SCORE
Co-own. Prosume. Renew.
Supporting Consumer Ownership in Renewable Energies

Guidance for Follower Cities

"How to set up a Consumer Stock Ownership Plan for Energy Communities"

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Abbreviations

CSOP	Consumer Stock Ownership Plan
CSSP	Center of Social Services Prague
EU	European Union
ESCO	Energy Service Company
GDPR	General Data Protection Regulation
kWh	Kilowatt-hour
LED	Light Emitting Diode
LIH	Low-income households
NGO	Non-governmental Organization
PV	Photovoltaics
RE	Renewable Energy
RES	Renewable Energy Sources
REC	Renewable Energy Community
RED II	Renewable Energy Directive II
SME	Small and medium-sized enterprises

Abstract

This report brings together all learnings and insights obtained during the Horizon 2020 SCORE project, with a focus on giving guidance to local actors - primarily municipalities - aiming to set up an energy community and a Consumer Stock Ownership Plan. The report is divided into two parts, Part I focuses on practical steps to be taken to get the project started and to produce a feasibility study. Part II is dedicated to involving other stakeholders, including (vulnerable) consumers and local actors, and explains how the project is best communicated to actors at city level. We have aimed to produce a practical guide that will inform interested municipalities and support them in driving inclusive community energy projects.

Part I – How to set up a Consumer Stock Ownership Plan

1. Introduction

How to read the "Guidance for Follower Cities"

This report was developed as part of the H2020 project SCORE (www.score-h2020.eu) to bundle all experiences and lessons learned with its pilots and follower cities. It is a guidance document for municipalities and local actors that are interested in making the local energy transition just, inclusive and economically sustainable. Divided into two main parts, the report focuses firstly on the involvement of local key actors, the selection of buildings and the business model behind the SCORE project - the Consumer Stock Ownership Plan (CSOP). Secondly, Part II focuses on the inclusion of private households and consumers, especially the financial participation of vulnerable consumers in renewable energy projects. Practical advice is given to support municipalities in developing engagement strategies and to foster an inclusive, just transition locally. Hopefully this manual can inspire municipalities to create consumer-centred energy projects and support them in their journey towards a just and democratic local energy system.

Consumer Ownership as prerequisite for a local energy transition

Encouraging consumer (co-) ownership is a key success factor for the local energy transition and essential for the decentralisation of the energy system. When consumers acquire shares, and thus ownership, in renewable energy installations and projects, they become active participants in the energy market. The term prosumers has been coined to describe this group that both consumes and produces energy. Active participation in renewable energy projects has proven to be an important cornerstone of the successful energy transition as it fosters acceptance among the local population. While participation can be achieved through involvement in democratic decision making, it can also be understood as financial participation and co-investment. Consumer ownership is thus a model to increase the financial involvement of private households. There are several models of consumer (co-) ownership currently used in renewable energies, for example crowdfunding, cooperatives and private installations - all of these fall into this category.

The European H2020 project SCORE focused on the development and implementation of the Consumer Stock Ownership Plan as a means to empower citizens as co-investors of

renewable energy installations. These intentions are strongly guided and supported by the 2018/2019 European Union's (EU) legislation of the Clean Energy for All Europeans Package, which entails the recast of the Renewable Energy Directive II (RED II). RED II lays the foundation for prosumership and active consumers on the energy market by introducing the concept of Renewable Energy Communities (REC) which grants the individual the right to produce, share and sell its own energy. These developments on the EU level have strongly influenced the implementation of the CSOP model on the ground as it has introduced attractive conditions for collective energy actions.

Overview of the Consumer Stock Ownership (CSOP) model

A Consumer Stock Ownership Plan is a consumer-centred investment model that provides opportunities for participation both in decision making and financially. It permits co-investments of municipalities, small and medium-sized enterprises, consumers and other local partners in renewable energy plants. None of the co-investors have personal liability as the investment is carried out by an intermediary entity, the CSOP operating company. In practice, the operating company usually takes the form of a privately held corporation with limited liability or a cooperative. After set-up, the operating company invests into a new or existing RE plant and operates it on behalf of the co-owners.

The main aim of the CSOP is to facilitate consumers becoming co-owners, ideally of the utilities that supply them. In order to streamline and simplify decision making, the consumers are represented by a trustee who advises them and pools their investments and voting rights vis-à-vis the other co-investors. This results in a stable and attractive investment model for all stakeholders, be they public or private.

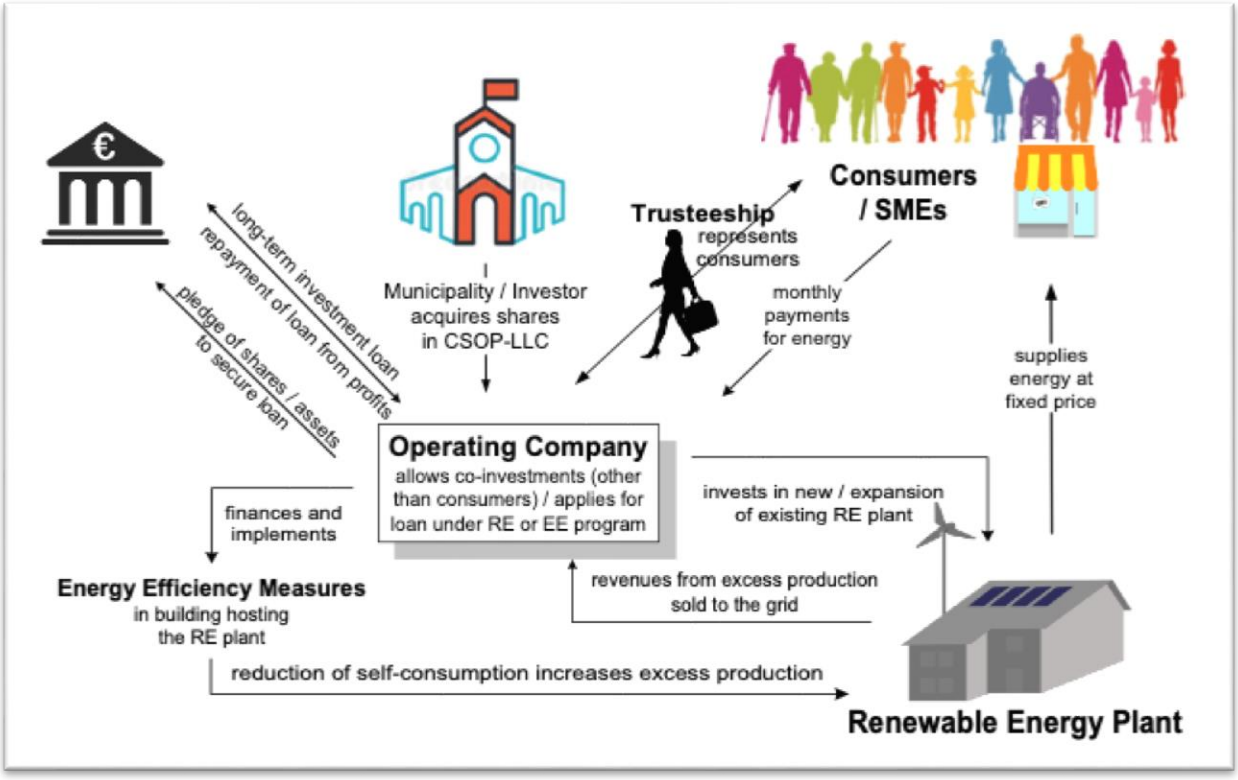


Figure 1 - Consumer Stock Ownership Plan model

2. A step-wise approach in setting up a local CSOP

Involving key actors

When setting up a local CSOP, the identification of partners is a crucial first step in the process. When choosing partners, and ultimately co-investors, there are several aspects to consider: 1) who are trusted stakeholders in my community that are open to the idea of setting up collective energy projects 2) which actors are driving the energy transition locally or could have an interest in doing so 3) in which way can private consumers and households be involved. Part II of this report, the Manual to include vulnerable consumers, gives a detailed overview of strategies to involve private households, especially low-income households. The centrepiece of such strategies is the collaboration with trusted intermediaries that have long standing cooperation with the target communities.

Identifying buildings or locations

Depending on the source of RE to be installed, one of the next steps in setting up the CSOP is the identification of buildings and roof spaces (for solar photovoltaics) and locations for other types of RE. In Italy SCORE focused on the financing of block heating systems fuelled by biomass in the form of locally produced wood chips. While new installations are one option to pursue in setting up the CSOP, it is also worth considering whether the municipality or other involved actors are already planning or even executing the installation of RE plants. In this case, it might be possible to hop on board those already existing plans and expand them in terms of citizen co-ownership. This step can save a lot of time, but can also restrict the building of the local CSOP model.

The identification of buildings is deeply intertwined with the building of the business case, as its properties and characteristics influence the renewable energy project. The most important considerations are exemplified here for the identification of a building for a new solar PV installation. In the first step, an analysis of the context of buildings takes place that includes construction details, energy consumption analysis and an energy model of the building. Secondly, a report on the necessary administrative permissions is issued. Thirdly, an economic and financial assessment of the investment costs is drawn up that covers the installation, its set up, connection to the supplier and maintenance. More information about this process and criteria can be found in this Manual on Energy Refurbishment developed within the SCORE project. Considering that the CSOP is a consumer-centered approach and that ideally the energy produced supplies the investing households to trigger change in consumer consumption behaviour, the buildings chosen should be residential buildings or in the vicinity of the households to be involved. In some of the SCORE pilots, the buildings chosen were also schools and public buildings, e.g. in die city of Essen in Germany.

Building the business case and producing a feasibility study

The conduction of a feasibility study is a major element in the process of setting up a Renewable Energy Community, building on the CSOP financing scheme. It is the analysis bringing together all relevant factors of the project known to date - including economic, legal, social and scheduling considerations. Its results are crucial information for the investors and determine the likelihood of completing the project successfully. The short questionnaire below (Table 1) was developed during the SCORE project in cooperation with the cities involved to gather all relevant data and information for PV projects. It can be used by interested municipalities and local actors to produce a project overview and identify open questions.

Further assistance to develop the business case for PV projects, is available in the form of the CSOP calculator, an open online tool providing a preliminary economic assessment of prosumer investment projects.

Conducting a feasibility study	
Investment	• How large is the overall investment sum? • How many potential partners are there? • What is their nature (Private persons, companies, public institutions)? • How are the shares distributed between the partners? • What own funds can the partners contribute? • Are there any subsidies applicable to your case (on local, regional, national level)?
Installation	• Will the PV be roof or ground mounted? • Was the potential production capacity already calculated and what is its size? • How large is the available roof space? Which cardinal direction does the roof have? Is roof inclination applicable? • Is a combination of heating/cooling or storage (e.g. battery) planned? • Are there already existing RE installations on the roof? • Is SMART-Metering technology planned or available? • Are there any energy efficiency measures planned?
Electricity usage information	• Will the electricity be self-consumed, sold or is it planned to have a mix of both? If sale is included, is it planned to sell to the grid or within a community to peers? • What is the current price per kWh? • What is the yearly usage of kWh?
Regulatory framework conditions	• Does your country have a regulatory framework for electricity sharing and self-consumption? What are its conditions? How do they apply to your project?
Consumer involvement	• Are you planning to involve consumers and if so, which type of consumers? • Does your planned project involve vulnerable consumers (e.g. low-income households) and if yes, how are you planning to involve them?

Table 1: Questionnaire to conduct a feasibility study

Planning consumer involvement

Learnings from the SCORE project show that consumer involvement needs focused planning that takes into account the reality of the target groups. It has great benefits for the local energy transition, but requires an additional effort. Experiences from SCORE and other consumer-centered initiatives show that the effort is worth it, if done right. The added value of consumer involvement is manifold, and is shown for example in an increased amount of investment available, a strong acceptance of RE installations and the building of social capital via an increased sense of community.

In Fig. 2 the three main steps of consumer involvement are displayed, followed by a timeline (Fig. 3) that summarizes broadly all necessary action points that lead up to the set-up and running of a Consumer Stock Ownership Plan.

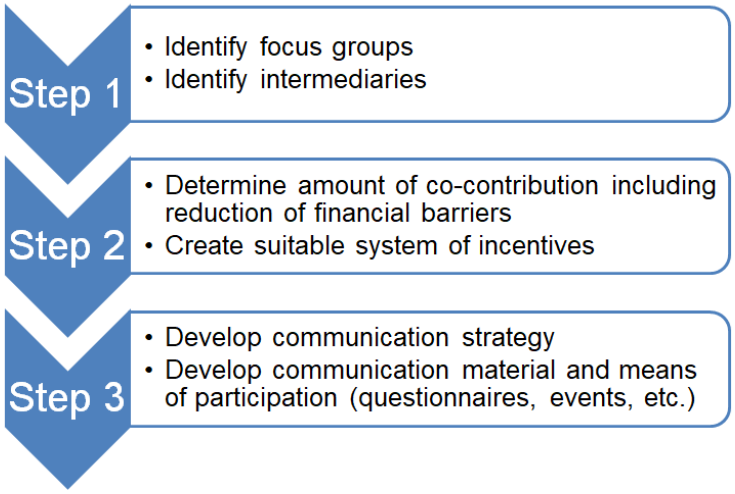


Figure 2 - Steps of consumer involvement

Timeline

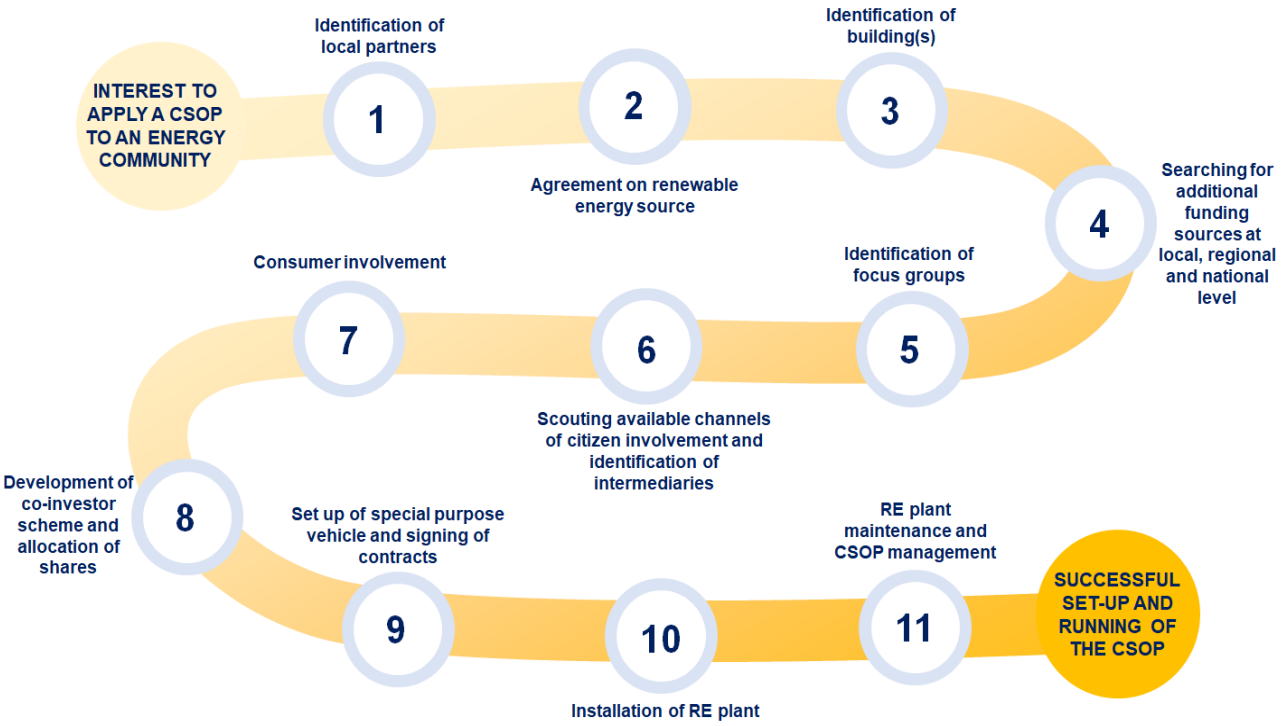


Figure 3 - Timeline and main steps

The following Part II – the Manual to include vulnerable consumers – is a practical guide for municipalities willing to create more participatory, socially inclusive and democratic energy projects. It gives an overview of benefits of working together with private households and lays down which aspects to consider when embarking on this journey together.

Part II – Manual to include vulnerable consumers

1. Introduction

The challenge: Inclusion as a transversal policy objective

The unequal distribution of costs and benefits of the energy transition is a challenge for energy justice and energy policy. Although the empowerment of consumers to participate in Renewable Energy Communities has great potential for a just energy transition, vulnerable consumers remain underrepresented in RE projects.

The European Commission promotes consumer empowerment by providing access to information and extending consumption options e.g. in the form of facilitated supplier switching or engaging in RE prosumption (COM, 2015). At the individual level this includes the need to choose among consumption/prosumption options requiring individual cognitive capacity to process relevant information (Ioannidou, 2018). Moreover, prosumership requires the willingness to take risks, access to financing as well as time and know-how (Hanke and Lowitzsch, 2020).

While national policies promote prosumership as a central element of the energy transition, only a fraction of citizens are currently acquiring their own RE installation and can thus benefit from the "enabling framework" and its subsidy schemes. Those who do not – mainly vulnerable consumers – not only do not benefit from an "enabling framework" but carry the increased burden of rising grid tariffs, levies and energy costs (Heindl, Schüßler and Löschel, 2014). While some citizen can benefit from prosumption, more than 50 million people in the EU cannot afford an adequate level of energy consumption and live in energy poverty (Energy Atlas, 2018).

That is why the recast of the European Renewable Energy Directive obliges the European Member States to facilitate the participation of vulnerable consumers and support their inclusion in its "enabling framework" (which includes transversal policy objectives related to e.g. simplified administrative and regulatory requirements, lower levies and taxes, etc.) for prosumership (Hanke and Lowitzsch, 2020).

Whom to include in local energy communities?

Energy communities, and more specifically the CSOP model, are designed to be inclusive and open to the participation of a multitude of potential members. Within the CSOP the focus lies on encouraging vulnerable and atypical consumers to become co-investors and thus prosumers. The vulnerability context has different dimensions, some of which are of individual nature (age, gender, income, health, ethnicity, religion, political orientation), others are the outcome of structural dynamics often of inequality (e.g. access only to poorly insulated flats, low education restricting information access), others are of political nature (e.g. political underrepresentation of certain social groups). Each vulnerability dimension does not only exist on its own but intersects with the others producing multiple layers of deprivation. The vulnerability context is thus a set of conditions or deprivations pruning life and consumption choices.

The inclusive focus is inherent to the CSOP approach and the model is open to a number of potential co-investors including small and medium-sized enterprises (SMEs), municipal companies, schools, citizen initiatives and cooperatives. The variety of possible co-investors makes the CSOP flexible and adaptable to local conditions - in order to qualify as a

Renewable Energy Community however, it is important to follow regulations such as that no partner shall have the majority of shares and all partners must be in the proximity of the RE plant. By following these conditions, CSOPs contribute to social cohesion, a sense of community and ownership.

Moreover, they can have a strong social impact since they have an incidence on many elements influencing vulnerability, whether such factors are traditionally considered as indicators of energy poverty or not e.g. energy prices, income level, quality of housing stocks, types of heating systems, etc. In particular with regard to the mitigation of structural vulnerabilities such as discriminating market conditions and access to financing in contrast to individual empowerment, a REC in form of a CSOP business model offers the possibility for individuals to pull their resources and competencies together in order to overcome these structural barriers.

With that idea, SCORE defined the three following focus groups (Figure 4).

- Low-income households (LIHs), fall under the bottom two income deciles, as defined by the official statistics about income distribution groups in each participating country. If available, data about households in energy poverty have been added to make the picture more comprehensive.
- Long-term unemployed, persons unemployed for 12 months or longer.
- Women, generally underrepresented in RE projects. In some cases, they additionally fall under one or both other categories; this is often the case for single mothers.

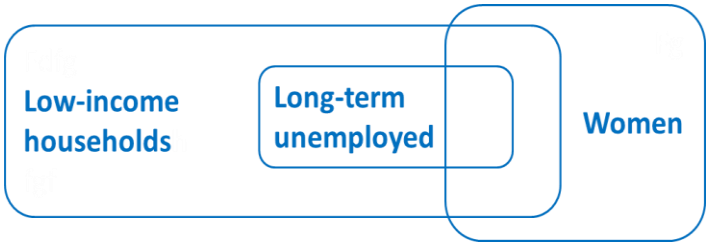


Figure 4 - Focus groups within the SCORE project. Source: Center for the Study of Democracy

Benefits of inclusion for the focus groups and the energy community

The added value of including citizens, and in particular vulnerable consumers, in energy communities are manifold, yet a central theme is the sense of ownership that is conveyed via the participation in energy communities. Not only is the mobilization of private capital for the energy transition facilitated – thus reducing the existing investment gap – but public acceptance of renewable energy projects increases when citizens are directly involved as partners. The empowerment of citizens is also a key to energy efficient behaviour that is crucial for reaching energy and climate goals. As soon as there is a financial incentive to save energy – because energy sharing opportunities or conditions for selling to the grid are in place – it will significantly contribute to energy efficient behaviour, including a mitigation of the rebound effect. Furthermore, by teaming up in energy communities citizens help contribute to the decarbonisation of the energy system, making it more flexible, decentralized and demand-driven.

The benefits of inclusion in REC projects for consumers are multi-faceted, and have implications on economy, technological innovation, social values and ethics. The main benefits for the focus groups are:

Financial benefits:

- Lowering their vulnerability caused by, firstly, the need to pay a higher share of their income for energy bills and, secondly, by price fluctuations of energy, and therefore improve their general (economic) situation.
- Receiving access to capital credit by pooling individual investments in intermediary entities using leverage to scale up the investment (no expensive micro-loans).
- Leading to additional revenues from the sale of excess energy production; once the loan is repaid, profits are distributed amongst the co-owners (in proportion to their share ownership).
- Solving the problem of capital unavailability for RE projects, becoming prosumer within a no-profit RE community with equal ownership to all members (‘one member one vote’).
- Consumers do not have to invest their own income or savings, since assets and shares are pledged as security for a bank loan to be repaid from future earnings.
- Consumer shareholding is pooled in a trusteed entity headed by a director who represents the consumer-shareholders in the CSOP Operating Company.

Social and environmental benefits:

- Empowerment as active citizens, by lowering structural barriers which prevent them from participating in prosumer models.
- Establishing the citizens and consumers as "central players on the energy markets", playing an active role to speed up the Renewable Energy Transition at community level.
- Positive behavioural changes in the energy consumption, by using new technologies to reduce their bills and participating actively in the market (Hanke and Lowitzsch, 2020).

Obstacles specifically related to social welfare transfers

With respect to the participation of LIHs that receive social aid in RECs, economic benefits arising from CSOP participation might reduce or endanger eligibility for public social welfare transfers. The system of means-tested transfers is a strong disincentive to form assets since they typically require the liquidation of all assets to become eligible to receive this type of support. Given that financial participation in the form of consumer (co-)ownership in RE is a form of asset formation, this mechanism effectively hinders LIHs from participating as every effort to do so directly reduces their eligibility for social transfer payments on which they rely. This paradox has also been dubbed ‘dual asset policy’: the same social policy that supports mid and high-income households to form assets and hence increase private wealth disincentivises LIHs to even attempt to increase wealth beyond subsistence. A similar phenomenon is observed with regard to the needs-tested minimum income which takes into account any income received, debiting it from the transfer; any job paying less than the minimum income threshold is thus disincentivised, with the recipient being caught in the “poverty trap” (Hanke and Lowitzsch, 2020).

Municipalities as pacemakers: Commitments, responsibilities and common obstacles

Municipalities and local governments are ideal partners and pacemakers of energy projects involving citizens. They have a lot to gain from initiating and supporting consumer ownership

as it represents a way to commit to and reach climate and energy goals. Many cities have pledged to increase citizen participation in the past, but have lacked the instruments and projects to fulfil this commitment. The CSOP is an ideal model to take on the responsibility as role model and pacemaker, especially now that the Renewable Energy Directive II has given them the opportunity to broaden their role as active actors in collective energy projects.

Furthermore, by actively initiating prosumership and joint RE projects, municipalities can reduce energy poverty locally by improving energy efficiency, reducing energy bills and boosting the local economy. Municipalities thus oftentimes contribute to their long-term strategic policy objectives.

There are a few factors that are commonly perceived as obstacles to involving citizens in municipal energy projects. Those include for example, the difficulty to reach and motivate the specific target groups, especially if a focus on vulnerable groups is chosen. This is however an obstacle that arises due to a lack of integrating the right intermediaries or in a faulty set of incentives in place and can thus be overcome. Furthermore, the perspective of having to deal with a multitude of voices and co-investors in a single project can be very discouraging and even exclude city participation, as many local governments only participate as co-investors in citizen energy projects if they are represented in management and advisory bodies. A CSOP, subject to corporate law, guarantees this representation.

Furthermore, even though a multitude of citizens may be involved as co-investors in the energy project, the risks of fragmentation of shares is counteracted by the CSOP model that foresees the bundling of consumer voices via a trustee that represents all citizens involved in decision making processes, thus keeping the number of decision-makers involved to a minimum and securing a democratic yet efficient decision-making.

2. Instruments to include vulnerable groups

Exploring needs and motivations

To overcome the barriers of inclusion, several strategies were developed and tested in the SCORE pilots and Follower Cities to evaluate their impact and derive learnings for other cities. The approaches chosen focused on questionnaires, participatory workshops and online meetings (Fig. 5).

All methods aimed at exploring and understanding better the needs of the target groups and their motivations behind potentially being involved in collective energy actions. Most importantly, barriers to inclusion need to be identified early in order to be able to put counter measures in place. Therefore, the first step for the inclusion of vulnerable groups is to understand their energy habits and challenges that they are currently facing in this regard, such as the low efficiency of the building envelope and high energy expenditure (clustering the citizen’s patterns). To do so, several events and meetings to involve and inform all target groups (stakeholders including citizens and vulnerable groups, SMEs and public administration) were organized. In addition, questionnaires were distributed among the focus groups. From the SCORE experience, there is some key information that needs to be gathered from the consumers, compliant with General Data Protection Regulation (GDPR):

- Energy / heating situation at home
- Average electricity and heating costs
- Household energy consumption data
- Eligibility for public social welfare transfers

Of course, this may need to be adapted to the specific local conditions, target groups and project scope. Accordingly, what may differ are the specific intermediaries and contact persons to involve in the process. It has been evident that a larger percentage of households is successfully engaged in participatory events - and subsequently in the energy projects - if known and trusted intermediary organizations or persons are supporting the process of informing the focus groups. Intermediary organizations might include Caritas, social cooperatives, trusted teachers in schools and neighborhood initiatives.

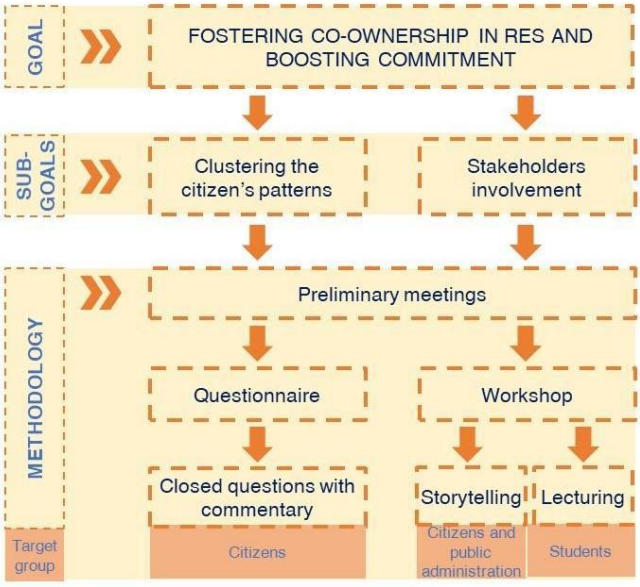


Figure 5 - Methodology of consumer involvement. Source: SCORE

(Overcoming) Barriers and obstacles

There are a few obstacles to consider when setting up an inclusive CSOP model. In addition to obstacles on the legal and regulatory side that can arise due to a given national legal framework, there are also barriers to consider on municipal and household level. The SCORE project has shown that those evolve from the following main topics of inclusion:

- Lack of trust in relatively unknown business models such as the CSOP despite its proven functionality.
- Regulatory and legal unknowns due to newly developing laws on energy sharing within cities and neighbourhoods.
- Lack of prior experience with co-investment energy projects at municipal level.
- Economic benefits arising from the participation in a CSOP might reduce or endanger eligibility for public social welfare transfers of individual consumers.
- Lack of timely resources within private households to understand the concepts and benefits of RECs.
- Lack of financial buffers leads to risk-averse economic decision-making. Households try to maximize flexibility and liquidity to respond to short-term challenges, such as fluctuations in income or unforeseen expenditures and have reservations against long-term commitments (Röber/Kalker 2020).
- Lack of financial resources for large investment capital, as well lack of savings or access to credit within several municipalities.
- Passivity due to a lack of trust in products and institutions as well as in their own capability to make successful investment decisions (perceived low self-efficacy) within consumers.

SCORE partner Caritas Association Germany has gathered ways to overcome many of those barriers on the private consumer level to motivate especially vulnerable households to participate in joint energy projects. According to work in the pilots and Follower Cities, main motivations and key success factors include (Röber/Kalker 2020):

- Prospect of reduced energy bill
- Reduction of up-front investment costs
- Risk mitigation measures for vulnerable groups in place
- Providing complimentary devices (LEDs etc.) to reduce energy costs immediately
- Generation of additional income
- Increasing energy efficient behaviour lowering energy costs
- Inclusion in RE projects to prevent social isolation
- Social capital within RE communities leading to exchange of technical and financial knowledge
- Engagement in environmental and climate protection activities

"Assisted" Consumer Stock Ownership Plans

Currently, more than 50 million consumers, among them low-income households and single women, struggle to pay for energy bills in Europe. They are victims of energy poverty caused mainly by high energy costs and low household income. The first step in enabling vulnerable groups to become prosumers – a means to mitigate energy poverty – depends on providing access to finance. This is what the CSOP does through its leveraged financing approach. Nevertheless, for some groups of vulnerable consumers even the reduced capital needed to participate in a standard CSOP is an insurmountable hurdle. This where the "Assisted" CSOP comes in.

Even more than a typical CSOP, an "Assisted" CSOP is adapted to the circumstances of the particular situation, including the needs of vulnerable consumers. An example is the workplace of social services - Center of Social Services Prague (CSSP) - Žilinská in the Czech Republic: In 2020 the city administration agreed with CSSP to finance the installation of a photovoltaic installation to supply the location with electricity, thus lowering its energy bill. The city is planning that a part of the installation may be sold to the residents of the shelter. In the context of SCORE the mentioned parties are anticipating to launch an "Assisted" CSOP:

- Up to 25 per cent of the PV installation would be sold to those of the CSSP clients willing to participate, turning them into co-owners and thus prosumers;
- A matching contribution from a donor would assist these residents to acquire an ownership stake;
- Sharing 25-50 per cent of the profits from electricity savings and energy efficiency measures with the "Assisted" CSOP participants through a dedicated expense fund.

As a result, the participating residents need an even smaller initial contribution to join the project. In turn, CSSP allocates the residents share of the monies saved though RE production and energy efficiency measures to a dedicated expense fund; this fund covers expenses for their personal needs like for example a new pair of boots, a joint leisure excursion or a musical instrument.

To sum up, in the case of an "Assisted" CSOP a) the RE installation is often donated and b) the acquisition of the shares by the consumer-beneficiaries is additionally facilitated by a

matching contribution from a donor. The joining consumers need an even smaller initial contribution to participate and do not have to wait for the amortisation of the investment before they benefit from revenues. Both elements are of importance with regard to particular vulnerable groups. An Assisted CSOP differs to some extent from the classic CSOP inasmuch as creating a source of income for its participants is not its primary purpose. The Assisted CSOP is envisioned as a low threshold participatory instrument to empower vulnerable consumers that even in a conventional CSOP would not have been able to participate. The sense of ownership and both the benefits as well as the responsibility associated therewith are key for behavioural changes with regard to energy efficiency but also with regard to inclusion and the experience of becoming actively involved in the energy transition.

Example: The homeless shelter in Krzywousto street 6, Słupsk (Poland)

In early 2018 IKEA Poland agreed with the city of Słupsk as owner of the building in Krzywoustego Street 6 and the charitable association Holy Brother Albert to donate PLN 61,500 (about EUR 14,300) to the latter for the acquisition and mounting of a photovoltaic installation to supply the homeless shelter with electricity and thus to lower its energy bill. The agreement on the use of the building between the city and the charitable association Holy Brother Albert foresees that the ownership of the installation is transferred to the City of Słupsk as owner of the building.

In the context of SCORE the mentioned parties have agreed to launch an Assisted CSOP: a) selling a maximum of 25 per cent of the PV installation to those of the 70 residents of the shelter willing to participate turning them into consumer co-owners; b) sharing 25-50 per cent of the benefits from electricity savings and energy efficiency measures with the Assisted CSOP participants through a dedicated expense fund; c) with the aim to entice the new co-owners to save electricity, become more energy efficient and – where possible – to train them as energy consultants.

It was assumed that in the best case 50 residents of the homeless shelter will participate in the Assisted CSOP with a contribution of PLN 216 each (about EUR 50 as well as a matching contribution of PLN 144 (two for one, about EUR 34) from the Kelso Institute of European University Viadrina Frankfurt (Oder). The overall investment of the 50 Assisted CSOP participants amounts to PLN 10,800 (about EUR 2,500) which is roughly equivalent to 25 per cent of the value of the PV installation. As the investment of the Assisted CSOP participants is conveyed and administered by a trusteeship, a trustee is appointed or a limited liability company (spółka z ograniczoną odpowiedzialnością) is set up by the local charitable association Holy Brother Albert in Slupsk to be managed by the president of the shelter. The Trusteeship is collecting both the personal instalments as well as the matching contribution and is allocating them to each resident's personal account. With these funds the Trusteeship purchases subsequently up to 25 per cent of the PV installation from the City of Słupsk. The funds the city receives are reinvested in the mentioned energy efficiency measures which are estimated to bring down the shelter's electricity consumption by a further 15 per cent.

The Assisted CSOP facilitates temporary (co-)ownership of the residents of the shelter without impairing their mobility as participants can sell back their shares. At the same time it prevents two "classes" amongst the residents ensuring that newcomers can take over the shares of departing plan participants. Here ownership as a learning device has an important function to trigger energy efficient consumption behaviour of participants.

Communication and engagement

Considering Art.18 of RED II, information is a key component for enabling citizens and communities to become active players on the energy markets (European Commission, 2018). Taking this into account, it is essential to guarantee strong communication through solid and inclusive channels. These channels should solve questions between the public administration and citizens, thus taking into account other points of views and recognizing the variety of possibilities and challenges for each actor group involved.

Public administrations should use existing communication channels with the local community if possible to benefit from known and accepted information channels. If such channels are non-existent, they may create channels through online software designed for the local community, to facilitate communication and social inclusion, where the community can send requests or pose questions about the project. This will promote dialogue between two of the most crucial actor groups within the CSOP and create trust. The channel can be useful to receive requests from the population or directly communicate information about RECs in progress.

Potential channels of communication are:

- Official communication channels of local partners and municipalities involved - social media (Facebook), municipal websites and newsletters.
- Animated flyers and brochures describing the project in simplified terms to be disseminated via post to potential households and focus groups.
- Established communication channels of intermediaries and multipliers with working relationships with the focus groups, e.g. newsletters or regular in-person meetings and reunions.
- Face-to-face meetings and workshops with citizens and trusted representatives of the focus groups.
- Site visits to the buildings involved and/or location of RE installations to create proximity.

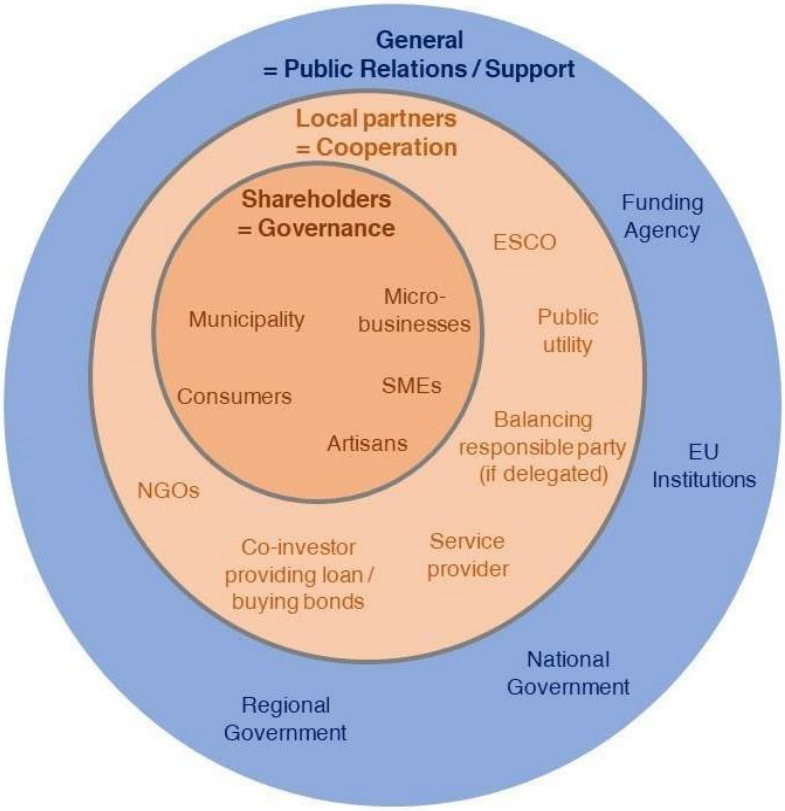
In one of the Spanish Follower Cities, Vega de Valcarce, the set-up of a working group with representatives of all groups involved has been beneficial to drive the process, increase efficiency and communication. Usually, it will need at least one member of the community to coordinate the set-up and the continuous organization of the working group.

3. Layers of action

In Fig. 6 the three main layers of action to foster co-ownership in RES are displayed. Firstly, the general sphere characterizes the framework in which energy projects are designed. Multi-level governance frameworks impact on the possibilities for energy communities and lay down the conditions in which they exist. This sphere can provide support through regulation and incentives, including simplified administrative and regulatory requirements, specific funding mechanisms and sources. Available funding depends mainly on national and regional frameworks.

Secondly, the energy community is connected to the second layer of actors via cooperation, meaning the shareholders of the inner circle will most probably interact with many other local actors involved in the technical and financial implementation of the project, such as energy service companies (ESCOs), public utility services, service providers, potential co-investors, non-governmental organizations (NGOs), citizen initiatives and cooperatives.

Thirdly, all shareholders of the energy community or CSOP, including small and medium-sized enterprises, consumers, municipalities and local governments, are bound by specific governance decisions and frameworks which have to be decided and designed for each local



project specifically by the shareholders.

Figure 6 - Layers of action

Summary of recommendations on CSOP financing and inclusion of vulnerable groups

NATIONAL LEVEL

- Policy measures to include vulnerable citizens in RECs financial system are extremely necessary to solve this dilemma and to help the transposition of RED II 2018/2001 into National levels (e.g., by ensuring the participation in RECs is open to all consumers involved, including those belonging to low-income or vulnerable families, Repubblica Italiana (2020)).
- Identification of adequate incentives for LIHs. Investing in renewable energy (RE) projects has proven to be a challenge, especially for LIHs. LIHs lack capital which prevents them from participating or even investing in prosumer models. Without adequate incentives, it is improbable to engage members from the focus groups.

Such incentives need to be tangible, limit co-contributions to a feasible amount and secure a sufficiently short investment amortization period.

LOCAL LEVEL

- Approaching vulnerable groups can be effectively facilitated by people they know and trust, especially with regards to sharing financial information. As a result, identifying, informing and including intermediaries are key structural elements of an effective engagement approach and needs to be finalized before addressing LIHs themselves. Additionally, it needs to be ensured that intermediaries can also advise and guide participants during the project implementation as long-term partners. Such an engagement by intermediaries over multiple years requires adequate personnel resources to be made available.
- Devising effective communication strategies. Due to a lack of relevant experience and education the focus groups may struggle to understand CSOP's complex structure. Hence, communication needs to focus on the benefits of the specific project in a clear, tangible language, roughly outlining CSOP's structure. Additionally, a critical factor is to integrate trusted intermediaries' endorsement into the communication mix.
- Local administration can create communication channels with the local community, e.g. through an application software designed for the local community, to facilitate communication and social inclusion, where the community can send requests or visualize information about the project. This will promote dialogue between two nuclei that usually are unlikely to meet. This channel can be useful to receive requests from the population or directly communicate information about RECs in progress.
- Local administrations can consider creating training activities with the local REC's stakeholders, e.g. by implementing capacity building programmes, as energy seminars. These information and training sessions can be carried out with energy technician partners solving technical issues/doubts of the local community and public administration. They can furthermore create awareness raising campaigns through local government on prosumer opportunities and procedures and search for already available knowledge and expertise within their communities and citizens.

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SCORE facilitates consumers to become (co-)owners of RE in three pilot regions and in cities across Europe following these pilot projects. SCORE applies Consumer Stock Ownership Plans (CSOPs) utilising established best practice updated by inclusive financing techniques. Vulnerable groups affected by fuel poverty – as a rule excluded from RE investments – are in the focus of the project.

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