens through Joint Energy Initiatives. Energy Poverty Guidebook for energy planning. Please find the publication under the following **link.**

Learn

Understand

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This section helps you to start working on diagnosis of the energy poverty and understanding the current state of energy poverty action at the local level.

Focus on the energy poverty

Activities: to start working on diagnosis of the energy poverty and understanding the current state of energy poverty action in your city, plan and organise the series of events with the participation of internal (inside the municipal administration) and external (outside the municipal administration) stakeholders.

Methods: community meetings, collective discussions and brainstorming, focus groups, workshops, surveys, online engagement, etc.

Discussion questions

- Who are the key energy poverty stakeholders in your municipality and what are the relationships with each other (i.e., roles, functions, tasks, etc.)?
- What is the current state of energy poverty in your municipality (e.g., available data, indicators, supporting information, studies, etc.)?
- What are the conditions of energy poverty in your municipality (e.g., causes, drivers, consequences, geographical distribution, etc.).

Module 2

How to communicate energy poverty at the local level?

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This section helps you to learn more about the energy poverty communication dimension, EU’s energy poverty communication milestones, key aspects and terminology for communicating energy poverty at the local level.

Energy poverty and the importance of communication

Energy poverty is a multi-dimensional phenomenon. Along with socioeconomic and technical dimensions, energy poverty has a communication dimension:

- **Insufficient information** on affordability of renewable and sustainable energy and energy efficiency is an **energy poverty driver**. [More information]
- Energy vulnerable households have **difficulties in obtaining and assimilating information** on energy accessibility, energy efficiency and management at home, as well as their energy rights. [More information]

Insufficient local authority and other relevant stakeholders' awareness of the tools and approaches for working on the ground with energy vulnerable households and policymakers to mitigate energy poverty **creates potential barriers** to the sustainable energy development and just energy transition in Europe. Therefore, **energy poverty communication** strategic planning and implementation remains one of the **significant preconditions for the further transition** towards a climate-neutral economy in a fair way, leaving no one behind.

EU's energy poverty communication milestones

Even though the issue of energy poverty was mentioned in several publications of the European Parliament and the European Commission since 2010, there is still no official definition of energy poverty within the European Union and consumers facing the risk of or suffering from energy poverty are often not aware of their rights and options for action. Therefore, appropriate **educational and explanatory communciation within the context of energy poverty is essential**.

“Energy poverty” terminology for communication

Within the context of “energy poverty” terms and expressions may be used diligently, based on a fundamental understanding of their meaning and tailored for the respective audience. Particularly when directly addressing vulnerable households, i.e., energy consumers facing the risk of energy poverty, the terms “vulnerable” and “poverty” should be avoided or used carefully to not offend the audience.

- **Energy poverty** can be defined as 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”. [More information]
- **Vulnerable households** either do not have access to energy services or making use of these energy services undermines their possibility to access other basic services. Energy poor households experience inadequate levels of some essential energy services, e.g., lighting, heating/cooling, use of appliances, transport and many others. [More information]

"Just transition" terminology for communication

- The **Just Transition** Mechanism is a key tool to ensure that the transition towards a climate-neutral economy happens in a fair way, leaving no one behind. The Just Transition Mechanism addresses the social and economic effects of the transition, focusing on the regions, industries and workers who will face the greatest challenges. [More information]
- **Leaving no one behind** in an age of change means fighting poverty. Energy poverty and the difficulty to invest in modern cost saving solutions point to the need to be vigilant on new distributional challenges brought by the transition to a carbon neutral economy. For all these reasons, a wide reflection needs to take place to consider the multiple and interconnected causes of poverty, to reflect on the impact of different policy instruments and to rethink the way forward. [More information]

Key aspects of the energy poverty communication

- The **concept of a fair energy transition** is increasingly gaining awareness throughout Europe. More and more public governments include measures against energy poverty when it comes to **political decisions** and **climate action.**
- Energy poverty communication should ensure that particularly **citizens and vulnerable consumers understand** that energy poverty is a widespread problem across Europe. It is important to inform target audiences about the extent of the energy poverty issue and about **how the local municipality contributes to its alleviation,** to attract attention and increase support for the local municipality actions.
- Local authority communication activities should be **adapted to local contexts** and designed to address the variety of different stakeholders and target groups. Local authority **communication activities should connect** and create synergies between different local initiatives, and to increase communication's efficiency.

Learn

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This section includes additional sources of information that may help you to understand better the principles and methods on energy poverty communication and to start working to increase community awareness in your city.

1. Sun4All Project. Sun4All Glossary. Please find the publication under the following **link.**
2. Sun4All Project. Sun4All Dissemination and Communication Strategy. Please find the publication under the following **link.**
3. Sun4All Project. Sun4All Video Project Presentation: Energy Communities for a fair Energy Transition in Europe. Please find the video under the following **link.**
4. Sun4All Project. Sun4All Pilot Video: Almada, Portugal. Please find the video under the following **link.**
5. Sun4All Project. Sun4All Pilot Video: Coeur de Savoie, France. Please find the video under the following **link.**
6. Sun4All Pilot Video: Sun4All in Rome, Italy. Please find the video under the following **link.**
7. Sun4All Pilot Video: Sun4All in Barcelona, Spain. Please find the video under the following **link.**

Learn

Understand

Apply

This section helps you to understand better the existing energy poverty communication landscape and improve communication effectiveness about the energy poverty, its main causes, and potential solutions in your city.

Focus on the energy poverty communication

Activity: to start working on planning and implementing communication about energy poverty, plan and organise the series of events with the participation of internal (inside the municipal administration) and external (outside the municipal administration) stakeholders.

Methods: community meetings, collective discussions and brainstorming, focus groups, workshops, surveys, online engagement, etc.

Discussion questions

- Who are the main stakeholders / audiences with whom you would like to communicate about the energy poverty?
- How familiar are these audiences – ***apart from vulnerable consumers*** – with the following concepts (4 – well familiar, 1 – not familiar)?
  - Energy community
  - Just energy transition

- Energy poverty
- Community solar/ cooperative energy projects

- From your perspective, how familiar are ***vulnerable consumers*** with the following concepts (4 – well familiar, 1 – not familiar)?
  - Energy community
  - Just energy transition
  - Energy poverty
  - Community solar/ cooperative energy projects
- From your experience, do these audiences perceive just energy transition as a priority? *Why/ Why not?*
- From your experience, do these audiences perceive energy poverty as a priority? *Why/ Why not?*
- In your environment, what are the most visible initiatives, projects or organisations working on the just energy transition and energy poverty?

- Which channels of your organization are you planning to mainly use to communicate about just energy transition and energy poverty?
  - Personal conversations
  - Online or offline presentations to groups
  - E-Mails
  - Website
  - Social Media Channels
  - Events
  - Dissemination of print media

Module 3

What is the current political and regulatory context?

Learn

Understand

Apply

This section helps you to learn more about the current political and regulatory framework of the just energy transition and energy communities

Introducing energy communities in European Union law

Energy communities, through which citizens can jointly own, democratically control, and self-consume local energy, increasingly emerge as an important tool to foster renewable energy deployment and address social acceptability issues. A more decentralised energy production, with wind and solar, is an opportunity to put energy back in the hands of people, and to build a new, more inclusive energy system in which fair access to energy is guaranteed. However, energy communities do not automatically have progressive and inclusive features. In the absence of appropriate public support, they can even exacerbate inequalities since their establishment requires technical, financial and time resources that are unevenly distributed in society.

While energy communities already existed in some Member states, the introduction of energy communities in EU law is recent.

At the EU-level, the development of energy communities has been steered actively for a couple of years only, with the first EU definitions introduced in 2018/2019 as part of the Clean energy for all Europeans package. [More information]

Introducing energy communities in European Union law

Energy communities are defined as a type of self-consumption scheme. Self-consumers are guaranteed the right in the EU to generate, consume, store, share and sell self-generated electricity.

Upcoming changes: Fit for 55 and REPowerEU

General provisions such as the introduction of an EU-wide definition of energy poverty and the increase of energy efficiency and renewable 2030 targets will impact all stakeholders, including energy communities. The acceleration of permitting processes for renewable deployment could favour the uptake of new renewable energy community projects. Specific provisions on energy communities will further promote their integration in the energy system. In the building sector, energy communities will soon be formally acknowledged as contributors to energy efficiency and renewable deployment efforts and be included as part of the relevant market actors to be involved in multilateral dialogues between public and social actors regarding renovation barriers like the split incentive.

Drivers and barriers to energy community projects at national and local levels

Improving legislation at national level

- Improving legislative provisions on energy communities is necessary as the concept remains vague and unclear.
- Legal requirements for energy communities often remain too complex.
- Energy communities face regulatory barriers beyond energy market regulations.

A dire need for effective implementation

- Energy communities are often faced with time-consuming procedures or a lack of proper procedures.
- Long, bureaucratic procedures are tremendously hindering energy communities' capacity to convince people, especially in vulnerable environments, to join an initiative.

Barriers and drivers for energy communities from the municipal legislation

- Simplified procedures in urban planning set at municipal level are an important driver for energy communities.
- However, the installation of renewable energy plants is often seen as a threat to heritage conservation.
- Difficulties for municipalities to take part in energy communities
- Since municipalities are not allowed to earn money, the selling and sharing of electricity through self-consumption arrangements is made very difficult.
- There is a lot of legal uncertainty about the possibility for municipalities to associate themselves with private bodies, associations and individuals.
- In the face of legal uncertainty and the fear of the associated legal consequences, municipalities thus often resort to extreme caution. Clarifying the legislation and providing legal certainty to municipal staff is the only way to overcome this barrier.

Partnerships with other stakeholders: a tremendous asset for energy communities

- Other energy communities and citizen-led projects can support newer energy community projects.
- Energy communities could also benefit from existing networks, such as sports or cultural associations. This would make the concept of energy communities better-known, allowing them to reach a more diverse audience and to be rooted in the local community.
- National and local measures should exploit cooperation avenues with companies provided there is a fair distribution of the benefits. Industrial buildings, offices or spaces hold a great potential to install generation plants. With upcoming regulations on mandatory solar installations on roof surfaces, this potential should be realised sooner than later. Municipalities should make sure to capitalise on these local resources and integrate themselves and their citizens in these energy loops. Creating strong links between local companies, municipalities and citizens is also a great way to strengthen the social fabric and cohesion of a territory.

Learn

Understand

Apply

This section includes additional sources of information that may help you to understand better the political and regulatory context for development or energy communities at EU, national, and local levels

1. European Commission. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. EU Solar Energy Strategy. Please find the publication under the following **link.**
2. European Commission. Commission Recommendation of 14.10.2020 on energy poverty. Please find the publication under the following **link.**
3. European Commission. Joint Research Centre Science for Policy report. Energy communities: an overview of energy and social innovation. Please find the publication under the following **link.**
4. ODYSSEE-MURE Project. Energy poverty in the European Union. Please find the publication under the following **link.**
5. Sun4All Project. A comparative analysis of the regulatory framework in Sun4All pilot cities. Please find the publication under the following **link.**

Learn

Understand

Apply

This section helps you to start working on developing the regulatory and administrative framework to mitigate energy poverty and promote access to renewable energy in your city.

Focus on the energy poverty mitigation regulation

Activities: to start working on developing legislative and administrative framework to mitigate energy poverty and support citizen partnership in your city, plan and organise the series of events with the participation of internal (inside the municipal administration) and external (outside the municipal administration) stakeholders.

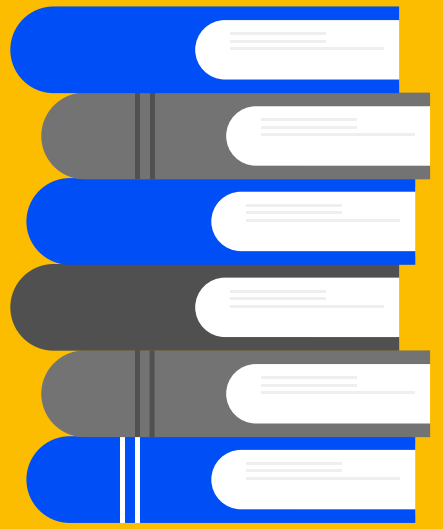
Methods: community meetings, collective discussions and brainstorming, focus groups, workshops, surveys, online engagement, etc.

Discussion questions

- Which are the existing legislation and policy initiatives to mitigate energy poverty and support citizen partnership (i.e., laws, regulations, policies, rules, etc.) in your city?
- Which are the existing development planning framework to mitigate energy poverty and support citizen partnership (i.e., development strategies, programmes, action plans, etc.) in your city?
- Which are the existing administrative procedures and practices to mitigate energy poverty and support citizen partnership in your city?

Module 4

What is the knowledge basis for the Sun4All scheme?



Learn

Understand

Apply

This section helps you to learn more about the knowledge basis for the Sun4All financial support scheme, i.e., the existing New York State initiative – utility bill assistance programme named “Solar for All” that is now adopted in Europe.

Solar for All programme

- Solar for All builds upon the extensive experience on community solar in New York managed by the New York State Energy Research & Development Authority (NYSERDA).
- Taking advantage of virtual net metering facilities in place in the State, community solar allows for anyone in the vicinity of a solar power plant, to subscribe and access clean and affordable power and get tangible benefits on their energy bill. This approach benefits households that want to invest in solar projects but do not have the capacity due to investment limitations or space limitations in the rooftop.
- Using available areas in the region, community solar can also deliver scale benefits making the project's finance more attractive and adding benefits to subscribers. The projects can be financed by a private company and/or by the members/subscribers. Shared ownership is also a possibility as is the possibility of being a simple subscriber.

- Given the fact that this approach has limitations regarding inclusiveness of all citizens, the New York State launched the Solar for All project. It does not differ substantially from Community Solar, but targets users that usually could or would not join these initiatives. This means that a large part of the investment is made by the New York state's budget which, after a competitive bidding process under New York State procurement rules, selects a company to deliver the project and sell the electricity. This is then bought by NYSERDA on behalf of low to moderate income households across the state.
- Households that qualify under the Solar for All scheme, will then receive the electricity at no cost which amounts for $5-15 dollars a month. To be eligible, households must rent or own their home and check income eligibility. The programme relies on voluntary application from customers and is boosted by significant on the ground outreach, extensive digital marketing, and support from local/regional partners such as housing providers or local community organizations.
- The next figure explains the main concepts of both Community Solar and Solar for All programmes and highlights the differences between the two:

Figure: Community Solar and Solar for All programmes functioning schemes (adapted from NYSERDA Sun4All workshop presentation)

- The Solar for All programme was launched in 2018 and reached approximately 4,000 participants in 9 community solar projects by the end of 2020. Currently, a new version of the programme is being developed. In April 2021, NYSERDA and National Grid jointly proposed an "Expanded Solar for All" program. This partnership allows the development of one of the main upgrades to the previous programme: the automatic enrolment of 160,000 + National Grid low-income bill discount program participants. Approximately 600 megawatts of projects should be procured by NYSERDA and target savings of $10 per month for each customer are expected. The program has been proposed in mid-2021, a public consultation has been developed in July/August 2021 and the potential launch is expected in 2022 after the formal final decision.

From Solar for All to Sun4All – Solar Power to the People

- A fundamental part of the Sun4All project is the adaptation of the Solar for All scheme to the local context of the pilots and the European framework, as depicted in the next figure.

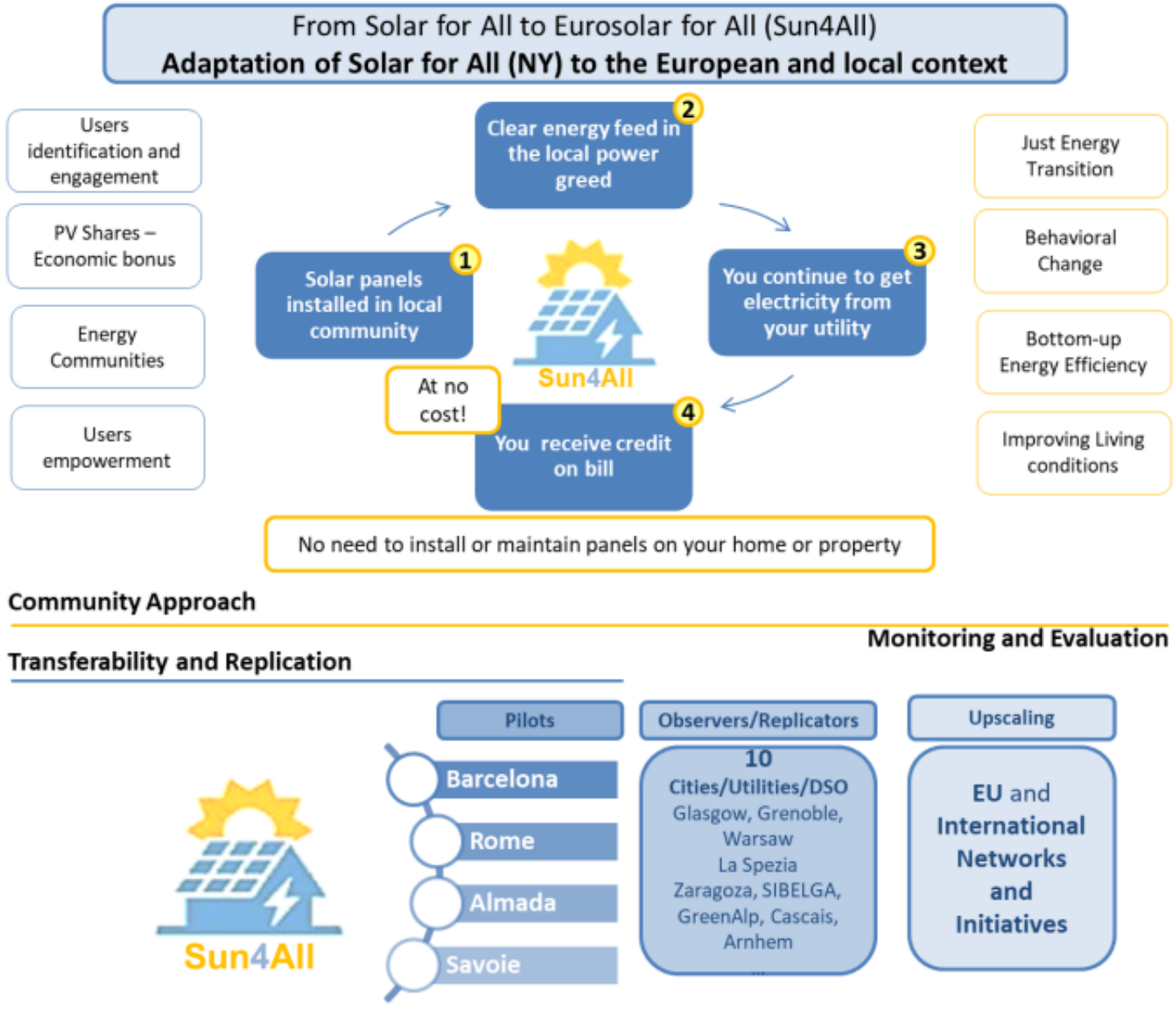


Figure: General concept for the adaptation of the Solar for All programme to the European Sun4All Solar Power to the People

- The adaptation process lies primarily on a direct liaison and peer learning process with 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. This process is fundamental to strengthening the pilot implementation plan and address some of the challenges with precautionary measures.
- One of the main challenges identified in the Solar for All Programme was the limited number of participants joining (around 4.000 when the initial goal was 10.000).
- This result is somewhat counterintuitive given the fact that there was no upfront cost for customers and all the change they would notice was a visible reduction in their energy bill. Also, the Programme had extensive outreach and local partnerships to help in the sign-up and dissemination processes. Project procurement was also highly effective and did not cause any constraints on solar plants and processes in place to deliver the electricity credits to customers.

The development of the Solar for All Programme identified the main causes for this relatively low adhesion rate:

- Lack of familiarity with community solar schemes.
- Application process was burdensome, especially its requirements for income verification is burdensome.
- Past experiences with scams from predatory energy retailers generate disbelief on all energy programmes.
- Possible language barriers especially relevant on low-income customers.
- Some of the participants also reported some nuisance on the fact that energy bill credit was variable. They could not easily grasp the link between fluctuating solar energy production across the year and their energy credit bill. These caveats were also a trigger for the new Solar for All Expanded programme already detailed in the first chapter. The solutions to these challenges were incorporated in the new programme and can be seen as “Pro Tips” to similar programmes to be developed.

Pro Strategies/Tips! To help you build your own solar power to the people scheme. [More information]

- Automatic enrolment.
- Integration with other benefits programmes.
- No risk, level monthly savings, easy exit.
- Multiple sources, partners, and languages.

- Universal access → Inclusiveness
- Ease of access → Confidence

Learn

Understand

Apply

This section includes additional sources of information that may help you to understand better process of adaptation of the existing New York State initiative – utility bill assistance programme named “Solar for All” to the European context.

1. Dorian Frieden, Andreas Tuerk, Camilla Neumann, JOANNEUM RESEARCH Stanislas d'Herbemont, Josh Roberts, REScoop.eu "Collective self-consumption and energy communities: Trends and challenges in the transposition of the EU framework – Working paper, December 2020", produced within the framework of the Compile project. Please find the publication under the following **link.**
2. Jacques Delors Energy Centre, Policy Paper 259 "Europe needs a Political Strategy to end Energy Poverty", February 2021. Please find the publication under the following **link.**
3. New York State Energy Research and Development Authority (NYSERDA). Solar for all. Please find the publication under the following **link.**
4. ODYSSEE-MURE Project, "Incentives and energy poverty in EU" Policy brief, October 2021. Please find the publication under the following **link.**
5. Sun4All Project. Blueprint model for the Sun4All programme. Please find the publication under the following **link** and the Sun4All Project Report "Revised version of blueprint model for the Sun4All programme" under the following **link.**

Learn

Understand

Apply

This section helps you to start working on planning the replication and adoption of the Sun4All financial support scheme in your city through analysis of the knowledge basis of the Sun4All.

Focus on the New York State initiative "Solar for All"

Activities: to start working on planning the replication and adoption of the Sun4All financial support scheme in your city, plan and organise the series of events with the participation of internal (inside the municipal administration) and external (outside the municipal administration) stakeholders.

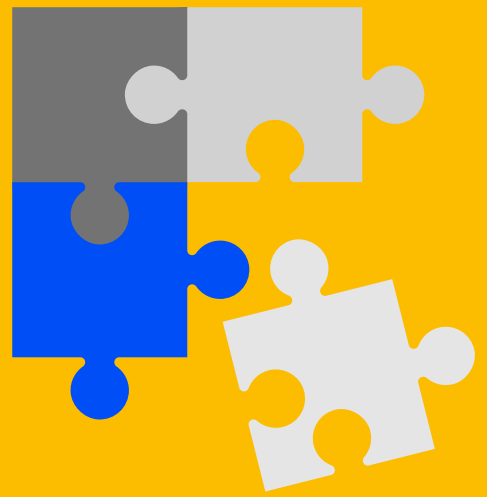
Methods: community meetings, collective discussions and brainstorming, focus groups, workshops, surveys, online engagement, etc.

Discussion questions

- What can your city learn from the New York State initiative "Solar for All" programme? Which knowledge and experience are useful for your city?
- What are the "Solar for All" tools and approaches to mitigate energy poverty that can be applied in your city context?
- How can your city benefit from the adaption of the "Solar for All" programme to the European context?

Module 5

How to plan the implementation of the Sun4All scheme?



Learn

Understand

Apply

This section helps you to learn more how to design the implementation of the Sun4All financial support scheme for your city, by setting all the parameters and the path to be followed to start running the scheme.

Designing the Implementation Plan

Designing the Implementation Plan of the Sun4All financial support scheme for the city includes the process of setting all the parameters and path to be followed to start running Sun4All.

The parameters to be defined by the city include operational aspects of the billing and communication process with beneficiaries and preparation of the installations, legal and administrative aspects, and involvement with various stakeholders.

The process of designing the Implementation Plan of Sun4All financial support scheme covers the following topics:

- Solar energy generated.
- Financial scheme of users' benefits.
- Involved stakeholders.
- Data management and protection.
- Recruitment and communication actions with beneficiaries.

Definition of typical use cases

To set up each pilot use case and developing a first approach to data and financial flows and stakeholder's roles, typical use cases were developed and are described below. These can be used as an inspiration to build your own use cases adapted to your context.

During the project lifetime, the Sun4All partners have adapted the use cases that best fit their needs and framework, as well as adapted them to tailor made solutions that respond to each region's context, to maximise the success and the positive impact of the pilots.

It is worth noting that not all mentioned use cases are being tested along the Sun4All project, however, they are presented as potential schemes that can be followed.

Use case 1: "Simple model"

- Sun4All partners act as "intermediaries" between the PV installation production and the end users/beneficiaries. Sun4All partners will be responsible for collecting and managing the data and the financial flows to provide the adequate benefits (municipal discounts, tax benefits etc.) to the end users of the project, the vulnerable consumers.

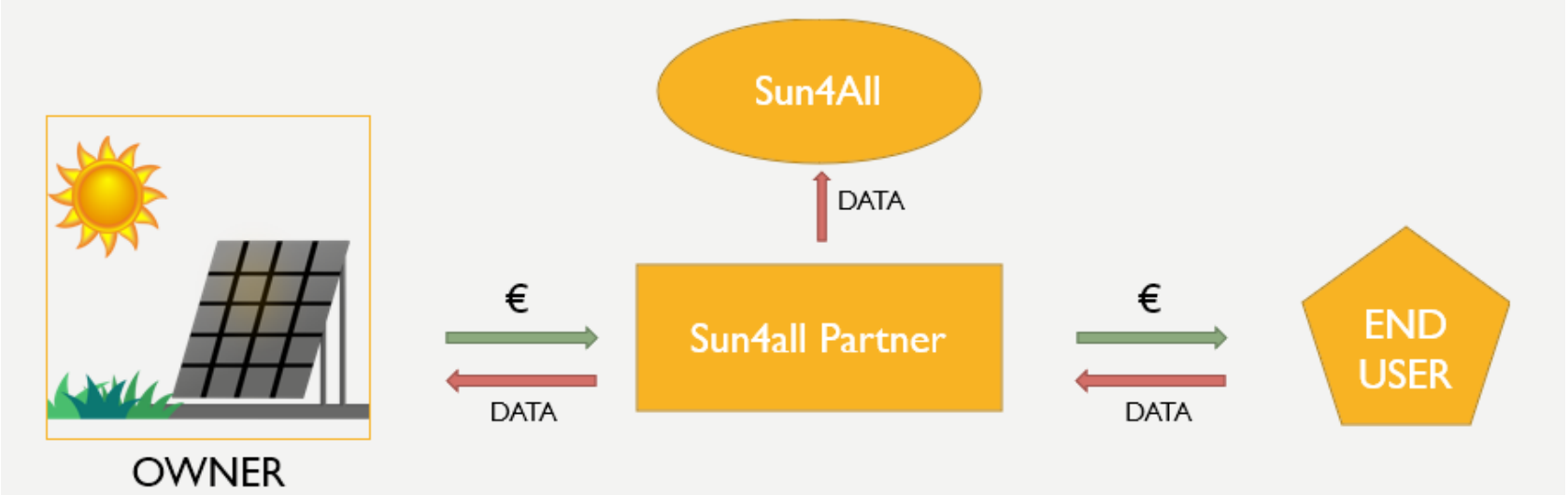


Figure: Use Case 1 – Simple module structure

Use case 2: "Energy community"

- A development of Use Case 1, where Renewable Energy Communities are established between the vulnerable consumers, local/regional authorities and technical Sun4All partners. In the case of some pilots, due to the legislative framework there will be the need to create a legal entity responsible for the operational management of the self-consumption activities and the communication with the respective operator/distributor.

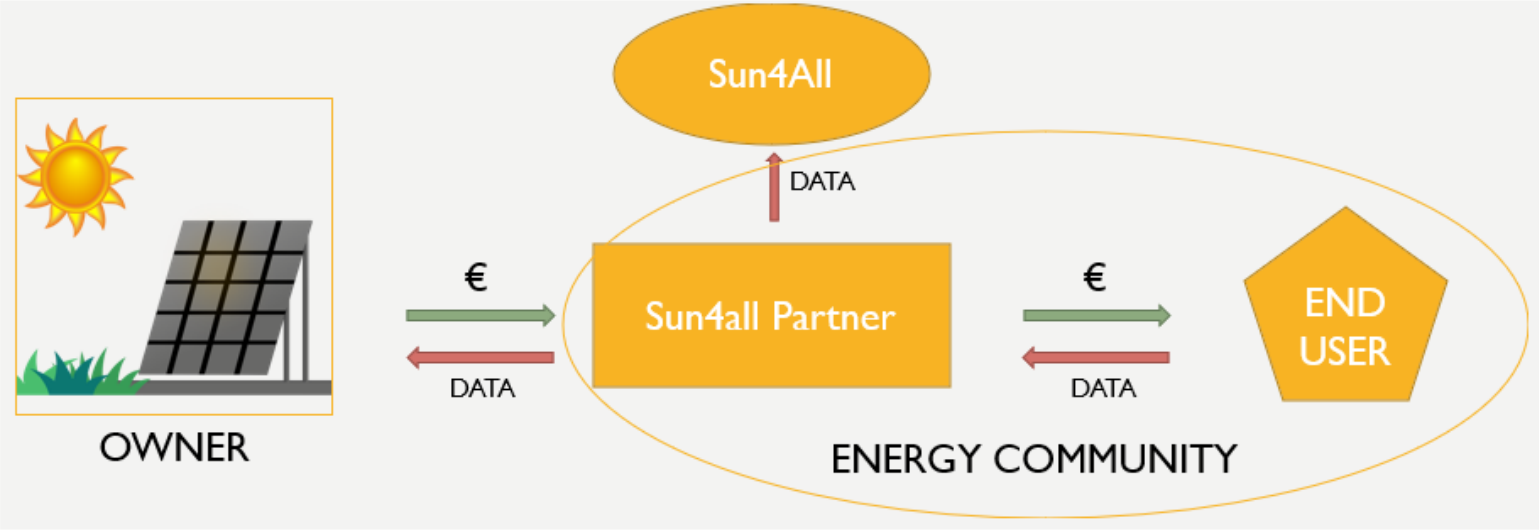


Figure: Use Case 2 – Energy Community structure

Use case 3: "Utility Company"

- As in Use Case 1, Sun4All partners act as "intermediaries" between the PV installation production and the end users/beneficiaries, but there will be also the involvement of the distribution/Utility companies in the collection/management of the data and financial flows. Sun4All partners will collaborate and liaise with the Distribution/Utility companies to calculate and distribute the financial benefits to the end users of the project, for example discounts in the energy bill.

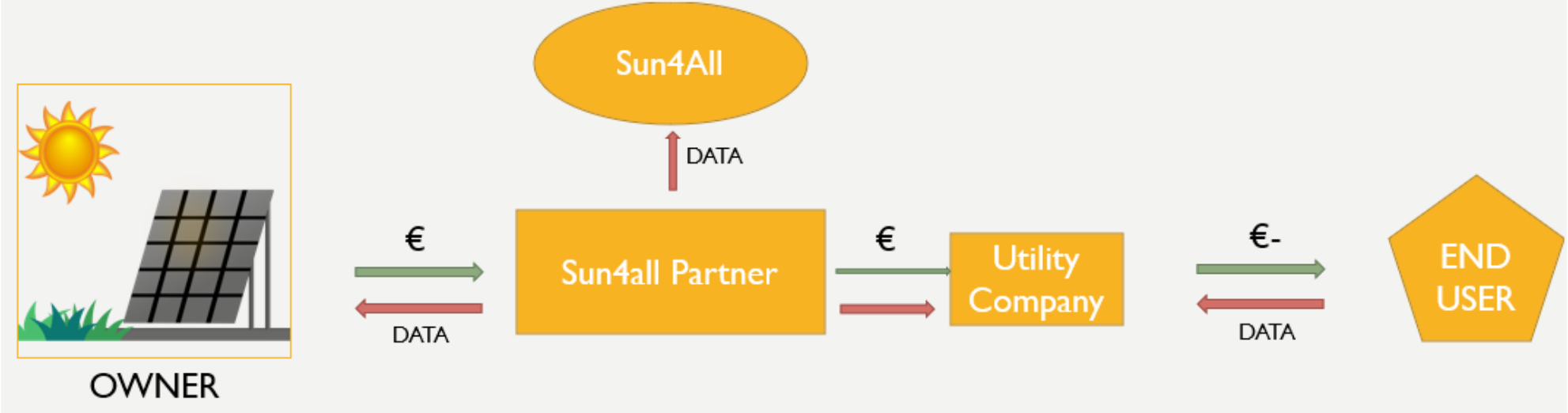


Figure: Use Case 3 – Utility Company structure

Use case 4: "Third party"

- Similar to Use Case 3 but involving a third party which can be a private company (e.g., a supermarket), that will provide a link between the PV production and the financial benefits for the end users (which could be discounts, for example). Due to the sensitive nature of the information, data from end users will only be collected and managed by Sun4All partners.

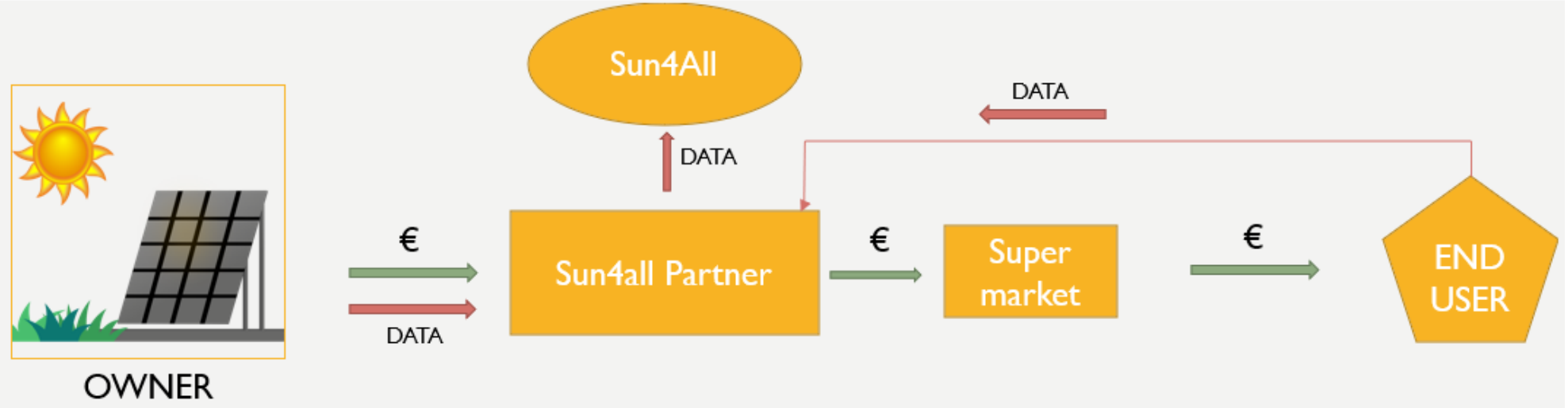


Figure: Use Case 4 – Third Party structure

Use case 5: "Social money"

- In this Use Case, the benefits from the PV energy production will be channelled to the end users though a Social Institution (Municipal Social Departments, grassroots organizations etc.). The beneficiaries will not receive financial benefits but instead this financial flow will be managed by the Sun4All partners directly to the Social Institution, which will in turn provide the non-monetary benefits to the vulnerable consumers. Collection and management of the data from end users will be done by Sun4All partners to inform the Social Institution which are part of the pilot.

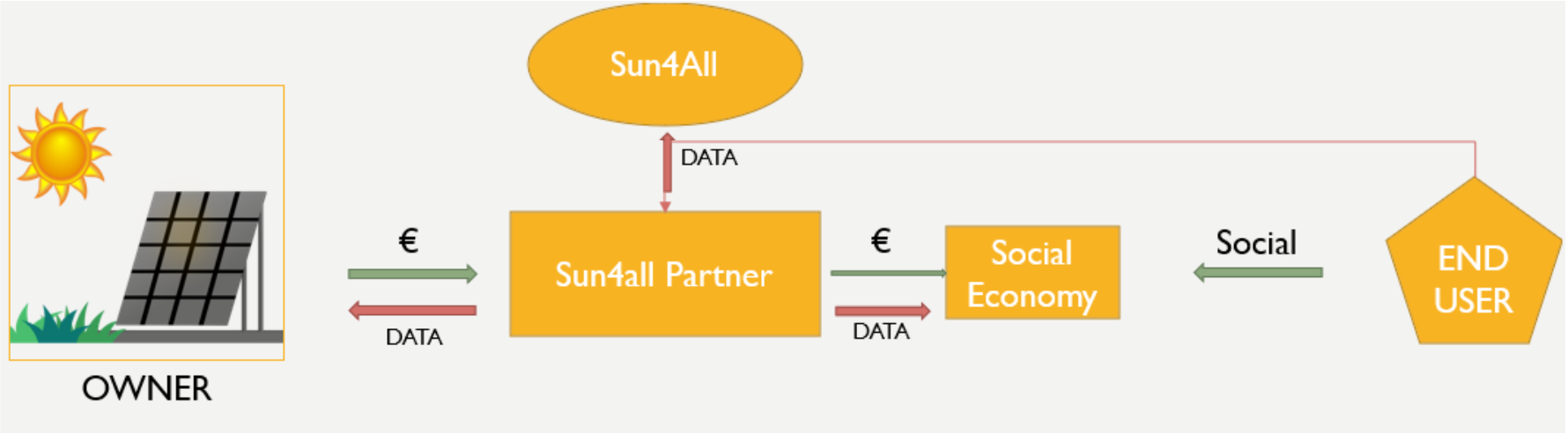


Figure: Use Case 5 – Social Money Structure

Learn

Understand

Apply

This section includes additional sources of information that may help you to understand better the process of the selection of the use case and the designing the Implementation Plan of Sun4All financial support scheme.

1. Frieden, D.; Tuerk, A.; Antunes, A.R.; Athanasios, V.; Chronis, A.-G.; d'Herbemont, S.; Kirac, M.; Marouço, R.; Neumann, C.; Pastor Catalayud, E.; et al. "Are We on the Right Track? Collective Self-Consumption and Energy Communities in the European Union". Sustainability 2021, 13, 12494. Please find the publication under the following **link.**
2. Sun4All Project. Blueprint model for the Sun4All programme. Please find the publication under the following **link** and the Sun4All Project Report "Revised version of blueprint model for the Sun4All programme" under the following **link.**
3. Sun4All Project. Implementation Plan of Sun4All programme. Please find the publication under the following **link.**
4. Sun4All Project. Monitoring Report on implementation. Please find a publication under the following **link.**
5. Sun4All Project. Final Report on implementation. Please find a publication under the following **link.**

Learn

Understand

Apply

This section helps you to start working on selecting the use case and the designing the Implementation Plan of Sun4All financial support scheme.

Focus on the Sun4All Use Case design

Activities: to start working on selecting the more appropriate use case and the designing the Implementation Plan of Sun4All financial support scheme for your city, plan and organise the series of events with the participation of internal (inside the municipal administration) and external (outside the municipal administration) stakeholders.

Methods: community meetings, collective discussions and brainstorming, focus groups, workshops, surveys, online engagement, etc.

Discussion questions

- What are the Sun4All financial support scheme typical use cases? What are their main advantages and disadvantages ?
- What is the relevance of the Sun4All financial support scheme typical use cases to the local context and needs of your city?
- What steps do you need to take to set up a use case and develop a first approach to data and financial flows and stakeholder's roles?

Module 6

How to define local requirements to benefit from the Sun4All?

Learn

Understand

Apply

This section helps you to learn more how to define local requirements (i.e., criteria and conditions) to benefit from the Sun4All financial support scheme.

Defining criteria

- Successful implementation of the Sun4All financial support scheme requires to define the eligibility criteria for the selection of participants and the further engagement strategies to reach them. It is essential to differentiate between Eligibility and Evaluation Criteria to be applied.

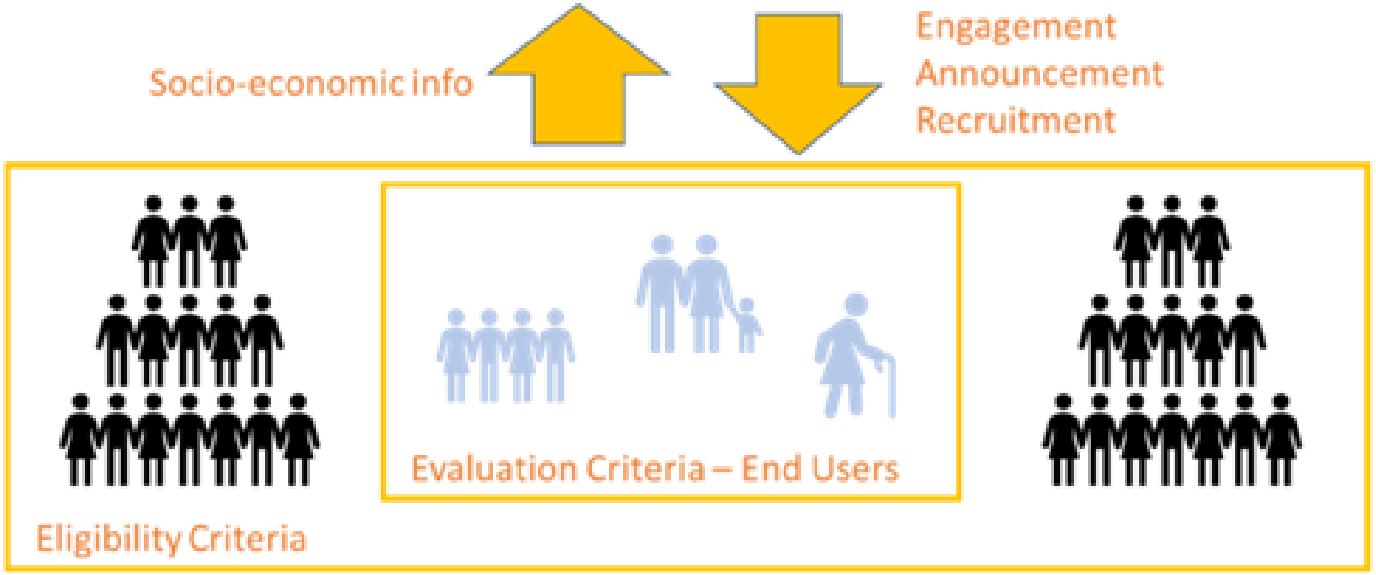


Figure: Sun4All local requirements' scheme

Eligibility Criteria Selection

The selection process of the Sun4All participants includes two phases:

1) **Eligibility Criteria** sets the minimum standards that potential beneficiaries must present. Those set of parameters and factors represent a strong exclusion criterion: people who do not fulfil the established requirements will not be able to access the announcement.

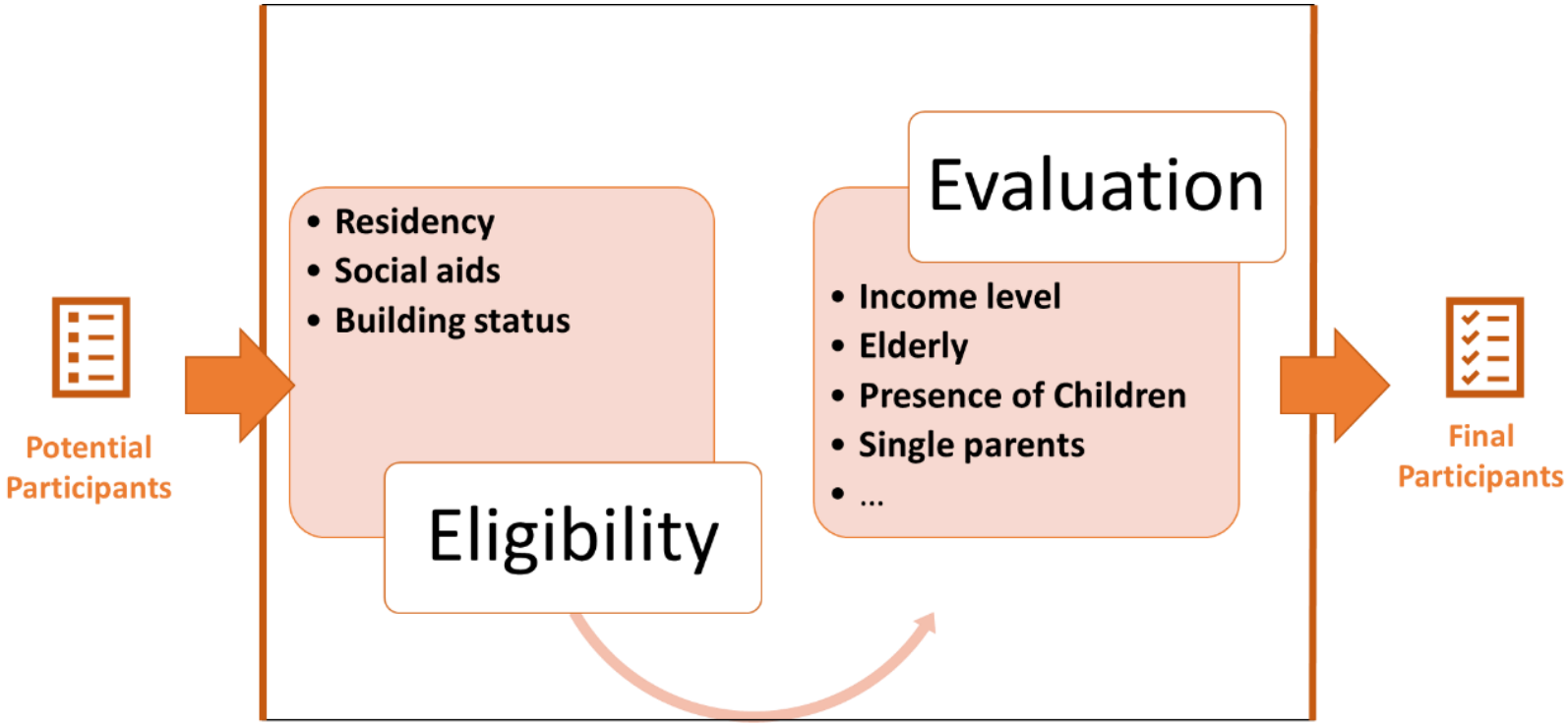
2) **Evaluation Criteria** is a basis to choose and prioritize participants when the number of potential ones is attested **beyond the maximum limit** set by the project objectives and budget.

In an effort of transparency and accessibility, it is important to detail the characteristics and specific participation requirements which would make the process of participation the most democratic and horizontal as possible, e.g.:

- To outline the location where the project action will take place.

- To outline the PV power plants where the electricity is going to be extracted.
- To outline the buildings or urban areas where the benefits are going to impact the most citizens.

The next figure presents the general scheme of selection process.



It is important to highlight the necessary trade-off between the following ideal Sun4All financial support user/beneficiary characteristics:

- **Ideal user characteristics:** such as stability, belonging to a community or a family, time availability and motivations. Those characteristics increase the feasibility of engagement and retention of participants, ensuring project implementation.
- **Ideal beneficiary characteristics:** such as unemployment, social marginalization, single motherhood/fatherhood, etc. Those characteristics increase the potential impact of project actions.

As a final aspect to be considered in the registration and selection process of participants, is the **type of call** that your city is going to use, namely, how your city is going to announce the programme for people to register in it.

An overview of the eligibility and evaluation criteria defined by the Sun4All pilots 1/2

	Almada	Barcelona
Eligibility criteria	• Residency in the nearby proximity of the building chosen for the Sun4All project. • Be under a social housing scheme.	• Living in one of the two buildings chosen for the Sun4All project: - Residency in High complexity buildings. - Residency in a public social housing buildings. • Be the holder of the electricity supply contract.
Evaluation criteria	• Income level: below the lower Social Support Index. • Social aid: be under the social energy tariff. • Elderly: participants over 65 years old.	• Income level per capita.
Evaluation criteria (secondary importance)	• Presence of disability. • Single parenthood: this is assessed to be an indirect selection criteria.	• Presence of children under 16-year-old. • Presence of disability. • Single parenthood.

An overview of the eligibility and evaluation criteria defined by the Sun4All pilots 2/2

	Coeur de Savoie	Rome
Eligibility criteria	• Residency in buildings within the perimeter of the community of communes. • Poorly insulated housing.	• Residency in buildings near 12 existing municipal PV installations. • Shows active engagement. • Vulnerability: the eligibility criteria could include people with the requirements for benefitting from „Bonus Energia" initiative.
Evaluation criteria	• Income level: defined by national housing agency.	• Income level. • Large family.
Evaluation criteria (secondary importance)	• Presence of children under 16-year-old. • Presence of disability. • Single parenthood. • Large family. • Elderly: participants over 65 years old. • Presence of unemployment.	• –

Learn

Understand

Apply

This section includes additional sources of information that may help you to understand better the process of defining the local requirements to benefit from the Sun4All financial support scheme.

1. 10 EU-funded projects (BECoop, CEES, PowerPoor, eCREW, W4RES, UP-STAIRS, COME RES, EC2, NRG2PEERS, Sun4All) collaborative briefing. March 2023. Are renewable energy communities a vehicle to mitigate the energy crisis and lift people out of energy poverty? Please find the publication under the following **link.**
2. EnergyMeasures project. How to identify energy vulnerable households? Please find the publication under the following **link.**
3. INSIGHT_E project. An Energy think tank informing the European Commission. Policy Report 2. April 2015. Please find the publication under the following **link.**
4. Steve Pye, Audrey Dobbins, ClaireBaffert, Jurica Brajković, Paul Deane, Rocco De Miglio. Addressing Energy Poverty and Vulnerable Consumers in the Energy Sector Across the EU. Dans L'Europe en Formation 2015/4 (no. 378), pages 64-89. Please find the publication under the following **link.**
5. Sun4All Project. Local requirements to benefit from Sun4All program. Please find the publication under the following **link.**

Learn

Understand

Apply

This section helps you to start working on defining the local requirements (i.e., criteria and conditions) to benefit from the Sun4All financial support scheme.

Focus on defining criteria

Activities: to start working on defining the local requirements (i.e., criteria and conditions) to benefit from the Sun4All financial support scheme as well as on planning citizen recruitment and engagement in your city, plan and organise the series of events with the participation of internal (inside the municipal administration) and external (outside the municipal administration) stakeholders.

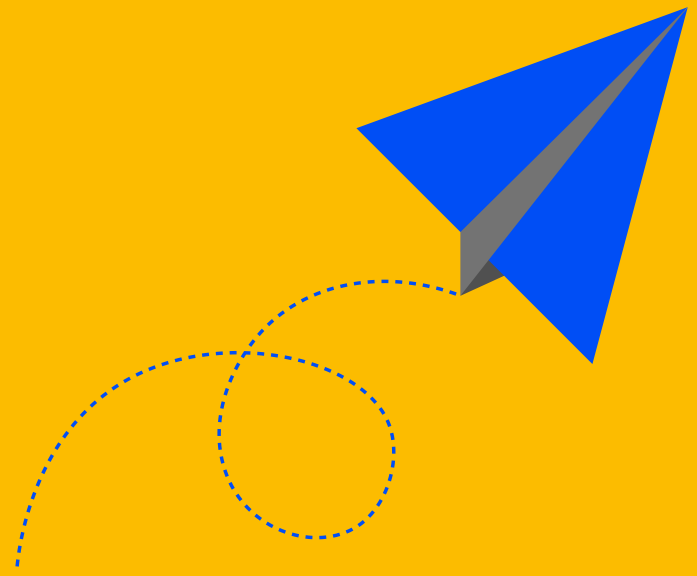
Methods: community meetings, collective discussions and brainstorming, focus groups, workshops, surveys, online engagement, etc.

Discussion questions

- Who will be the beneficiaries of the Sun4All financial support scheme in your city?
- Which kind of socio-economic information the potential beneficiaries should prove?
- Who among the many potential beneficiaries of the call should be selected? Which criteria for their evaluation should be followed?

Module 7

How to engage vulnerable families and build community?



Learn

Understand

Apply

This section helps you to learn more how to recruit and engage vulnerable families and build community.

Engagement strategy

Studies on residential engagement into programmes that concern energy generation and consumption are frequently described as including **three main stages** that are key to achieving sustained user engagement throughout a project:

- Recruitment.
- Consumer response or behavioural change.
- Persistence. [More information]

The division of engagement into three stages corresponds to temporal periods in which the user experience and required actions differ. As such, addressing each of them thoroughly and on their own grounds is especially useful to adapt engagement to the changing necessities of users along the whole duration of a programme. In this manner, it prevents the risk of insufficient initial recruitment, of engaging highly homogeneous social groups, hence excluding or missing out on others, and of drop-out over-time. [More information]

1

The Recruitment Stage

The recruitment stage concerns all the actions and circumstances through which a potential beneficiary is exposed to, or can access, information related to the project and the problems it seeks to tackle, to the process of registration. Recruitment thus encompasses issues as diverse as becoming aware of the project, learning whether one qualifies for participation, talking about responsibilities and benefits, and filling in the necessary paperwork.

2

The Consumer Response and Behavioural Change Stage

In the Consumer Response and Behavioural Change stage, strategies will be directed at initiating and maintaining the beneficiary's interest, participation and response to the various activities and tasks established by the programme.

3

The Persistence Phase

In the Persistence phase, engagement strategies are aimed at consolidating user interest over time. That is, engagement will seek to keep the user attentive and in interaction with the programme, until it becomes a well-established element in the day-to-day activities, and considerations of beneficiaries. The goal of persistence would be to develop a user interest in the topic of the programme that outlives the project itself.

Sun4All pilots' advice: After the completion of the recruitment stage, and the registration of the stipulated number of beneficiaries, it is important to devise and implement the further engagement strategies to ensure that participants stay active in the programme, and to consolidate interest in the energy community.

Local work plan of community work

The goal of the community work plan is to ensure that participants to the project do not merely benefit from a discount in their electricity bills, but that they are facilitated the tools to become empowered citizens, capable of making sense of, and participating in the advancement of a fair energy transition. For this purpose, many of these activities seek to promote simultaneously the sustained interaction between beneficiaries and between beneficiaries and Sun4All officers, as well as to offer them training and learning sessions to better understand how to be more energy-efficient, prevent energy poverty, and to generate and manage renewable energy sources as a collective resource.

Local work plan stands for the variegated resources, personnel, approaches to participation, activities and training material developed to sustain engagement and to promote community-building during the Sun4All implementation.

Key elements of the Sun4All pilots' Strategies of Engagement and Community Work Plan

Strategies of Engagement		Community Work Plan		
		Communication		
Information Campaign throughout the Programme	Recruitment Actions	Communication with Beneficiaries	Communication with the Broader Community	Community Strategy: Activities
• To use digital communication media, e.g., Facebook, LinkedIn, Twitter, Instagram. • To publish in the local newspapers and newsletters. • To develop a comic, a flyer.	• To organise the informative sessions. • To implement a door-to-door information campaign. • To engage a person trusted by the beneficiaries. • To support the socialization.	• To implement direct in-person interactions. • To set up a specific email address as well as a phone line. • To create a WhatsApp list channel. • To print and hung on the wall informative posters.	• To develop collaboration with other municipal departments. • To cooperate with the local associations, schools, community centres, etc. • To use the social media platforms and the webpage of the municipality.	To organise workshops To organise visits to the PV installations To organise individual energy advice sessions To support mentoring programme

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This section includes additional sources of information that may help you to understand better the process of recruiting and engaging vulnerable families and building community.

1. Sun4All Project. Local requirements to benefit from Sun4All program. Please find the publication under the following **link.**
2. Sun4All Project. Local work plans of community work. Please find the publication under the following **link.**
3. Sun4All Project. Sun4All Flyer. Please find the publication in the following languages under the following links:
   - English – **link.**
   - Catalan – **link.**
   - Spanish – **link.**
   - Portuguese – **link.**
   - French – **link.**
   - Italian – **link.**
4. Sun4All Project. Sun4All Visual Identity. Please find the publication under the following **link.**

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This section helps you to start working on planning the process of recruiting and engaging vulnerable families and building community.

Focus on recruiting and engaging

Activities: to start working on planning the recruiting and engaging vulnerable families to participate at the Sun4All financial support scheme and build community in your city, plan and organise the series of events with the participation of internal (inside the municipal administration) and external (outside the municipal administration) stakeholders.

Methods: community meetings, collective discussions and brainstorming, focus groups, workshops, surveys, online engagement, etc.

Discussion questions

- What type of public information campaign about the Sun4All financial support scheme your municipality is planning to implement?
- What type of recruitment actions to join the Sun4All financial support scheme your municipality is planning to implement?
- How is your municipality planning to communicate with Beneficiaries and with Broader Community?
- How is your municipality planning to develop and implement the Sun4All Community Strategy?

Module 8

How to assess the impact of the Sun4All scheme?

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This section helps you to learn more how to assess the impact of the Sun4All financial support scheme in your municipality.

Sun4All Impact Assessment Guidelines

The Sun4All Impact Assessment Guidelines have three main objectives:

1

- **First,** they aim at ensuring a comprehensive assessment of the Sun4All project. This will facilitate the continuous improvement of the scheme and the identification of best practices and challenges for future similar projects.

2

- **Second,** the guidelines aim at facilitating the production of relevant data and information on energy poverty and how to detect and alleviate it in different European contexts. It especially aims to ensure a certain level of commensurability between the data collected by the different pilots. This will help produce both context-specific and cross-cutting insights.

3

- **Finally,** the guidelines seek to ensure that the impact assessment raises awareness about energy poverty, renewable energies, and energy efficient practices amongst participating households and more widely.

Sun4All Impact Assessment Focus

The Sun4All Impact Assessment will focus on the following expected impacts of the Sun4All project:

- **Actively contribute to tackling energy poverty at the local level:** This impact will be measured through diverse social, financial and health indicators, such as the evolution of households' energy spending over time, the evolution of households' arrears on bills, whether households feel an increase in the general comfort of their dwelling, etc.
- **Facilitate behavioural change amongst participating households:** This impact will be measured through diverse indicators, such as the evolution of households' energy practices, whether households' general knowledge of energy efficient practices has increased, etc.
- **Contribute to the empowerment of participating households through the participation in a local energy community:** This impact will be measured through different indicators, such as households' general perception, involvement and feeling of belonging to the energy community, perception, and experience of the mentorship program, etc.

Impact Assessment Methodology

The Sun4All Impact Assessment Methodology is based on three main components:

1. **Questionnaires** filled by the participating households
2. **Public statistics at the neighbourhood/district level** and **at the city/region level**
3. **Interviews** conducted with volunteer households and members of the project

The questionnaires will be the main input for the impact assessment. Statistics and interviews will supplement and help contextualize the data gathered through the questionnaires.

Questionnaires

There are two questionnaires, each circulated twice:

- **Q1,** which should be circulated at the beginning of each phase of testing, aims at assessing the status quo, i.e., the situation of households before joining Sun4All. The analysis of the data from this questionnaire will also provide municipalities with further information about the difficulties participating households are encountering and can therefore help them refine their engagement strategies.
- **Q2,** which should be circulated 10 to 12 months after the start of each testing phase, aims at assessing the impacts of Sun4All on alleviating energy poverty, facilitating behavioural change and empowering participating households. Analysis from the Q2 data of phase I will also enable municipalities to refine their selection and engagement strategies for Phase II.

Please find the template of the **Q1** and **Q2** questionnaire **here.** (page 20-24 and 25-29 accordingly). It is important to ensure a **response rate as high as possible for each questionnaire.**

Statistics

Socio-economic and energy data/statistics can help situating participating households within the larger context of their living environment, formulating hypotheses as to the impacts of the project at the neighbourhood / district / city / regional levels and identifying potential benefits of replicability and of scaling up.

- **General statistics on pilot areas/cities:** Population, Density, Demographic growth.
- **Socio-economic characteristics:** Median income (Euros), % of taxable households, % of unemployment (and official definition), Poverty rate (and official definition), % of households below poverty line (and official definition), % of households in energy poverty (and official definition), Access to subsidies, Level of education, Size of households, % of people living alone, % of single-parent households, Type of housing (individual houses, apartments, etc.), % of homeowners/renters, % of social housing, Average size of housing, Age of housing stock.

- **Energy access and practices of households:** sources of energy available and use, main source of energy for heating, average annual energy bill per households (Euros), monthly electricity consumption (kWh/year), arrears on bills, average price of kWh.

Interviews

Qualitative interviews could be conducted either online, on the phone or in person. These interviews could provide further insights into the experiences of participating households and their overall perception of the project, as well as into the challenges and good practices put in place. It is recommended to have mostly semi-directed interviews, with general topics of conversation defined and shared with respondents ahead of the interview.

With participating households, interviews are mostly aim at collecting overall impressions and experience with the Sun4All project and financial support scheme. This will help supplement and contextualize the data gathered through the questionnaires.

1

Sun4All Impact Assessment Indicators

Indicators on energy poverty

To assess the impact of the Sun4All project on tackling energy poverty, we have identified the following indicators:

- **Reduction in energy spending** (lower energy bills, reduction of the share of energy bills in the monthly budget, less arrears on bills).
- **Increased comfort in the home** (temperature, humidity, lighting).
- **Reduction in practices related to energy poverty** (such as delaying the use of appliances, heating only part of the home, reducing the time spent at home, etc.).

To assess if and how the Sun4All project has impacted participants in the cohort differently, the above dynamics should be analysed for all cases together and for each relevant use case independently. It should also be analysed in conjunction with the socio-economic characteristics of households, the sources of energy used and the housing characteristics.

1

Finally, to assess the potential impact of the Sun4All project at the neighbourhood / district / city / regional levels and of its scaling up, it is recommended to compare the socio-economic and housing characteristics of participating households to existing statistics.

Similarly, it is recommended to compare data collected on energy usage and spending to existing public statistics on the same.

2

Sun4All Impact Assessment Indicators

Indicators on behavioural change of participating households

To assess the impact of the Sun4All project on behavioural change of participating households, we have identified the following indicators:

- **Evolution of energy related practices** (reduction in practices related to energy poverty, continuation and/or increase in energy efficient practices).
- **Investment in new appliances** (rebound effect and/or investment in more energy efficient appliances).
- **Increased knowledge of energy efficiency** (increased interest in energy efficiency related information, better understanding of energy efficiency ratings, better knowledge of energy efficiency ratings of home and appliances).

2

To assess if and how the Sun4All project has impacted participants in the cohort differently, the above dynamics should be analysed for all cases together and for each relevant use case independently. It should also be analysed in conjunction with the socio-economic characteristics of households and with existing practices and knowledge of energy efficiency before the start of the project.

Finally, to assess the potential impact of the Sun4All project at the neighbourhood / district / city / regional levels, it is recommended to analyse indicators such as sharing of information on energy efficiency by respondents with other participating and nonparticipating households.

To assess the potential impact of the scaling up of the Sun4All project, it is recommended to compare socio-economic and housing characteristics of participating households to existing statistics at different scales.

3

Sun4All Impact Assessment Indicators

Indicators on empowerment of participating households

To assess the impact of the Sun4All project on the empowerment of participating households, we have identified the following indicators:

- **Knowledge and use of existing support mechanisms** (access to subsidies and public support mechanisms to tackle energy poverty, sharing of information on such support mechanisms, on energy efficiency and / or on renewable energies with friends / neighbours / relatives).
- **Involvement in the Sun4All project** (participation in the events, benefits from the energy community, participation in the mentorship programme).

3

To assess if and how the Sun4All project has impacted participants in the cohort differently, the above dynamics should be analysed for all cases together and for each relevant use case independently. It should also be analysed in conjunction with the socio-economic characteristics of households.

Finally, to assess the potential impact of the Sun4All project at the neighbourhood / district / city / regional levels, it is recommended to analyse indicators such as sharing and use of knowledge on support mechanisms by respondents, involvement in the long-term functioning of the energy community, etc.

To assess the potential impact of the scaling up of the Sun4All project, it is recommended to compare socio-economic and housing characteristics of participating households to existing statistics at different scales.

An overview of the Sun4All Impact Assessment Indicators

	Cohort	Differentiated impacts within the cohort	Neighbourhood / district and city / regional levels
Tackle Energy Poverty	• Bills • Comfort • Practices	• Pilot cities / cases • Sources of energy • Socio-economic characteristics • Housing characteristics	• Socio-economic characteristics as compared to living environment • Housing characteristics as compared to living environment • Energy uses and spending as compared to living environment
Facilitate Behavioural Change	• Practices • Appliances • Knowledge of Energy efficiency	• Pilot cities / cases • Socio-economic characteristics • Existing practices • Existing knowledge	• Sharing information on energy efficiency with other participating and non-participating households • Potential for scaling-up
Empowerment of participating households	• Knowledge of existing support mechanisms • Involvement in the project	• Pilot cities / cases • Socio-economic characteristics	• Long-term involvement in the energy community. • Sharing and using knowledge on existing support mechanisms • Potential for scaling-up

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This section includes additional sources of information that may help you to understand better the process of Sun4All project impact assessment.

1. European Commission. Energy Poverty Advisory Hub. Energy Poverty Local Indicators. Please find the publication under the following **link.**
2. European Commission. Energy Poverty Advisory Hub. Energy Poverty National Indicators: Insights for a more effective measuring. Please find the publication under the following **link.**
3. Sun4All Project. Impact Assessment Indicators and Guidelines. Please find the publication under the following **link.**
4. Sun4All Project. Impact Assessment of Sun4All programme in Pilot Cities. Please find the publication under the following **link.**
5. ODYSEE-MURE project. Measuring and monitoring energy poverty in the EU – Examples of good practices. Please find the publication under the following **link.**
6. Trinomics project. Selecting Indicators to Measure Energy Poverty. Please find the publication under the following **link.**

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This section helps you to start working on planning the impact assessment of the Sun4All financial support scheme implementation in your municipality.

Focus on impact assessment

Activities: to start working on planning the impact assessment of the Sun4All financial support scheme implementation in your municipality, plan and organise the series of events with the participation of internal (inside the municipal administration) and external (outside the municipal administration) stakeholders.

Methods: community meetings, collective discussions and brainstorming, focus groups, workshops, surveys, online engagement, etc.

Discussion questions

- At which Sun4All financial support scheme impact assessment factors your municipality would like to focus on? Why?
- What local specificities: elements of context (average income, available subsidies, available sources of energy, etc.) and diverse timeframes in terms of implementation does your municipality need to consider? Why?
- How to adopt the impact assessment methodology (i.e., questionnaires, statistics, interviews) and impacts assessment indicators to the local needs of your municipality?

Final remarks

- The Sun4All Capacity Building and Training Package is a living knowledge and experience accumulation document, and its development is a dynamic process.
- An updated edition of Sun4All Capacity Building and Training Package is covering the practical experience and lessons learned by the Sun4All pilot cities and regions, as well as by the members of the Sun4All Community of Practice gained during the period from October 2021 until September 2024.

Thank you!

Jurijs Grizans, ICLEI European Secretariat

Learn more:

https://sunforall.eu

Sun4All Project

info@sunforall.eu

@Sun4All_EU