

The smarter E Europe

The smarter E Europe Conferences

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THE SMARTER E EUROPE TREND PAPER: ENERGY SHARING IS ESSENTIAL FOR THE DEPLOYMENT OF RENEWABLES

Munich/Pforzheim, June 2023 – There is widespread demand from society and governments for citizens to be part of the renewable, decentralized and digital energy world. The European Union (EU) has been demanding the implementation of energy sharing from their member states since 2021. Energy sharing involves a shared generation as well as consumption and distribution of electricity from renewable sources of energy. But progress has been patchy across the EU-27: While countries such as Austria, France and Italy are performing well, Germany, for example, is lagging behind.

Citizen energy communities and tenant power

Energy sharing allows regional electricity consumers (households, municipalities and small and medium enterprises) to establish renewable energy communities (REC) or citizen energy communities (CEC) and jointly operate renewable energy systems. As part of energy sharing, tenant power models provide solar power directly from the roof to different tenants in the same residential building.

Energy sharing relieves power grids

This means that direct participation in the new energy world comes with reduced prices for citizens. Furthermore, it incentivizes decentralized consumption of renewable energy in line with the generation profile, thus taking the burden off the power grids. For these reasons, the EU requires its member states to implement and legally facilitate nationwide energy sharing (Article 22 of the Renewable Energy Directive, RED II).

Generation: Yes – Self-consumption: No

However, in countries such as Germany, the implementation of the EU's directive has not yet taken off. Although citizen-owned energy generation is already widespread – about 1,000 citizen energy communities build and operate PV and wind power plants – it is not available for self-consumption in Germany. As a result, citizens with a share in an energy community have no incentive to align their consumption with the generation of their shared powerplant. Even with the recent adjustments to the EEG 2023, the tenant power model is still considered too bureaucratic and cumbersome, especially for apartment buildings with a small number of tenants.

BEE calls for enabling citizen participation

“The energy transition is a democratic participation project. It hinges on the involvement of many local, regional and transregional stakeholders. However, the tight legal framework excludes a large part of the population,” Simone Peter, President of the German Renewable Energy Federation (BEE), criticizes. “For people and communities who do not own

real estate or properties to shape the energy transition and benefit from cheap renewable energies, the German government must follow the guidance from Brussels and enable extensive energy sharing across Germany. This would speed up the energy transition and increase the acceptance for the deployment of renewables," Peter explains.

Energy Sharing in Italy

Several EU member states are leading the way in energy sharing. In Italy, it has already been possible since 2020 and the Italian government implemented the provisions of the European Renewable Energy Directive II at the end of 2021. Members of same energy community must be connected to the same high-voltage substation, and the size of the power plant is limited to a capacity of one megawatt. An incentive system rewards grid-serving, decentralized consumption: In addition to the market premium, plant operators receive a premium for shared energy of 11 cents per kilowatt hour generated and consumed by the community. The EU has approved this according to state aid rules.

Energy Sharing in Austria

In Austria, renewable energy communities can generate, store and consume, as well as sell electricity, heat or gas from renewable sources of energy via the power grid. At the local level, producers and consumers must be connected to the same transformer while at the regional level, they must be connected to the same transformer station. Austria now has 230 active energy communities, and a central coordination office provides advice and support. Reduced grid charges provide energy communities financial incentives: In the low-voltage grid, they are reduced by 57 percent, in the medium-voltage grid between 28 and 64 percent.

Energy sharing in Spain, Portugal and France

European countries such as Spain, Portugal and France also provide progressive legal frameworks for energy sharing. In Spain, collective self-consumption has been possible since 2015, but it is only since the so-called "sun tax" on self-consumed solar power was abolished in 2018 that it has become relevant for communities. In 2020, renewable energy communities were defined almost literally according to the provisions of the EU's RED II. All renewable projects that receive surcharges through nation-wide invitations to tender must include a local citizen participation scheme. At the regional and local levels, there are various programs for promoting energy communities. However, Spain lacks grid connection capacities, which means they are overshadowed by the big players of the renewable energy sector.

In Portugal and France, it is possible to tap into a shared self-supply from renewable sources of energy through the distribution grid. While in rural areas in France a distance of up to 20 kilometers is allowed, in Portugal, generation systems and consumers must be connected to the same transformer station. Moreover, energy sharing is rewarded with reduced grid usage fees.

Energy Sharing at The smarter E Europe 2023 and accompanying conferences

Energy Sharing is one of the hot topics at The smarter E Europe which will be held under the motto "Creating a new energy world" this year from June 14 to 16, 2023 at Messe München. With the four energy exhibitions Intersolar Europe, ees Europe, Power2Drive Europe and EM-Power Europe, Europe's largest platform for the energy industry offers an ideal opportunity to find out about the dynamically growing market for photovoltaics, energy storage and e-mobility in Germany and Europe as well as to make new business contacts. The industry will also receive new impetus at the four

accompanying conferences on June 13 and 14, 2023 at the International Congress Center Munich (ICM). Numerous companies will be participating in The smarter E Europe. It is worth taking a look at the [exhibitor list](#) and the [conference program](#).

For further information, please visit:

www.thesmartere.de

www.intersolar.de

www.ees-europe.de

www.powertodrive.de

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