

NEWS

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SOLutions for URban  
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Circular Economy  
policies and Dc  
backbones


Leiedal Intermunicipal  
Association, Belgium

TOPIC

Circular economy

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UIA EXPERT

# What are Energy Communities?

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Energy Communities have had considerable press coverage recently and RE/SOURCED always had an Energy Community as one of the integral elements of its design. But what are Energy Communities, why is everyone talking about them now and why did RE/SOURCED incorporate one?

## What are Energy Communities?

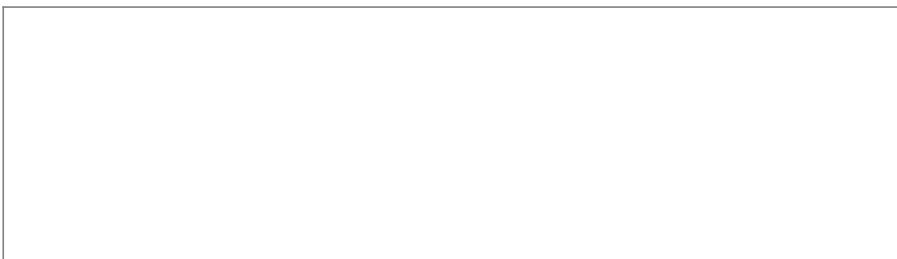
This is one of the challenges - historically, there has not been a consistent definition for what an energy community comprises. Until a few years ago, they were broadly considered to be a recognised grouping or entity that allows citizens and certain commercial organisations to come together to deliver energy initiatives that benefit the members of a community.

One of the earliest cited European examples was in Italy in the early 1960s where a community was formed around the creation of a hydroelectric scheme. These types of groups continued to form sporadically in the '60s and '70s but became more numerous in the 1980s with the emergence of community based renewable generation (notably wind) and the provision of local grids for communities who did not have access to the public grid. An example would be the community on the Island of Eigg in Scotland.

While this was the case historically, things have changed recently, notably in Europe.

## Why is everyone talking about them now?

The EU *Clean Energy for All Europeans Package* recognized, for the first time within EU law, the rights of citizens and communities to engage directly in the energy sector. The Directives associated with the Pack also introduced the role of the *prosumer* - individuals who produce their own energy and consume energy from the public grid - and collective forms of energy users and generators. The *Clean Energy for All Europeans Package* defines two distinct types of Energy Community namely, *Citizen Energy Communities* (introduced in the revised Internal Electricity Market Directive) and *Renewable Energy Communities* (introduced in the revised Renewable Energy Directive). The definitions of the two types are a little inconsistent but they can broadly be summarised as follows:



<p><b>Citizens Energy Community</b></p> <ul style="list-style-type: none"> <li>● <b>Electricity generation only</b></li> <li>● <b>Consumption</b></li> <li>● <b>Storage</b></li> <li>● <b>Sale &amp; Supply</b></li> <li>● <b>Energy sharing</b></li> <li>● <b>Distribution</b></li> <li>● <b>Aggregation</b></li> <li>● <b>Energy efficiency services</b></li> <li>● <b>EV support</b></li> </ul>	<p><b>Renewable Energy Community</b></p> <ul style="list-style-type: none"> <li>● <b>Electricity generation only</b></li> <li>● <b>Consumption</b></li> <li>● <b>Storage</b></li> <li>● <b>Sale &amp; Supply</b></li> <li>● <b>Energy sharing</b></li> </ul> <p><b>Thus, no...</b></p> <ul style="list-style-type: none"> <li>● <b>Distribution</b></li> <li>● <b>Aggregation</b></li> <li>● <b>Energy efficiency services</b></li> <li>● <b>EV support</b></li> </ul>
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Other differences between the two types include:

- Renewable Energy Communities must be formed around projects that are in the geographic area in which the Communities' members are based and the project will be implemented whereas Citizens Energy Communities can support projects in other locations
- Renewable Energy Communities can only engage in projects generating renewable energy - Citizens Energy Communities can support fossil fuel as well as renewable energy projects
- The membership of Renewable Energy Communities can include small and medium sized enterprises whereas Citizens Energy Communities can have large firms as members - while energy companies and DSOs can be members, they cannot have overall control of the community, as this must rest with non-energy sector members.

There are two principal drivers of the recent increased interest in Energy Communities. First is this formal recognition of energy communities by the EU through the Clean Energy for All Europeans Package. The two Directives introduced legally a clearly defined role for citizens and groups of citizens wishing to generate (renewable) energy locally.

The second driver is the rapid fall in price of solar PV technology coupled with the recent very sharp rises in energy prices. These market changes coupled with the timely introduction of legislation that formally define Energy Communities within the EU legislative context and the growing urgency of the climate crisis has led to increased interest by municipalities, urban regeneration agencies and citizens' groupings in forming energy communities.

### “Not so fast, Mr Bond”

So, there are two EU Directives, each reinforcing the role and profile of citizens in the energy system, and giving them explicit rights to form energy communities and produce electricity for their members and to seek any surplus to the public grid. It's all clear and all good - anyone can generate their own electricity while selling the surplus to others or the public grid?

Well, not quite. There are two variables that need to be factored in. The first is a member state's pre-existing legislative infrastructure. Each member state must adopt the Directives into their respective legal systems and member states are tending to “fit” the new legislation around pre-existing measures. Consequently, there may be different interpretations and implementation of the rules governing the formation of energy communities in different member states. This was an issue for RE/SOURCED - while the Directives recognise that an individual's rights must be respected, they are less clear in defining how a community could be a recipient of renewably

produced energy. The challenge faced by RE/SOURCED was partly due to the way the Directives were drafted and partly due to the way they were adopted within Flanders legislation.

The second is the capacity of the public electricity grid in the locality where the new generation will take place. This is not directly linked to legislation, but in some member states, legislation states that local energy generation must effectively be "off grid" (so all of the generated electricity must be used by the local consumer(s) or be stored off grid) due to limitations in public grid capacity. These anticipated restrictions could last until 2030 or beyond.

### Why does RE/SOURCED incorporate an Energy Community?

The Principal reason that RE/SOURCED includes an Energy Community within its design is to strengthen local governance and citizen participation - specifically, to enable local energy users to have a say in how their energy is generated and used and how the pricing should operate. A secondary reason is to maximise the usage of renewably produced energy by local businesses and citizens, thereby addressing a key sustainability goal of the project and its partners.

Energy Communities can own assets. In the case of RE/SOURCED, the partners are using UIA investment to construct the generation capacity (solar PV arrays, a wind turbine). Once operational, it may be that ownership and operating responsibility for these assets will pass from the RE/SOURCED project partners to the community and there would need to be a legal entity in place to whom the ownership can be transferred - this may be the Energy Community.

Before that can happen, the RE/SOURCED partners must ensure that there is a viable operating model that will allow the Energy Community to operate in a financially sustainable way. This will consider income, costs and the on-going investment required to keep the energy assets (production and storage) performing optimally. This operating model is currently being prepared by Leiedal, the Lead Partner.

### Concluding thoughts

The inclusion of Energy Communities within two key EU energy Directives is significant. They complement the increased profile of citizens within the Directives and they strengthen community representation within the energy sector - of critical importance in Europe currently. The Directives also provide a more formal definition of what comprises an Energy Community. Overall, they assist with the democratisation of energy for European citizens.

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