Community Energy in Europe

Collective wins on the legislative framework & inspiring initiatives

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Who is RESCOOP.EU ?

- European Federation of Citizen Energy Cooperatives
- Not for profit association
- Based in Belgium
- Brussels & Antwerp
- Founded in 2013
- 13 people staff
- 1.900+energy cooperatives
- 1 250+ million EU citizens
- Sector federation of Cooperatives Europe
- International Cooperative Alliance

What is an energy cooperative?

- Groups of citizens who jointly cooperate on energy transition projects
- Legal entity is not always relevant to refer to a cooperative
- 7 ICA principles
    - Voluntary and open membership
    - Democratic member control
    - Member economic participation
    - Autonomy and independence
    - Education, training and information
    - Cooperation among cooperatives
    - Concern for Community

What kind of activities do citizen energy cooperatives focus on?

- Production
- Supply
- Distribution
- Flexibility – Storage, Demand response, & VPP
- Energy monitoring
- District heating
- Transportation - E-car sharing
- Energy savings - Collective home retrofits

Acknowledgment:
definitions of renewable
and citizens energy communities

A set of basic rights
to participate
in the market based
on
non-discrimination

Enabling Framework
to promote
& facilitate
development of
energy communities

Equal footing
in accessing
renewables
support schemes

Proportional regulatory treatment
simplification of
administration and
procedures

+

Energy Union Governance:
monitoring & transparency of Member State action

REC and CEC, why 2 definitions?

Context: the legal perimeter

CEC → Electricity Directive

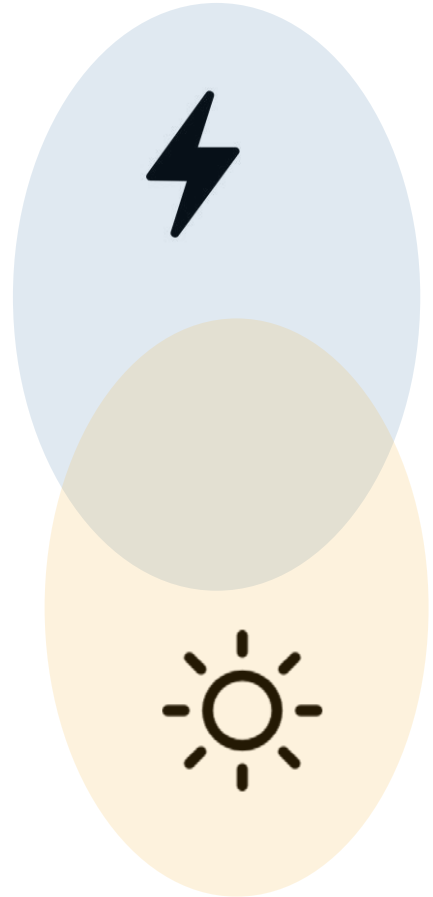
👍 **Includes** all activities related to **electricity**

👎 **Excludes** gas, biomass and other sources of heat

REC → RED II

👍 **Includes** all activities related to **RES** (incl. biomass, biogas, etc)

👎 **Excludes** non-renewable energies (natural gas and all fossil fuels)



Definition: CEC

11. '**citizen energy community**' means a **legal entity** that:

(a) is based on **voluntary and open participation** and is **effectively controlled by members** or shareholders that are **natural persons, local authorities, including municipalities, or small enterprises**;

(b) has for its **primary purpose** to provide **environmental, economic or social community benefits to its members** or shareholders or to the local areas where it operates rather than to generate financial profits; and

(c) **may engage in** generation, including from renewable sources, distribution, supply, consumption, aggregation, energy storage, energy efficiency services or charging services for electric vehicles **or provide other energy services** to its members or shareholders;

(Electricity Directive, art. 2, "Definitions")

Definition: REC

‘renewable energy community’ means a legal entity:

(a) which, in accordance with the applicable national law, is based on **open and voluntary participation**, is **autonomous**, and is **effectively controlled by shareholders or members** that are located in the **proximity** of the renewable energy projects that are owned and developed by that legal entity;

(b) the shareholders or members of which are **natural persons, SMEs or local authorities, including municipalities**;

(c) the **primary purpose** of which is to provide **environmental, economic or social community benefits** for its shareholders or members or for the local areas where it operates, rather than financial profits;

(REDII, art. 2.16)

Definition: REC

Member States shall ensure that renewable energy communities **are entitled to**:

(a) **produce, consume, store and sell renewable energy**, including through renewables power purchase agreements;

(b) **share**, within the renewable energy community, renewable energy that is produced by the production units owned by that renewable energy community, subject to the other requirements laid down in this Article and to maintaining the rights and obligations of the renewable energy community members as customers;

(c) **access all suitable energy markets** both **directly or through aggregation** in a non-discriminatory manner.

(REDII, art. 22.2)

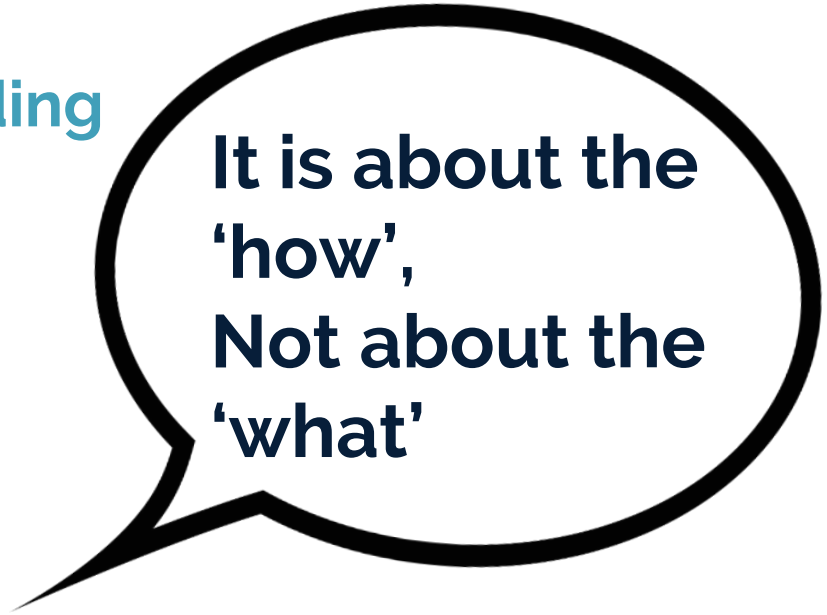
Organisational concepts

CEC (Electricity Dir.)	**REC** (REDII)
legal entity	**a legal entity**
voluntary and open participation	**open and voluntary participation**
-	**autonomous**
effectively controlled by members or shareholders	**effectively controlled by shareholders or members**
-	**located in the proximity**
members or shareholders that are **natural persons, local authorities, including municipalities, or small enterprises**	shareholders or members of which are **natural persons, SMEs or local authorities, including municipalities**;
primary purpose to provide **environmental, economic or social community benefits**	**primary purpose** of which is to provide **environmental, economic or social community benefits**

voluntary and open participation

effectively control by members

members are natural persons, local authorities, including municipalities, or small enterprises;



environmental, economic or social community benefits to its members as primary purpose

Cooperatives are energy communities

Citizen initiatives respecting the following principles:

- **Open and Voluntary Membership**
- **Democratic Member Control**
- Members' Economic Participation
- **Autonomy and Independence**
- Education, Training, and Information
- Cooperation Among Cooperatives
- **Concern for Community**

- A legal entity
- **voluntary and open participation**
- **autonomous**
- **effectively controlled by shareholders or members**
- **members are natural persons, local authorities, including municipalities, or small enterprises**
- **primary purpose of which is to provide environmental, economic or social community benefits**

International Co-operative Alliance

New way of doing things

Organisation, governance and objectives

Activities

CEC

- Self-consumption
- Electricity production
- Energy efficiency
- Electric mobility
- Electricity supply
- Aggregation
- Community network
- Energy sharing
- Other services

REC

RES self-consumption

District heating and cooling

Energy efficiency (linked to RES supply)

Electric mobility (using RES)

Electricity supply (from RES)

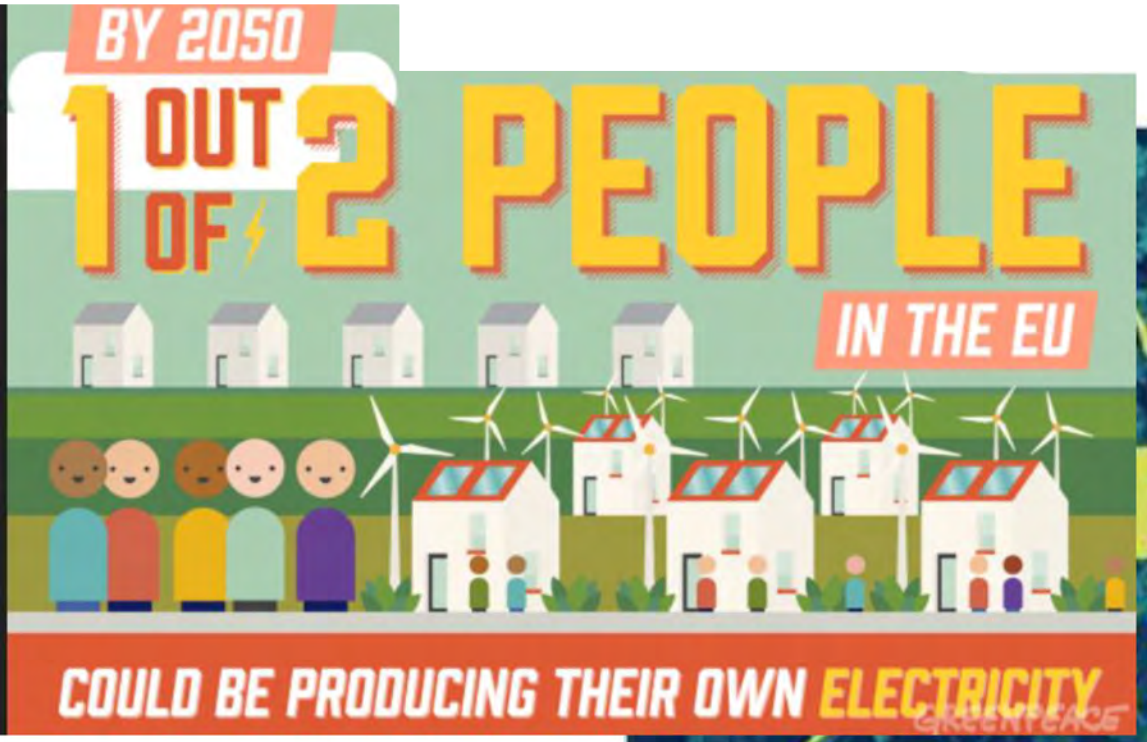
(RES) Aggregation

Energy sharing (from RES)

Transposition deadlines

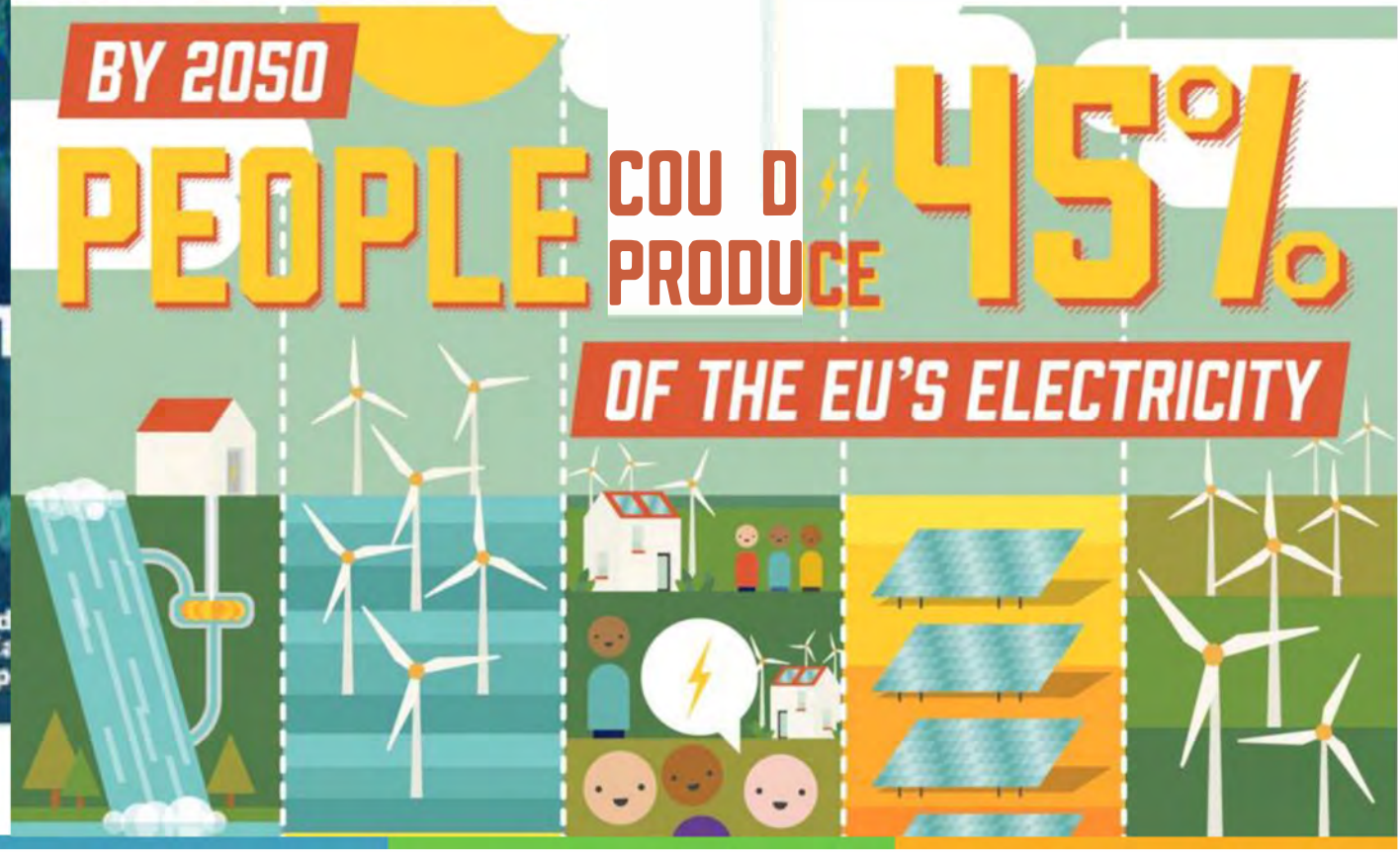
Dispositions of the Electricity Directive (CEC): 31 December 2020

Dispositions of the Renewable Energy Directive (REC): 30 June 2021


BY 2050
1 OUT OF 2 PEOPLE
IN THE EU
COULD BE PRODUCING THEIR OWN ELECTRICITY


EASHING


OF COMMUNIT
energycities


BY 2050
PEOPLE COU D PRODUCE 45%
OF THE EU'S ELECTRICITY

Recently…

"Today's proposals will enable the necessary ***acceleration of greenhouse gas emission reductions in the next decade****. They combine: application of emissions trading to new sectors and a tightening of the existing* ***EU Emissions Trading System****; increased use of* ***renewable energy****; greater* ***energy efficiency****; a faster roll-out of* ***low emission transport modes*** *and the infrastructure and fuels to support them; an* ***alignment of taxation policies with the European Green Deal objectives****; measures to prevent carbon leakage; and tools to preserve and grow our* ***natural carbon sinks****."*

Policy work

To protect the rights of

energy communities

and support the creation of the necessary

enabling frameworks

across the EU

Priorities

1. **Clean Energy Package** transposition and implementation

2. Following-up the implementation of the Governance Regulation dispositions related to **NECPs**

3. Following up the **State-aid legislation revision**

4. Contribute to the **“Fit-for-55” Package**, including the Renewable Energy Directive and the Energy Efficiency Directive.

5. Contribute to the revision of the **Energy Performance of Buildings Directive**

Transposition Tracker Tool

What legal support are different EU countries giving to community energy?

This tool tracks how EU governments are putting the policies in place under the EU's clean energy laws that should support community energy. We refer to two main Directives: the Renewable Energy Directive (REDII) and the Internal Electricity Market Directive (IEMD).

Do you have more information about the situation in your country? Contact us.

Ongoing analysis of the status of the transposition

Focus on definitions

- Specific purpose
- ICA cooperative governance principles
- Legal entities allowed
- Citizen participation
- Designated overseeing authority
- Number of definitions

State aid Guidelines

The draft CEEAG do very little to create a fair and level playing field for RECs. Specifically, the draft CEEAG:

- Do not provide **sufficient recognition for the different factual situation** of smaller and non-commercial market actors, in particular RECs;
- Do not acknowledge **the market failures that prevent communities** from taking more ownership in the renewables sector, or the fact that the REC sector is still very new or non-existent in many Member States;
- Mandate **market-based competitive bidding procedures** for support to renewable energy sources without factoring in the challenges small and non-commercial market actors face to access such schemes; and
- Fail to balance cost-efficiency and other market-based outcomes against other social policy considerations such as **inclusiveness** and **public acceptance**.

To align with Green Deal and CEP

The draft CEEAG must include:

1. Dedicated provisions on RECs acknowledging their **unique market position and challenges** as non-commercial market actors;
2. **Increased thresholds to exempt RECs** and other small renewables production installations from having to participate in competitive bidding procedures;
3. Clear and concrete **guidance to help Member States integrate RECs** into their support schemes consistent with their legal obligations under the RED II;
4. Simpler **administrative burdens** on Member States that want to create **dedicated support for RECs** in their national renewables support schemes;
5. Acknowledgment of **social impacts on local communities** from renewable energy projects, along with supportive provisions on the integration of **social criteria** into competitive bidding procedures for renewables; and
6. The continuation of **dedicated chapter for support** to renewable energy

Community Energy initiatives in Europe

Netherlands

Zuiderlicht

- Solar PVs on roofs of schools, public and private buildings
- Participation in wind projects
- Central aim is the education and empowerment of citizens for their participation in the energy transition

Deltawind

- Wind and solar parks
- The biggest community owned wind park: 34 wind turbines - 100 MW
- Collaboration between 2 coops Deltawind & Zeeuwind (4.000 members)
- Energy production for more than 100,000 consumers

Belgium

Ecopower - Amel & Büllingen

- Wind farm of 4 wind turbines
- Citizen participation as prerequisite in tender
- Joint ownership model
- 50% ownership citizens
- 50% ownership municipalities

Pajopower – Halle

- Replacing 445 public street lights by LED
- Investment 225.000 euro
- Loan provided to the municipality

Beauvent – Oostende

- Cooperative district heating network
- Getting rid of gas
- Private homes
- Public buildings
- SMEs

Spain, Portugal

Som Energia

- First energy cooperative in Spain - 2010
- More than 70.000 members
- RES production of more than 18,50 GWh/year

Coopérnico

- First energy cooperative in Portugal - 2013
- More than 1.800 members
- 21 Solar PV stations rising to a total capacity of 1,9 MWp

Spain

Xenergia

(Som Energía, La Corriente, ONGAWA)

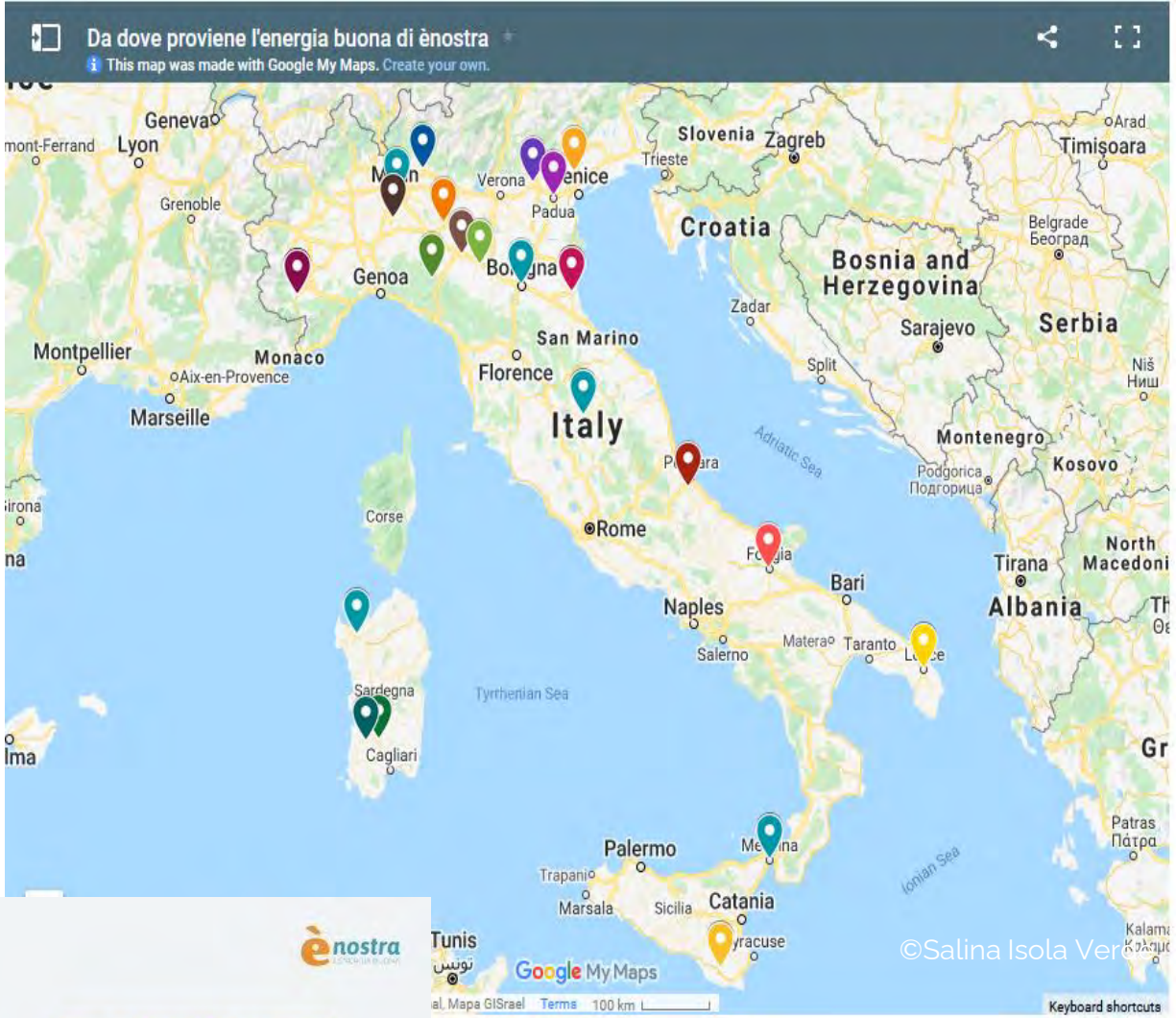

©El salto diario


©El salto diario

Italy

enostra

- Staff employed: 21
- Number of members: 5,790
- Electricity sold (MWh): 13,982 MWh Renewable energy with GO 100%
- Electricity produced by selected plants (MWh): 2,899 MWh (17% of the total energy sold)



Greece

Sifnos

- First energy cooperative in Greece
- Focus on raising awareness:
  coop helped in addressing concerns about
  the installation of 2 wind turbines on the island

- Municipality became member of the cooperative
- Recently the permit has been received for the
  development of a hybrid wind & pumped hydro plan

Greece

ESEK (Karditsa)

- Local Biomass
- Wood pellets
- Becoop (Horizon Europe) support
    - the creation of new bio-coops in Europe

Greece

Hyperion Virtual net metering (Athens)

HYPERION
SOLAR COMMUNITY

Credit: Hyperion Solar Community by Electra

https://www.youtube.com/watch?v=ptwRBKVnRVU

Energy Communities in Greek law

Article 1(1) of the Greek Law 4513/2018 (Energy Communities and other provisions) defines ECs as:

"*a cooperative with the sole purpose of* ***promoting a social and solidarity economy*** *and* ***innovation*** *in the energy sector,* ***tackling energy poverty*** *and promoting* ***energy sustainability****, production, storage, self-consumption, energy distribution and supply, enhancing energy self-sufficiency and security in island municipalities, and improving energy efficiency in end-use at local and regional level through the activation in the fields of Renewable Energy (RES), Cogeneration and High Efficiency Heat (CHP), rational use of energy, energy efficiency, sustainable transport, demand and production management, distribution and supply of energy.*"

→ **Means: technology** (RES, CHP, EMS) **+ efficiency + sufficiency**

Energy poverty in the Directives

*"Community energy offers an **inclusive option for all consumers** to have a direct stake in producing, consuming or sharing energy. Community energy initiatives **focus primarily on providing affordable energy** of a specific kind, such as renewable energy, for their members or shareholders **rather than on prioritising profit- making** like a traditional electricity undertaking."*

(Electricity Directive, recital 43)

*"Empowering jointly acting renewables self-consumers also provides opportunities for renewable energy communities to **advance energy efficiency at household level and helps fight energy poverty** through reduced consumption and lower supply tariffs."*

(Renewable Energy Directive, recital 67)

Information

Pajopower reaches out to people in socially vulnerable neighbourhoods with their "**Klimaatmobiel**". People are curious and go and check it out. This is how they gain **trust**.

They talk to these people about the energy transition, the importance of **energy savings and renewables** and they teach them to switch energy suppliers, how to take action in their private homes and how to apply for subsidies.

© De Klimaatmobiel by PajoPower

Info and capacity building

With ‘Gent Zonnestad’, Energent helps **households that rent their dwelling** invest in renewables. They help facilitate the provision of **legal advice to both tenants and homeowners** on how they can develop shared projects.

To combat energy poverty, Energent works with a local charity that works to **help low income households invest in energy performance measures**, even if they don't own their dwelling.

© Gent Zonnestad by Energent

Circular investment and training

'**Brixton Solar**' community power project **allows tenants in social housing to make smaller investments** in the projects, and gives them a limited amount of the electricity produced with solar panels on their own roofs for free.

Part of the revenues from the project go into a **dedicated energy efficiency fund** that allows people to take part in **'draught buster' workshops** to help them cut energy waste and save further on their energy bills.

The cooperative also provides **training opportunities** for youth living in the local community through **an internship programme**

© Brixton Energy

Solidarity-based energy finance (i)

With its support lab, Les Amis d'Enercoop, Enercoop is implementing 'Energie Solidaire', a **solidarity fund that raises money through micro-donations from** energy bills of **consumers and** produced energy donated by renewables **producers** to support local social initiatives tackling fuel poverty

énergie solidaire

enercoop
L'énergie militante

©Energie Solidaire

Solidarity-based energy finance (ii)

Coopérnico provides Cooperative Loans* to its members, by allowing for **members to lend capital to the cooperative** to install solar PV panels on the rooftops of charities (already €1,2 M of investment).

Coopérnico is adapting it to enable members to **borrow from other members with low interest rates.** This capital is then used for self-consumption **RES equipment or in energy efficiency measures** with a low payback time. Interest rates range from 2.5% to 4%, much **lower rates than available banks or utilities offers** in Portugal.

*The scheme was awarded by the Social Innovation to Tackle Fuel Poverty programme by Schneider Electric and the Ashoka Foundation

Ireland

Energy Communities Tipperary Cooperative

- A **One-Stop-Shop for Community-led, home insulation upgrade and retrofitting**
- Assist in grant aid, sourcing of contractors and project overseeing
- Funding from the Sustainable Energy Authority of Ireland (SEAI) and in partnership with the regional energy agency and community development company (community loans)
- Between 2012 – 2019 already **827 houses and 25 communal/commercial buildings** in 13 communities have been renovated, leading up to **8.8 GWh** in energy savings through a 10.2 million Euro investment

Belgium

Partago - Ghent

- Created in 2015 by 5 neighbourhoods
- With the support of 740 citizens and local small enterprises, the cooperative possesses 74 cars and a digital sharing platform

Belgium

CoopStroom - Bruges

- CoopStroom is a REScoop from Belgium
- Active in photovoltaic panels installations on public buildings and schools

Statute

Energy production & Energy efficiency projects, Energy generation, distribution & storage, Insulation, lighting, ecological building material, Advice

Belgium

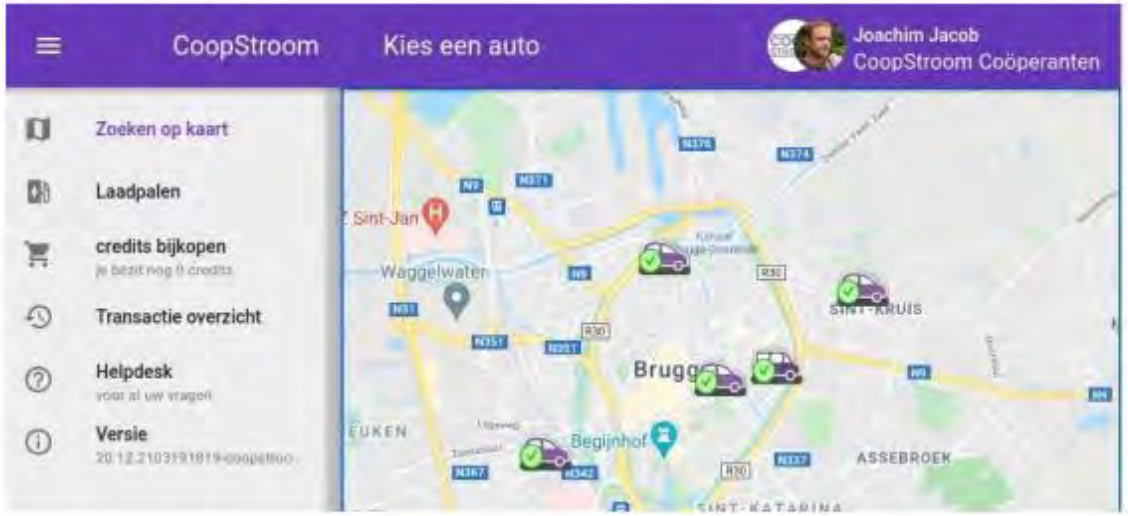
CoopStroom - Bruges

- In 2018 they decided to start with electric car sharing.
- After getting into contact with Partago they decided to get first subsidy-projects for acquiring electric vehicles and sharing them.
- They now have 23 e-cars
- E-cars shared between civil servants and coop members (morning vs. night and weekend use)

Success story : CoopStroom (BE)

Key take aways of CoopStroom

- They partnered with **local car dealers** to get good prices
- They partnered with **local municipalities**, which use the shared cars for professional trips
- They partnered with Partago for the **TMF app**.

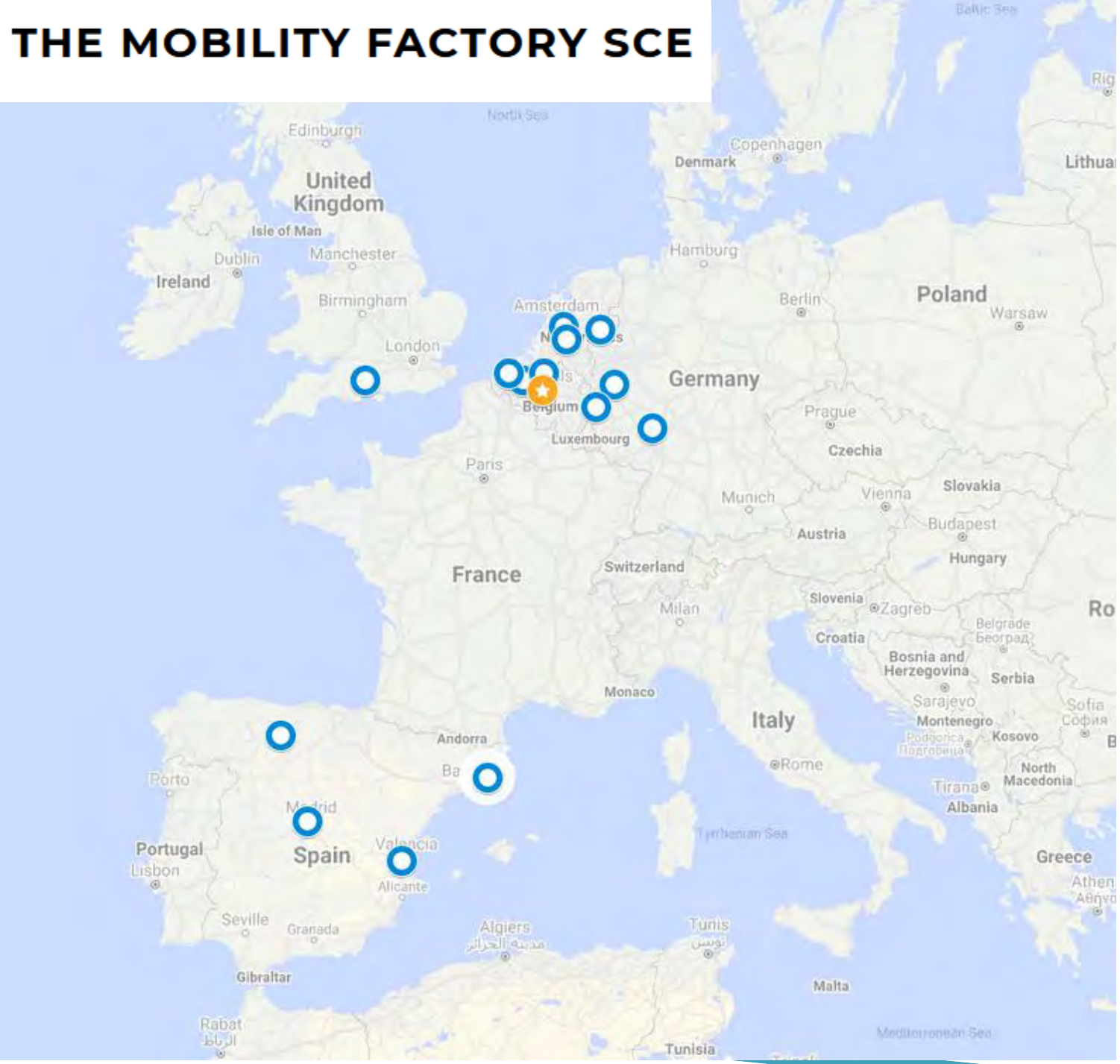


Challenges they faced:

- Operational in remote areas, increases follow up challenges.
- Lot of subsidies, requiring follow up work.
- Need to convince the board to see the value in electric car sharing. Few board members see the link with climate change and energy transition.

The Mobility Factory SCE - Milcampslaan 105 - 1030 Schaarbeek - Belgium
www.themobilityfactory.eu - info@themobilityfactory.coop

THE MOBILITY FACTORY SCE



- TMF is a European Cooperative Society, founded in 2018 by 8 cooperative enterprises
- Every cooperative enterprise engaged in sharing e-cars can become member and benefit from the services and IT of TMF.

Critical success factors in cooperative e-car sharing

Community

- Users are cooperative members
- **Reliable users: less damage, less costs**
- Mutual assistance with onboarding
- Assistance with maintenance
- The feet and eyes on the ground

Location

- Density of neighbourhoods
- Mobility habits
- City size
- Number of vehicles at stations
- Number of vehicles
- Security
- Charging
- 24h/7 Access

Critical success factors in cooperative e-car sharing

Cooperation

- Users are cooperative members
- **Connection to the local partners**
  - Municipalities
  - Local enterprises
  - Universities
  - ,,,
- Cooperation between local / national initiatives
- **International Cooperation between coops**

Model

- Car-sharing model
  - Local vs Regional
  - Station based vs free floating
  - Public service vs communities
  - Fleet
- Business model
  - **Clear** pricing for end-users
  - **Clear** financing of new vehicles
  - **Clear** service level agreements: provided level of insurance, maintenance
- Growth

Critical success factors in cooperative e-car sharing

Efficient, reliable and automated processes

- Mobility is an 24/7 service
- Booking of vehicles via **online platform app**
- Locking and unlocking via app
- Helpdesk telephone
- Damage **follow up processes**
- Fine follow up processes
- Automated payment & invoicing Reliable IT is key

Clear Communication

- Onboarding new members
- **First users**
  - Cars
  - Stations
  - Model
- Pre usage
- Usage
- Post usage
- Incidences

A wide variety of energy communities across the EU

Technologies

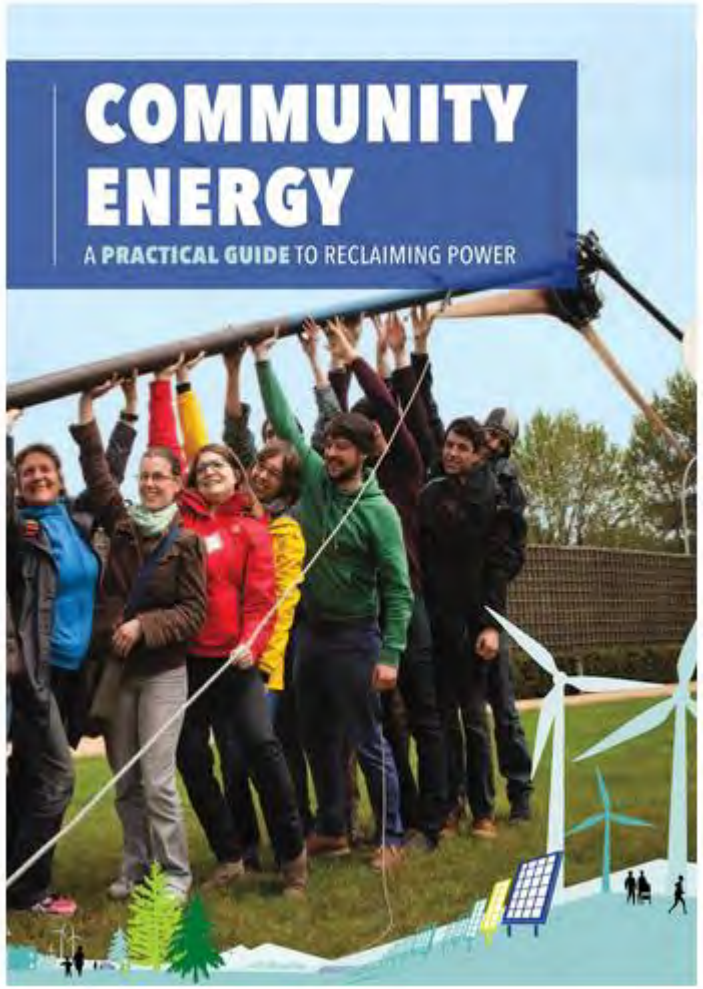
Number of projects

Members' involvement

(De)centralisation

RES generation / Membership focus

Support framework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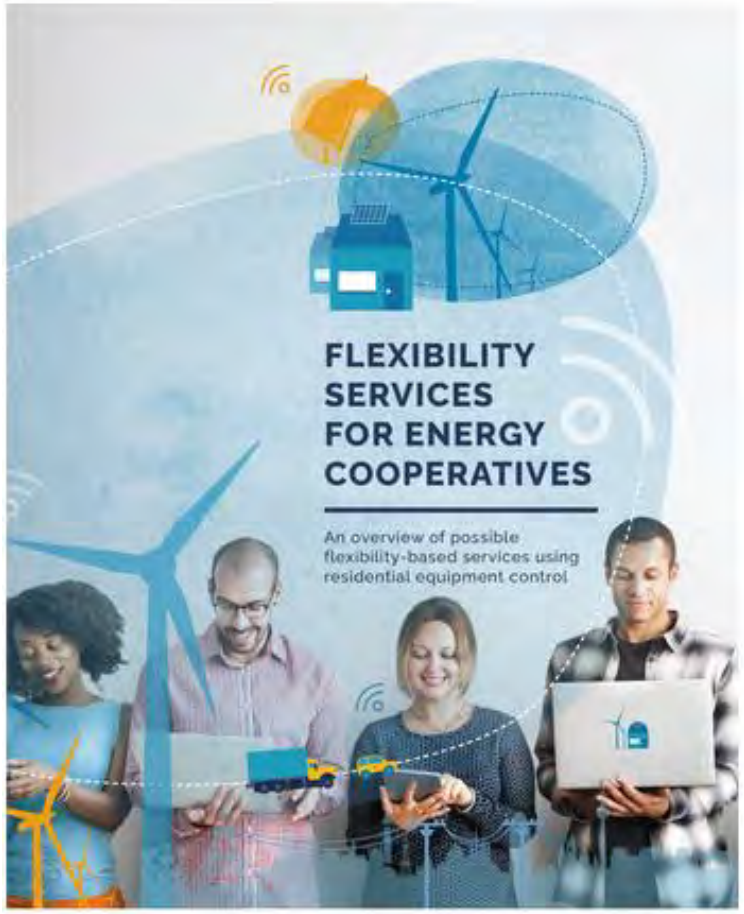
ENERGY
A PRACTICAL GUIDE TO RECLAIMING POWER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