SCORE

Co-own. Prosume. Renew.

This project is funded by the European Union

CSOP-Financing

Introducing Consumer Stock Ownership Plans

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Imprint

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Introduction

SCORE – Supporting Consumer Co-Ownership in Renewable Energies

SCORE is a project funded by the European Union under its HORIZON 2020 programme, facilitating consumers to become (co-)owners of renewable energies (RE).

Financial, technical and social innovations are essential prerequisites for a successful transition from fossil fuels to renewables. In order to balance demand with a volatile energy supply and to increase acceptance of new technologies like smart meters, it is necessary to build new energy infrastructure and motivate consumers to change their consumption habits.

In this context, consumer (co-)ownership in RE has proven to be an essential cornerstone to the overall success of energy transition. When consumers acquire ownership in RE, they become prosumers generating a part of the energy they consume, hence reducing their overall expenditure for energy. At the same time, they receive a second source of income from the sale of excess production. This in turn induces positive behavioural changes in energy consumption.

Applying Consumer Stock Ownership Plans (CSOPs)

The aim of SCORE is to facilitate co-ownership of RE for consumers first in three pilot regions in Italy, Czech Republic and Poland – and later in various other follower cities across Europe.

SCORE particularly highlights the potential of this democratic participation model for the inclusion of women and low-income households. The participation of these under-represented groups as prosumers through financial empowerment is a core element in the fight against energy poverty.

We are applying Consumer Stock Ownership Plans (CSOPs) in RE-projects, utilising established best practice updated by inclusive financing techniques. As vulnerable groups affected by fuel poverty and usually excluded from RE investments are of particular importance, effective and innovative engagement actions are tailored to their needs. The participating local and regional authorities as well as existing local energy projects receive legal and technical assistance for a tailor-made participation model.

The EU Paves the Way for CSOPs in the 2018/19 “Clean Energy Package”

In December 2018, the European Union passed a corresponding legal framework for prosumership as part of a recast of the Renewable Energy Directive (RED II). From June 2021 onwards – once the Directive has been transposed into national law – consumers, as prosumers, will have the right to consume, store or sell RE generated on their premises

- either individually, for example households and small and medium-sized enterprises (SMEs), and collectively, for example in tenant electricity projects (Art. 21 RED II)

- or as part of Renewable Energy Communities (RECs) organised as independent legal entities (Art. 22 RED II).

RECs require a particular democratic governance model focusing on the local partners. The RED II prescribes that in order to qualify as an REC, the effective control, that is the majority of ownership stakes, should be held by members based in the proximity of the installations. Furthermore, the autonomy of the REC from single members is to be upheld by the principle that no single shareholder owns more than a third of the shares.

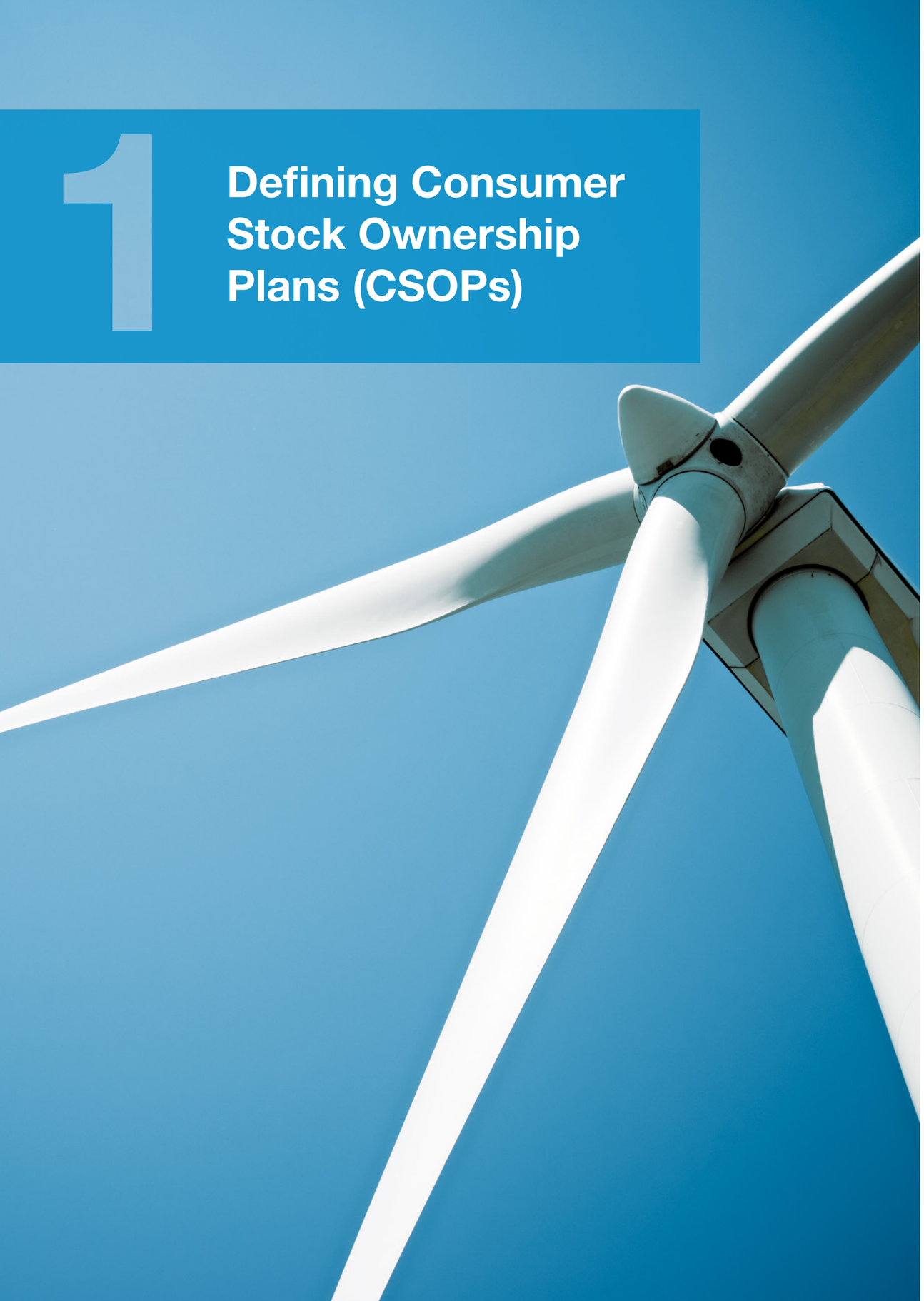
The CSOP is a prototype of this business model and shows how to implement these new rules. CSOPs allow for the inclusion of municipalities and/or commercial investors like SMEs. Moreover, they offer an opportunity of advancing to economies of scale. At the same time, they retain the benefits of individual consumer participation.

Renewable Energy Clusters – the Future of the Energy Systems

RECs can be seen as the prototype governance model of an emerging form of energy systems, that is RE-clusters. This concept for the lawful control over and administration of (local) energy generation, supply and management is the mirror image of the technical / engineering concept for RE clusters.

Such RE-clusters will typically include demand flexibility and energy efficiency (EE) measures, storage and peer-to-peer trading within energy communities, and between energy communities and the market.

For the technical solutions existing (e.g. smart meters) and those emerging (e.g. distributed ledger technologies like blockchain) to be functional, behavioural changes of the consumer are indispensible. Therefore, it is crucial to couple technological solutions with good governance as acknowledged by the European legislator in RED II, the Internal Electricity Market Directive (IEMD) and Regulation (IEMR) and enshrined in the CSOP.



1 Defining Consumer Stock Ownership Plans (CSOPs)

Defining Consumer Stock Ownership Plans

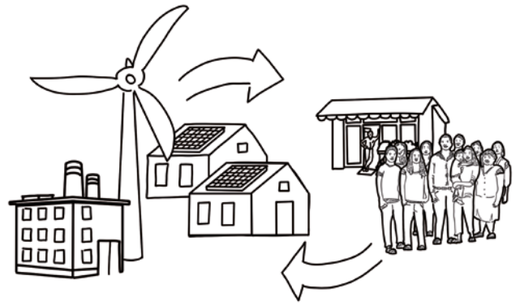
A CSOP (Consumer Stock Ownership Plan) enables consumers – especially those without savings or access to capital credit – to acquire an ownership stake in a utility that supplies them and thus to become “prosumers”:

- It is a trusteed comsumer-centred investment model for general services, providing participation both financially and in decision-making.
- A CSOP permits co-investments of municipalities, small and medium-sized enterprises (SMEs) and other local partners. Shareholders do not have personal liability..
- An intermediary entity, the CSOP Operating Company (as a rule a privately held corporation with limited liability; possibly also a cooperative), invests into a new or existing RE plant and operates it on behalf of the co-owners.

A CSOP may invest in any kind of utility, be it water, energy, transportation or the like. When investing in renewable energy installations, CSOPs contribute to the energy transition and climate change mitigation by facilitating local, decentralised production..

A CSOP is a consumer-centred investment model for general services. It facilitates co-investments of municipalities, small and medium-sized enterprises (SMEs) and other local partners. At the same time it allows co-investments of strategic non-local investors.

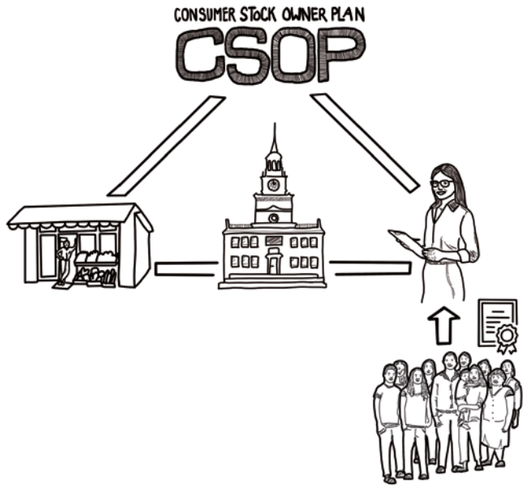
An intermediary entity (CSOP Operating Company) invests into a new or existing RE plant and operates it on behalf of the (co-)owners.



Aims

The main aims of a CSOP are to:

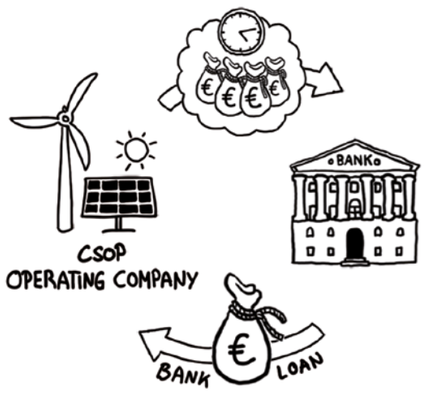
- Enable consumers/households to become (co-)owners of the utilities that supply them and thus to benefit from the profits and actively participate in decision-making;
- Pool the investment and voting rights of consumers vis-a-vis other co-investors (public or private);
- Advise, consult and represent consumers’ interests in multi- stakeholder projects.



Specific Features

The properties of a CSOP compared to conventional participation models are:

- Access to capital credit by pooling individual investments in an intermediary entity; CSOPs can use leverage to scale up the investment.
- Streamlining and simplifying decision-making through a trusteeship which protects the interests of consumer shareholders.
- Repayment of the acquisition loan from future earnings including the sale of excess energy production; once the loan is repaid, profits are distributed amongst the co-owners.



An investment carried out through a CSOP has the advantage of being

1. **Scalable and thus more competitive:**
   CSOPs use the most advanced technology to achieve cost-efficient production

2. **Profitable:**
   By benefiting from economies of scale, unit production cost decreases with increasing capacity while at the same time providing sufficient excess-production to sell to third parties or the grid. Profits thereof reduce the amortisation period.

3. **Low-threshold:**
   Since assets and shares are pledged as security for a bank loan to be repaid from future earnings, the consumers do not have to invest own income or savings.

4. **Mainstream:**
   A CSOP is based on proven legal concepts/ vehicles and compatible with existing legal and financial requirements. In particular, it complies with future European rules concerning Rrenewable Energy Communities (RECs).

5. **Complementary to energy efficiency measures:**
   A CSOP can also combine investment in a production facility with measures that reduce energy consumption. With less consumption, more energy can be sold, thus shortening the amortisation period.

2 CSOPs Explained Step by Step

CSOPs Explained Step by Step

In the renewable energy CSOP (RE-CSOP), consumers co-own a RE project through an intermediary – the CSOP Operating Company (usually a privately held corporation with limited liability but possibly also a cooperative). A trustee who consults with them and acts in their interest represents them on the board of directors.

The consumer investment in the RE installation can be initiated by a group of private energy consumers together with their municipality and/or local small or medium-sized enterprises.

The following steps have to be taken when realising the investment:

1. Setting up a fiduciary vehicle as trustee (usually another privately held corporation with limited liability; in small projects this can be a physical peron) that administers the consumer accounts.

2.a Conclusion of fiduciary agreements (trustee – consumers) defining the number of shares in the CSOP (as a rule proportional to the energy consumption of each household, but other principles are also possible).

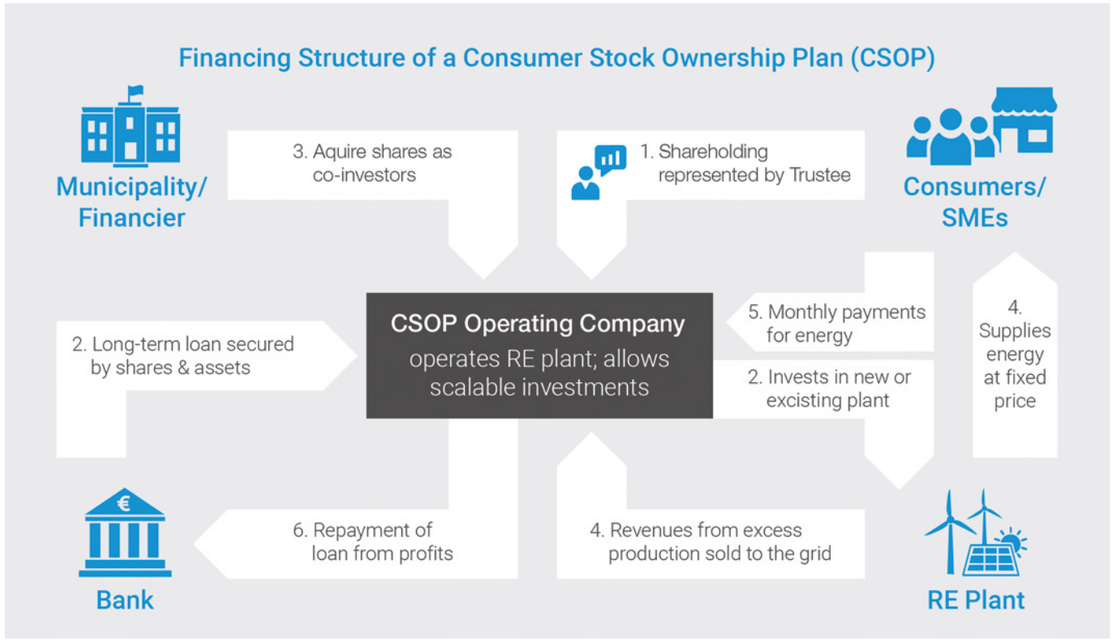
2.b Contribution of the initial share capital by the participating households as their investment (100 – 250€ each, depending on the type of RE-project).

3.a Setting up an intermediary entity (CSOP Operating Company) that invests in an existing or a new energy plant.

3.b Acquisition of shares in the CSOP Operating Company by co-investors like the municipality and/or local SMEs.

4. Conclusion of standard energy supply agreements between consumers and the CSOP Operating Company.

5. The CSOP Operating Company then takes out a bank loan on behalf of the consumer shareholders and provides collateral to secure the loan (value of the plant plus that of the shares), thus shielding the consumers from personal liability.



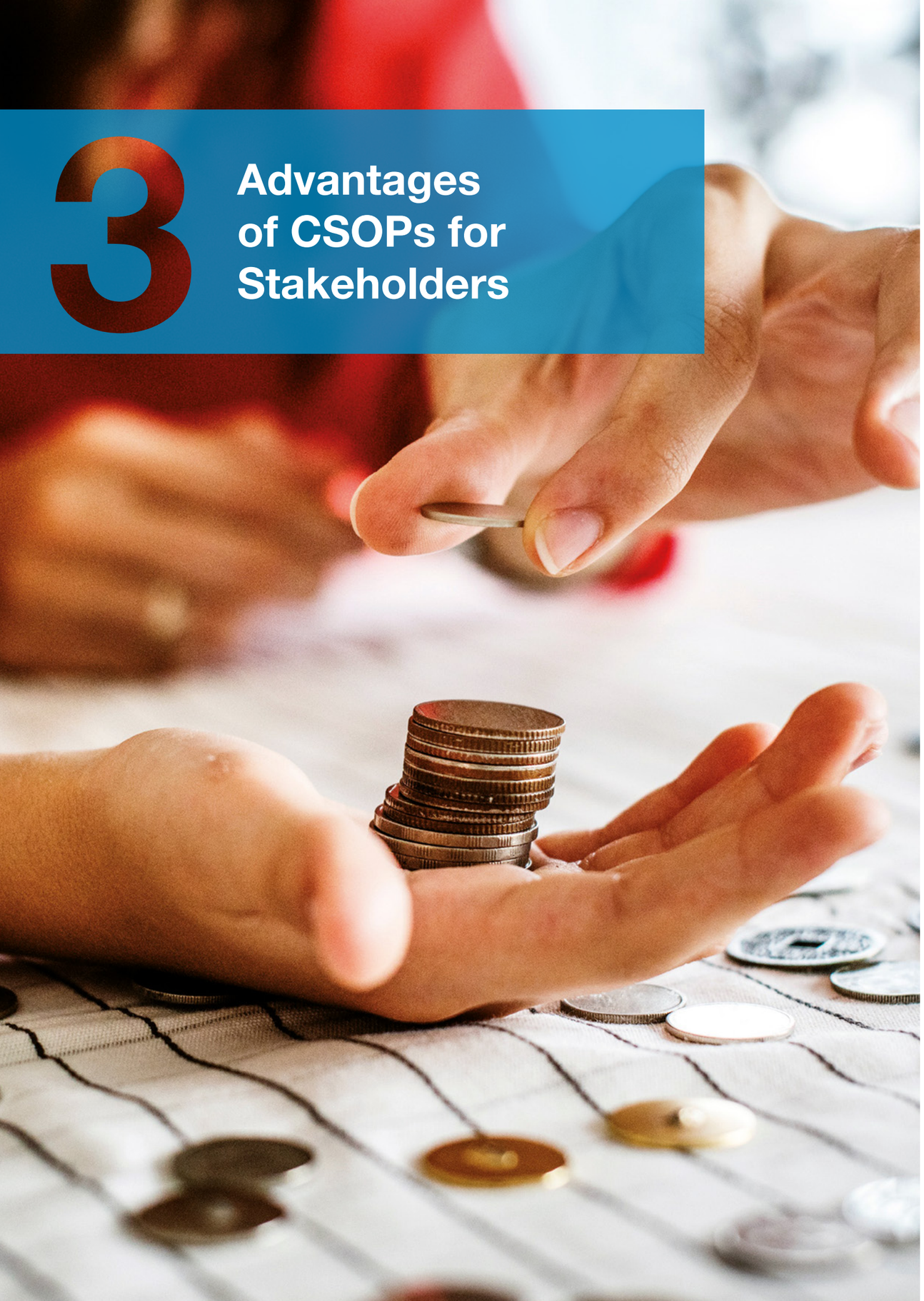
6. The RE-installation supplies the consumer shareholders with energy and sells surplus production; all revenues flow into the CSOP Operating Company.

7. Loan repayment: interest and principal are serviced with revenues from the sale of surplus energy produced by the power plant monthly energy payments by each household.

8. After the capital acquisition loan is redeemed, profits from the power plant are paid out to the consumer shareholders as dividends according to their number of shares.

The revolutionary aspect of a RE-CSOP is that the consumer shareholders gain a second source of income from capital ownership in an investment that does not require past savings. It is financed by future earnings from the investment, i.e., revenues from energy sales.

For more legal, financial and technical information about the financing structure and phasing of a CSOP, please do not hesitate to contact us..



3 Advantages of CSOPs for Stakeholders

Advantages of CSOPs for Consumers

Consumers acquiring productive property of the utility that supplies them with energy are thus entitled as shareholders to a part of the profits as well as to participate in management decisions.

A CSOP can be launched by consumers themselves or be set up for them by another entity – for example the municipality they live in.

One of the advantages for consumers of investing in a CSOP is that their shareholding is pooled in a trusteed entity headed by a director who represents the consumer-shareholders in the CSOP Operating Company.

From a financial point of view, participation entails:

- Financial inclusion**:**
  Participation does not require substantial assets or savings because the loan is repaid from future profits and secured by the RE installation.

- **No individual liability:**
  The CSOP Operating Company assumes the bank loan, so the liability of individual consumers is limited to the value of their shares.

- **An additional source of income:**
  Consumers reap the rewards of their investment once the loan is repaid. Then profits are distributed to consumers in proportion to their share ownership.

- **Deferred taxation:**
  Consumers benefit from deferred taxation as the trusteeship shields them; taxes are not due until shares transferred or sold.

From an operational point of view, consumers benefit from:

- **Low entry and exit costs:**
  Consumers can easily buy or sell their shares. When, for example, a household moves away from the region, it can transfer its shares to new residents. Only the party of the trust agreement changes; there is no need for additional registration with the register court or a notary public.

- **Simplified allocation of shares:**
  Shares are allocated to consumers in proportion to their (monthly) energy consumption, with other principles of distribution also possible.

- Flexible decision-making**:**
  The trust agreement defines which decisions are retained by the consumers and which are delegated to the trustee. Decision-making for day-to-day operations is left to the trustee (and other co-investors). Thanks to professional advice and clear and simple rules, time-consuming involvement or expert-knowledge for strategic decisions is not required. While being protected from manipulation, at the same time, consumers can gain knowledge from their active involvement.

- Strong representation of consumer-shareholder interests and more bargaining power**:**
  Consumers benefit from a stronger position relative to the other co-owners in the CSOP Operating Company because they can avoid fragmentation of their voting rights and rely on the expertise of the trustee. Their shares are voted en block after the internal decision-making process.

Advantages of CSOPs for Local Authorities

Investing into a CSOP has many advantages for local authorities:

- Fulfilling their leadership role:
  A CSOP can be initiated by the home municipality of consumers. Local authorities can shape renewable energy and energy efficiency policy by bringing together different stakeholders and aligning their interests.

- **Flexible financial participation:**
  Local authorities are under strict fiscal rules and budgetary constraints that often prevent them from unlocking their full potential as pacemakers. Pooling the financial resources of local consumers (both individuals and SMEs), a CSOP reduces the pressure on local authorities to be the sole investor of a local project.

- **Representation guaranteed:**
  Obligatory representation in management and supervisory bodies is often perceived as an obstacle to municipal investment in many citizen's projects. Unlike a cooperative, a CSOP, is subject to corporate law, guaranteeing the representation of local authorities in management and supervisory bodies.

The shareholding of consumers in the CSOP Operating Company is pooled in a trusteed entity that is managed and represented by an expert (trustee).

For the local authorities, this results in:

- **Simplified communication:**
  One interlocutor, one phone number.

- **A stable, long-term shareholder:**
  Fluctuation among consumer-shareholders does not impact the overall shareholder structure in the CSOP Operating Company. Consumer shareholders are concerned with the long-term performance of the business, not short-term fluctuations, which may occur from year to year.

- **Efficient democratic decision-making:**
  As the involvement of consumers is mediated, investors have the guarantee that their participation does not impact the professional management of day-today operations. At the same time, consumers still may discuss, decide and learn more about the operation of an energy plant if they wish.

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Image by rawpixel.com from Pexels

Advantages of CSOPs for Co-Investors

Co-investors – whether local (small or micro enterpises, municipal companies, NGOs) or strategic (plant engineer, energy supplier, network operator) – may partner with consumers and municipalities in implementing a CSOP.

Investing in a CSOP is attractive for commercial investors, since **voting rights are proportional to shareholding** unlike in other citizen energy models, where the cooperative principle of one member/one vote often applies.

Moreover, consumers' shareholding is pooled in a fiduciary entity that is managed by a director. This trusteeship represents the consumer-shareholders in the CSOP Operating Company.

For an external investor this entails:

- **Simplified communication:**
  One interlocutor, one phone number.

- **A loyal long-term shareholder:**
  Changes in consumer shareholders do not affect the overall shareholder structure of the CSOP Operating Company.

- **Efficient, democratic decision-making:**
  As the participation of consumers is mediated, investors are given the guarantee that consumer participation does not affect the professional management of day-to-day operations. At the same time the trustee makes the consumers' voting behaviour predictable and ensures that they are not manipulated by other shareholders.

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Advantages of CSOPs for Financial Institutions

Lending to a CSOP involves low transaction costs for commercial banks. This results from the pooling of the individual investments. Individual micro-credits are avoided. A single bank loan is taken on behalf of all consumers thus avoiding the risk of funds being diverted for other purposes:

The profitability of the project is assured by:

- A scale of the investment large enough to ensure that the energy produced exceeds the energy needed by consumers, so the excess can be sold to repay the loan.

- Potential incentives or preferential conditions for RES or citizen projects to level the playing field between commercial and non-commercial projects, as well as fossil and renewable energy.

CSOPs are in accord with political priorities and regulatory requirements, they can raise additional financial support from public financial institutions such as national or European development banks (e.g., KfW, BPI/Caisse des depots, BGK, BDB, EIB) or European structural and investment funds (European Regional Development Fund, European Social Fund, Cohesion Fund, European Fund for Strategic Investments).

Meeting the requirements of Renewable Energy Communities (RECs) under the new EU prosumership framework in RED II (see page 7 above), the CSOP brings together citizens, municipalities, SMEs and commercial investors under a common governance model.

While aligning the interests of all parties involved, to qualify as a REC is an important condition for preferential conditions – e.g. simplified administrative procedures, favourable tariffs, assistance and support – under the "enabling framework" for RECs as defined in Art. 22 RED II. These conditions in turn increase the economic feasibility of RE-projects and thus reduce the involved risk – two important issues for the lenders financing these projects.

"Assisted" CSOPs – Adapting the CSOP to the needs of vulnerable consumers

The challenge:
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. However, energy prices and inequality keep on rising all over Europe.

At the same time the European Union is promoting RE prosumership, that is, turning consumers into producers; prosumers have the option of self-consuming renewable energy they produce or selling surplus production to the grid. While prosumership provides financial benefits such as lower energy costs and additional income, only those able to afford the necessary investments benefit.

If, however, the energy transition is to be successful, its benefits must be distributed evenly across society. 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 is where the "Assisted" CSOP comes in.

Adapting the CSOP to social needs
Unlike 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 asylum house "Želetická", a shelter for homeless and people in precarious situations run by the charitable association NADĚJE (hope) in the city of Litoměřice in the Czech Republic: In 2019 the city administration agreed with NADĚJE to finance the installation of a photovoltaic (PV) installation to supply the shelter with electricity, thus lowering its energy bill. The city agreed that the a part of the installation may be sold to the residents of the shelter. In the context of SCORE the mentioned parties agreed to launch an "Assisted" CSOP:

- Up to 25 per cent of the PV installation would be sold to those of the 50 residents willing to participate, turning them into co-owners and thus prosumers;

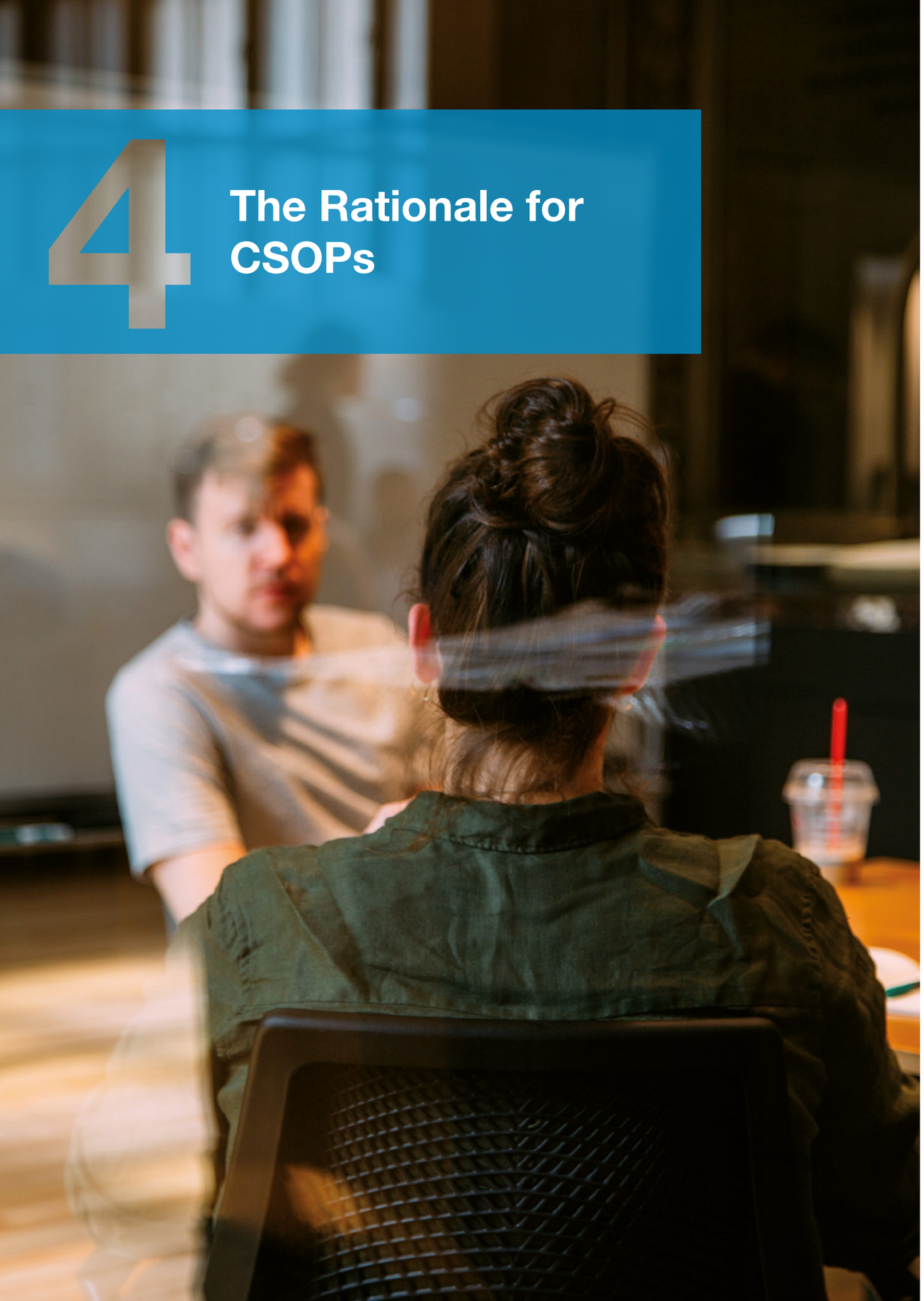
- A matching contribution from a donor would assist these residents to acquire an ownership stake;

- 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.

Enabling the poor to become prosumers
As a result, the participating residents need an even smaller initial contribution to join the project. In turn, the charitable association NADĚJE 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.

A secondary aim of the "Assisted" CSOP is to entice the new co-owners to save electricity, become more energy efficient and – where possible – to train them as energy consultants.

A similar approach is planned for homeless shelters and similar institutions in the Susa Valley (IT), the city of Essen (DE) and the town of Słupsk (PL).



4 The Rationale for CSOPs

The Rationale for CSOPs

CSOPs directly relate to current political and social priorities and contribute facilitating the energy transition.

- **Bridging the investment gap:**
  A CSOP is an alternative to both, commercial projects without local participation, and citizen-energy projects without substantial funds. Unlocking untapped investment opportunities in RE, a CSOP contributes to reaching our climate goals.

- **Bridging the social gap:**
  By reducing barriers in terms of financial assets, expertise or time, a CSOP is a low-threshold and inclusive financing tool for consumer groups that have so far been under-represented and often even excluded from or disinterested in citizen energy.

- **Fighting energy poverty while avoiding social transfers:**
  Because vulnerable consumers are supplied with energy by the RE plant and receive an additional income from their investment (once the loans are repaid with the profits), a CSOP can reduce inequalities without relying on social transfers.

- **Fostering acceptance and democratic participation through ownership:**
  Since the energy transition requires societal and behavioural changes, it is crucial to increase energy consumers' acceptance. Consumer (co-)ownership as a learning experience encourages acceptance, by providing additional income, enhancing the quality of life and stimulating the (local) economy.

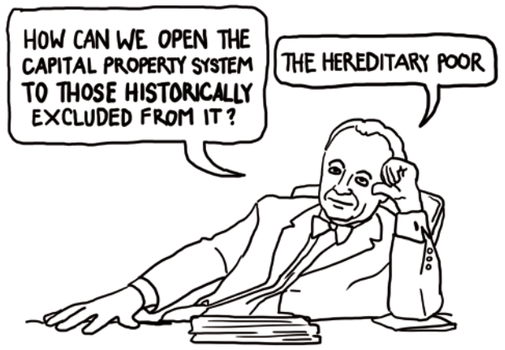
- **Contributing to a level playing field and diversity of actors on the market:**
  The CSOP financing technique builds on financial techniques (leverage; trusteeship) to scale up citizen energy investments. A CSOP can compete with commercial projects in a liberalised market. It does not crowd out commercial investments or prevent small-scale projects from benefitting from regulatory exemptions.

- **Fighting climate change globally with a standard solution:**
  Following a comparative analysis, CSOPs could not only be introduced in Europe but also represent an opportunity for the Energy Transition in other countries across the globe. Particularly in developing countries, a CSOP may facilitate the access to credit needed for RE installations.

5 CSOP History and Best Practice

CSOP History and Best Practice

- The SCORE-project introduces CSOPs to the energy sector in Europe. They employ the same logic as the highly successful ESOP pioneered in the USA.
- Louis O. Kelso introduced the CSOP in California's Central Valley in 1958 by enabling local farmers to become (co-)owners of a fertiliser manufacturing plant, Valley Nitrogen Producers, Inc., of which they were the main consumers.
- The main motive for the local farmers to become prosumers were high, inflated fertiliser prices set by an oligopoly of major producers controlling the market.
- The first CSOP was a great success: 4,580 farmers became (co-)owners of a new anhydrous ammonia fertiliser plant. This involved an overall investment of USD 120 million (today about USD 1 billion) financed mainly by a loan from the Berkeley Bank of Cooperatives.
- Valley Nitrogen Producers, Inc., ended the monopoly of the fertiliser industry in the Central Valley. Fertiliser price dropped from USD 250 per ton to USD 66 per ton. Thus, farmers saved well over USD 1 billion in fertiliser during a 15-year period.
- The financial structure of the CSOP is based on the same logic as the Employee Stock Ownership Plan (ESOP) of Louis O. Kelso. The latter has been part of corporate America since 1956. In 2018, there were over 6,600 ESOPs and 3,200 ESOP-like plans with 14.5 million employee-owners (13% of the private sector workforce) holding around USD 1.4 trillion in assets.



6 SCORE – Pioneering CSOPs for Renewable Energies

Within the context of the SCORE project, CSOPs are being implemented for the first time in the RE sector. The model is tested in three pilot regions: the city of Litoměřice in Czech Republic, the city of Essen in Germany, and in the Susa-Valley in Italy.

The Town of Litoměřice

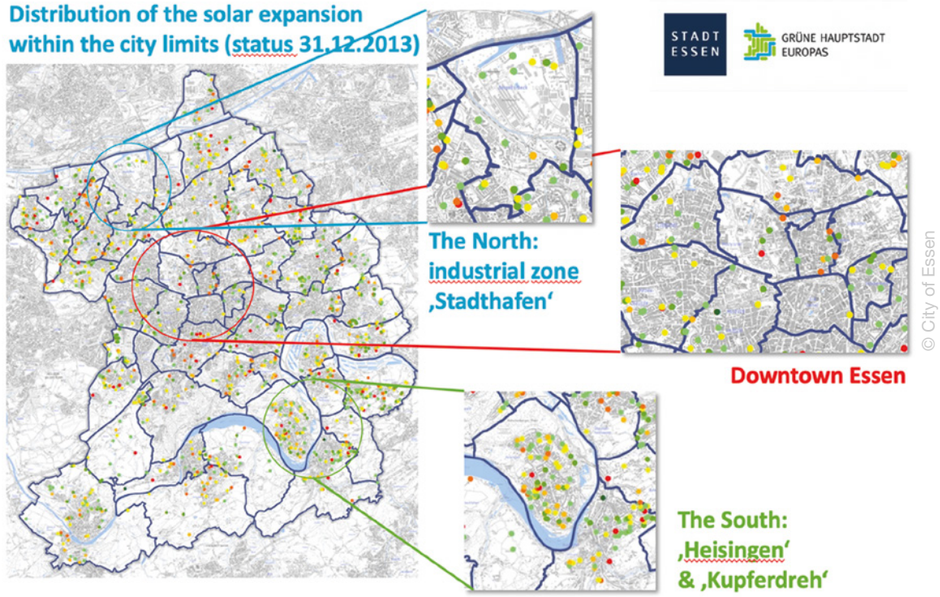
The Czech municipality of Litoměřice is located northwest of Prague and has 25,000 inhabitants. In regards to renewable energy sources, the city administration as a pioneer in sustainable development is focusing on photovoltaic (PV) energy.

As of 2018, the existing PV installations are covering an area of 3,500 m², with 1.2 MWp capacity on private houses and 0.15 MWp capacity on public buildings. These installations are combined with energy efficiency measures in order to reduce the energy consumption of buildings with RE installations to a low level (50 kWh/m²) and passive standard (15 kWh/m²).

With the Czech pilot project SCORE is aiming to raise the capacity of existing installations by 1.5 MWp; this corresponds to an overall increase of 125%. 250 households are to be involved as (co-)owners of the newly installed PV facilities, whose expected annual energy yield is to exceed the demand of these households three times. The surplus energy will be used for public and administrative buildings, and the energy savings triggered by changes in consumption behaviour are expected to amount to 14%, i.e. 368 kWh per year. Hence, the anticipated annual energy savings for all 250 households amount to 92,000 kWh (368 kWh * 250 households = 92,000 kWh).

The municipality of Litoměřice and the RE consultants of Porsenna are implementing the Czech pilot with support from the SCORE consortium partners.

Members of the SCORE-team visiting a potential project site: the local elementary school.



The City of Essen

Located in the very western part of Germany in North Rhine-Westphalia with a population of almost 600,000, Essen is home to the headquarters of some of Germany's biggest energy companies: These include e.g. RWE AG, Evonik Industries AG, E.ON SE and Innogy SE. In 2017 Essen has been selected "European Green Capital" for its efforts concerning the development "from grey to green" and the related successful transformation. As of today, around 1.800 PV facilities are installed on public and private buildings, nearly 200 cogeneration facilities are running and wind power is being discussed. With regard to consumer (co-)ownership the Solar Cooperative Essen with around 200 members has installed PV panels on 18 roofs leased for a symbolic price from the municipality with the complete production fed in to the public grid.

The nationwide Strom Sparcheck carried out by SCORE partner Caritas is implemented with great success in Essen under the brand "Energie SparService Essen". The city of Essen wants to actively participate in the further expansion of RE. The funding of the planned investments in RE projects with a focus on regional self-consumption is to be co-financed by a supplement of 0.2 ct per consumed kWh on the certified green electricity supply of city (approx. 200,000 Euro/year).

Over the lifetime of the SCORE project, an additional 650 kWp is to be installed with the help of private (co-)investments corresponding to an overall capacity dynamic increase. At least 200 households are expected to be included and turn from consumers into prosumers. Considering the annual energy demand of these 200 households and the anticipated energy savings of 368 kWh per household, the expected energy savings resulting from a change of consumption behaviour are expected to amount to 73,600 kWh (368 kWh * 200 households = 73,600 kWh) per year.

The pilot implementation is managed by the City of Essen and the Caritas Association Germany with the support of the SCORE consortium partners.

The Susa Valley

The Susa Valley is an Alpine zone in the northern part of Italy with 90,000 inhabitants in 14 municipalities.

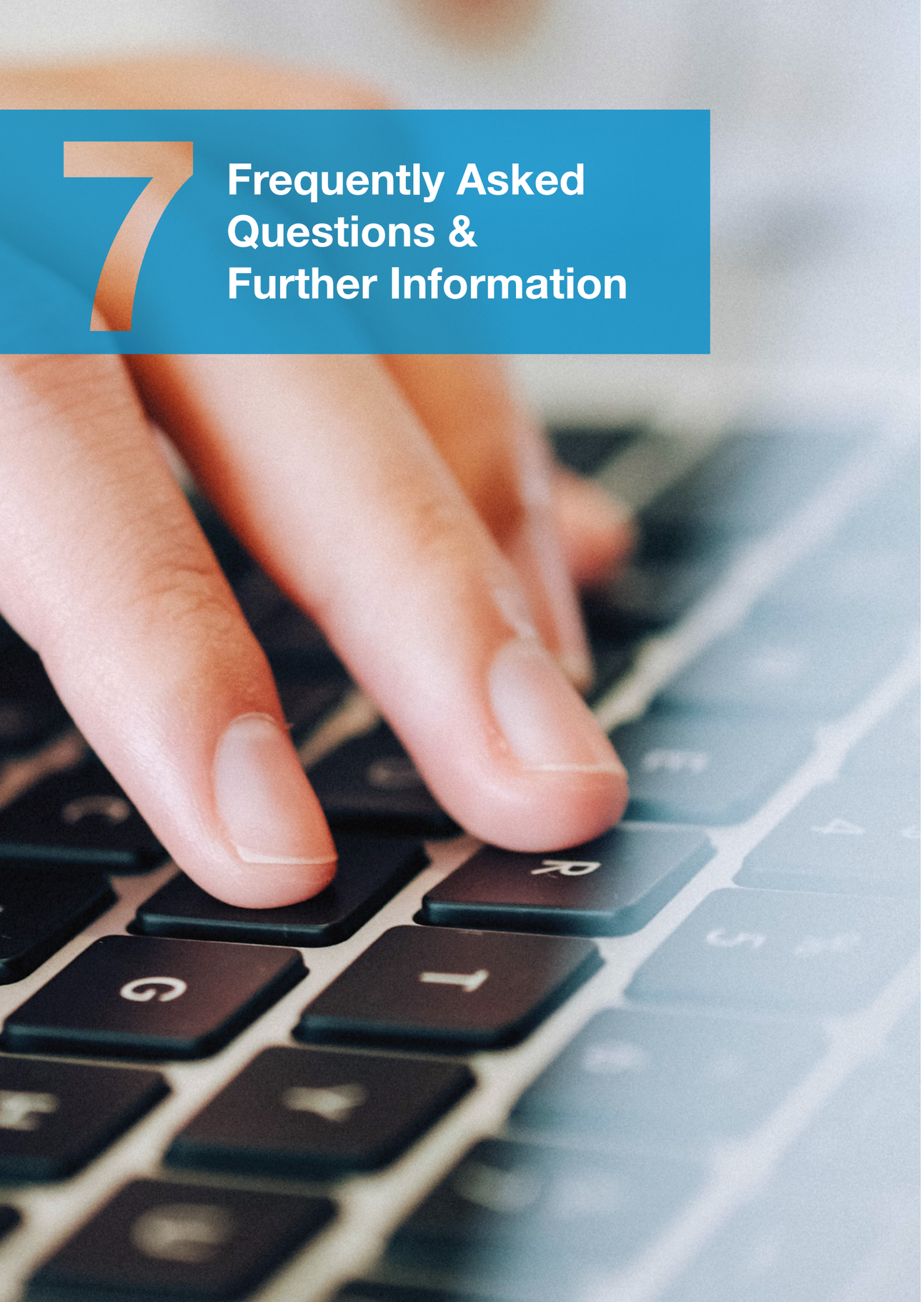
The SCORE pilot project here focuses on replacing existing block heating facilities powered by diesel and oil fuel with new ones fuelled by biomass in the form of locally produced wood chips.

The Italian pilot project aims at biomass power plants to be expanded by annually adding 1.3 MWh per installed MW capacity. Approximately 2,200 households will benefit from the project by changing their heating energy source from fossil to renewable. This process is further accompanied by energy efficiency measures.

Due to behavioural changes related to (co-) ownership of the new installations, the overall energy consumption is expected to be reduced by 14% per year. On average, households in the region consume an annual amount of 3,000 kWh. Assuming a 14% decrease in consumption, the energy demand will from then on amount to 2,632 kWh per year, yielding 368 kWh (3000 kWh – 2632 kWh = 368 kWh) annual savings per household. Consequently, the total of targeted energy savings amounts to 809,600 kWh (368 kWh * 2,200 households = 809,600 kWh) per year.

The local partners in charge of the Italian pilot are the Politecnico di Turino, the forestry and lumber cooperative La Foresta, the Consorzio Forestale, a company managing the forestry conjointly owned by the municipalities of the valley, and the social cooperative AMICO.

The 12th century Novalesa Abbey, where a biomass heating system is to be set up, replacing the current, inefficient diesel installation.



7 Frequently Asked Questions & Further Information

Frequently Asked Questions (FAQ)

What is the difference between a CSOP and a capital market investment?

In contrast to investment funds or the like, consumer (co-)ownership as conveyed by a CSOP is not subject to capital market regulations. As a CSOP typically invests in only one local project and then – unlike investment funds – operates the RE-plant, it is operationally active outside of the financial sector; with regards to the restricted group of persons targeted, i.e. the energy consumers living in the proximity of the RE plant, CSOP financing is also not a public offer.

Shares are not tradable in the financial markets. Furthermore, the CSOP Operating Company will typically hold a control interest in the RE plant that it administrates and operates.

How do CSOPs relate to RE-cooperatives?

A CSOP is complementary to a RE-cooperative, not a substitute.

The “one member one vote”-principle of a cooperative tends to be an obstacle for a partnership with small and medium-sized enterprises (SMEs) and commercial investors, since these co-investors generally prefer voting rights proportional to their shareholding. Furthermore, the necessity of a representation on management and supervisory bodies has been reported an obstacle to municipal investments. This is due to the fact that cooperative law does not acknowledge a right of delegation familiar to legislation on joint stock companies.

For this reason, cooperative projects often set up special purpose vehicles. CSOPs involve such a special purpose vehicle by standard but with a defined governance structure. Like this, they allow for the direct involvement of municipalities and strategic partners while safeguarding the interests of local partners.

Moreover, CSOPs offer an alternative in Eastern Europe where citizen energy projects are still rare and the cooperative model is sometimes associated with the socialist past.

Who can invest into a CSOP

As the CSOP business model uses the borrowing power of a corporation, it enables the participation of vulnerable consumers that have so far been under-represented. Empirical studies (e.g. Yildiz et al. 2015) show that citizen energy models typically involve a homogeneous group of investors (male, aged 50+, well-off, highly skilled). Through their leveraged financing approach, CSOPs allow for the participation of societal groups threatened by energy poverty (typically low-income households like single parents, unemployed, pensioners, etc.). Like this, CSOPs are more inclusive than established business models.

An online calculator that enables simulating the setup, amortisation and benefits of CSOP investments is under preparation.

With this dynamic interactive tool you will be able to calculate your individual CSOP projects.
www.score-h2020.eu

Image by Danial RiCaRoS from Unsplash

CSOP Prospects

CSOPs can be an important “bridge technology” in financing citizen energy projects because they extend the advantages of RE-cooperatives – particularly in cases where projects involve very different co-investors or where the cooperative model is not feasible for other reasons. This is especially the case in Eastern Europe, where citizen energy projects are still rare, and where the cooperative model is associated with the socialist past.

This is of particular relevance for “electricity/energy sharing” as introduced with the new legal European framework (see above page 7). Recital 71 RED II stipulates that “renewable energy communities should be able to share between themselves energy that is produced by their community-owned installations.”

Especially in energy cluster projects that target sector coupling and that may involve electricity sharing, storage, e-mobility, cogeneration, etc., it will become increasingly important to include professional operators because operation and maintenance of infrastructure can quickly become very complex. In this context, the CSOP provides a standard governance model that safeguards the interests of local partners with regards to their co-investors.

Further Information

CSOP financing is currently implemented by the SCORE project in three pilot regions: the Susa Valley (Italy), the city of Essen, (Germany) and the city of Litoměřice (Czech Republic). In these pilot municipalities, an existing renewable energy project at community scale is extended to include local consumers and citizens with the active involvement of the local government body.

A group of currently around 30 municipalities across Europe (IT, DE, CZ, PL, BG, ES, NL, FR) have become so-called "Follower Cities" supported by the SCORE consortium to replicate CSOPs locally.

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For more information visit

www.score-h2020.eu

Further reading

Lowitzsch, J., ed. (2019). *Energy Transition: Financing Consumer Co-Ownership in Renewables. Cham: Springer International Publishing.* The book provides an overview of consumer co-ownership in 18 countries across the globe.

Lowitzsch, J. (2019). *Investing in a Renewable Future – Renewable Energy Communities, Consumer (Co-)Ownership and Energy Sharing in the Clean Energy Package.* RELP 9, Vol. 2, pp. 14-36, Claeys & Casteels Law Publishers. The article explains the new EU rules of the 2018/19 RED II and IEMD with a focus on RECs.

Lowitzsch, J. & Hanke, F. (2019). *Consumer (Co-)Ownership in Renewables, Energy Efficiency and the Fight Against Energy Poverty – a Dilemma of Energy Transitions.* RELP 9, Vol. 4 pp. 5–21, Claeys & Casteels Law Publishers BV 9(3):5–21. The article discusses the fight against energy poverty and the inclusion of vulnerable consumers as prosumers in the energy transition.

Lowitzsch, J. , Hoicka, C., van Tulder, F. (2020). *Renewable Energy Communities under the 2019 European Clean Energy Package – Governance Model for the Energy Clusters of the Future?.* Renewable & Sustainable Energy Reviews, doi:10.1016/j.rser.2019.109489.

Lowitzsch, J. (2020). *“Consumer Stock Ownership Plans (CSOPs) – the Prototype Business Model for Renewable Energy Communities”,* Energies 2020, 13, 118; doi:10.3390/en13010118

Sovacool, B. et al. (2017). *New Frontiers and Conceptual Frameworks for Energy Justice. Energy Policy* 105, pp. 677–91.

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Image by Marco Ritzki