

# e-SMART TRAINING MATERIAL

## Energy communities

## The e-SMART project

While electrification of private transportation has continued to expand constantly, ambitions should move forward towards electric vehicles solutions in Last-Mile-Logistics (LML) and the Local Public Transport (LPT), with electricity generated from renewable energy sources.

The decarbonisation of the transport sector and particularly the mass deployment of electric vehicles need truly interoperable roll-outs of electric vehicle charging infrastructures powered by renewable energy as well as an intelligent charging management to prevent peak loads. This is especially important in the Alpine Space, where mobility and transport have always played a significant role.

The e-SMART project addresses this challenge: Bringing developments in e-mobility in LML and LPT together and improving the electric vehicle ecosystem building up on the concept of smart-territorial relationships.

Find out more about the e-SMART project:  
[www.alpine-space.eu/projects/e-smart](http://www.alpine-space.eu/projects/e-smart)

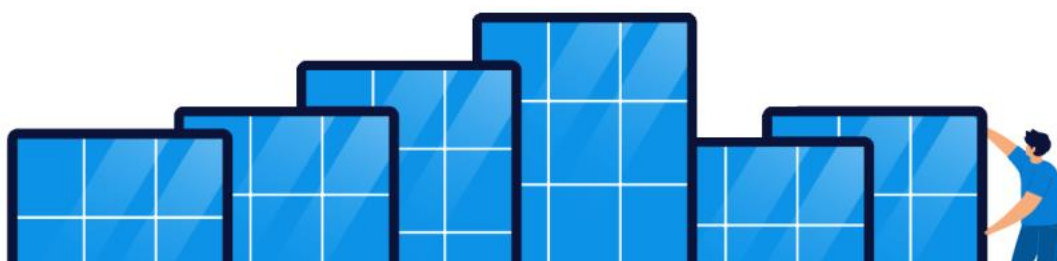


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## Objective

This training material aims at presenting the legislative framework on energy communities, which was introduced by two European directives, explaining the concept and definitions and analyzing the expected impacts on the energy ecosystem evolution.



## 1. Introduction

Energy Communities are coming more and more on the front of the stage when it comes to analysing the new market players in the energy ecosystem. They were recently introduced through the “Clean energy for all Europeans package” by the revised directive 2018/2001 on renewable energies and the directive 2019/944 regarding the electricity market. Member States are now in the process of transposing this new concept in their national regulation. What’s new is the importance which is given to citizens and final users in various fields of the energy system, which used to be the private ground of professional companies up to now. It is expected that citizens become more active and fully integrate the energy transition. Then, the introduction of energy communities in the energy landscape appears to be an important turning point, which will push forward new business and governance models.

## 2. Definition of energy communities

The European Clean Energy Package recognize, for the first time in the European regulation, that citizens and communities have some rights to participate actively in the energy transition. The directives 2018/2001 and 2019/944 introduce the definitions of energy communities and require Member States to develop an enabling legislative framework so that these communities can operate on an equal footing compared to other players on the energy market.

Energy communities are legal entities whose governance actively involves citizens and whose activities are related to energy transition, with a non-commercial approach. The two EU directives introduce two definitions for energy communities:

- **Citizen Energy Communities (CEC)** described by directive 2019/944
- **Renewable Energy Communities (REC)**, described by directive 2018/2011

Though these two concepts are quite close, they contain significant differences that have to be detailed.

### a) Legal form

Both REC and CEC have to rely on a legal entity, which can be an association, a cooperative, a non-profit enterprise or any other organisational form, provided the definition criteria are met.

### b) Membership

Both REC and CEC are based on an open and voluntary participation of their members, which means that participation cannot be based on discriminatory criteria and that members have the right to leave the community whenever they want.

The members who are eligible to participate in energy communities are slightly different according to the type of community concerned, as showed in the table below.

REC	CEC
natural persons	
local authorities (including municipalities)	
small and medium enterprises whose participation does not constitute their primary economic activity	small, medium or large enterprises (see further below the restrictions on governance)

### c) Governance

Beyond the eligibility to membership, energy communities also have specific requirements regarding the way decision-making is controlled. Both of them have to be autonomous, which means that the governance is jointly shared between the members. The main difference between REC and CEC concerns the geographical perimeter: whereas REC have to be locally rooted in a given territory, CEC can be owned and controlled by members coming from anywhere. Member States have discretion to elaborate their own definition of geographical proximity. Regarding CEC, some safeguards have been put to limit the risk of abuse by commercial companies: only small enterprises can play a part in the effective control of the community.

REC	CEC
effectively controlled by shareholders or members that are located in the proximity of the projects	Effectively controlled by natural persons, local enterprises and small enterprises. No decision-making power should be conferred to members or that are engaged in large-scale commercial activity and for which the energy sector does not constitute a primary area of economic activity."

### d) Purpose

REC and CEC are required to give priority to environmental, economic or social community benefits for their members and the local areas. They can't be focused on financial profits.

As for their activities, REC can only operate across the electricity sector whereas REC are entitled to bear activities on renewable energies. Member States can grant or not to citizens the right to own and operate grid infrastruc-

tures through CEC, which means that in that case CEC become responsible for the quality of supply.

REC	CEC
Produce, consume, store renewable energies Share the energy with the members as customers Access all the suitable markets	Produce, including from renewable sources, distribute, supply, consume, aggregate, store, develop energy efficiency services or charging services for electric vehicles or provide other energy services to its members or shareholders; Share the electricity in the community

### 3. An enabling framework for energy communities

The European directives clearly state that the Member States have to ensure an enabling framework to facilitate the active participation of citizens and communities in the energy system. Dedicated measures have to be implemented to create a favourable environment and mitigate the regulatory challenges which are faced to access the markets. Thus it is expected that the following requirements are met:

REC	CEC
No discriminatory treatment Fair, proportionate and transparent procedures Removal of unjustified barriers	Non-discriminatory, fair, proportionate and transparent procedures and charges
Access to the markets	Access to all electricity markets, either directly or through aggregation
Cooperation with DSOs	Are financially responsible for the imbalances they cause in the electricity system CEC can operate a distribution network, with dedicated network charges and in close relation to the other networks to which their network is connected

It is also expected that Member States succeed in defining consistent frameworks for REC and CEC. Actually, the two definitions are very close but differ

anyway on some key points. When looking closely to these definitions, it comes out that most of the times REC can be considered as a specific sub-category among CEC. Actually, the REC definition fits the CEC definition but includes some specific additional requirements, such as the obligation of a local control. Nevertheless, this is not totally true since in REC, medium-sized enterprises can exercise an effective control on the community, provided they are local, whereas in CEC, only small enterprises can access this level of commitment (whether local or not). Thus, the transposition of the two definitions is not so easy and Member States should be particularly cautious in ensuring as much consistency as possible between the two concepts.

It is also of utmost importance not to mix the definition of energy communities with other existing concepts such as collective self-consumption, which corresponds to a specific activity and is much more restrictive.

## **4. Outputs and benefits**

### **a) Environmental benefits**

The introduction of energy communities in the European legislative package is a clear signal to foster citizens' empowerment on energy issues. The role of citizens and communities are finally acknowledged as a relevant lever to help EU Member States meet their climate objectives. It is also an opportunity to push forward more decentralized renewable energy production and to support the development of non-commercial market actors.

As regards the energy system, energy communities can host innovative solutions which bring more flexibility. They aim at keeping closely connected to the main networks, even if in some cases stand-alone systems might be implemented, and then they shall behave in an interactive way with them.

### **b) Social benefits**

But energy communities go even further and also drive social innovation: by engaging citizens in collective actions, they reinforce the social cohesion and reinforce democratic practices, whatever be the financial capacity of their members. Social benefits can extend to other activities such as solidarity initiatives or education and training for children and students.

### **c) Economic benefits**

Beyond the return on investment which can be brought back to their members, energy communities can contribute to the local economy and generate local jobs. The outflow of financial resources is avoided and local value is gained by the territory.

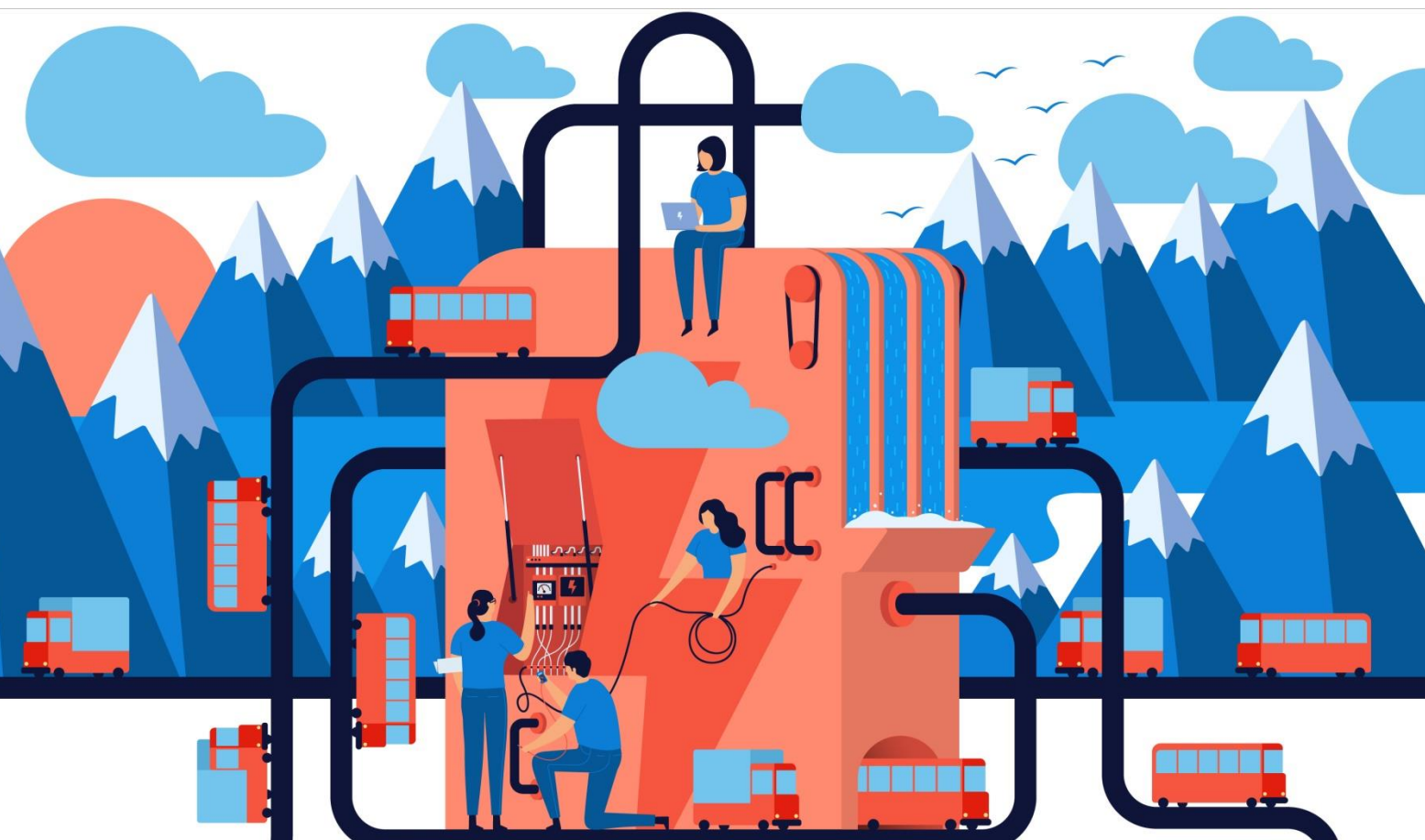
Depending on the type of project which is developed, energy bills can also be reduced at the household level and energy poverty can be alleviated.



## 5. References & Further Readings

Directive 2018/2001 on the promotion of the use of energy from renewable sources	<a href="#">link</a>
Directive 2019/944 on common rules for the internal market for electricity	<a href="#">link</a>
Energy Communities under the Clean Energy Package, transposition Guidance, RESCOOP 2019	<a href="#">link</a>
Energy communities: an overview of energy and social innovation Caramizaru, A. and Uihlein, Publications Office of the European Union, Luxembourg, 2020,	<a href="#">link</a>
Collective self-consumption and energy communities: Overview of emerging regulatory approaches in Europe COMPILE project, June 2019	<a href="#">link</a>
Energy communities webinars ECO-SESA project	<a href="#">link</a>





## Imprint

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