

## Energy sharing: what's in it for consumers?

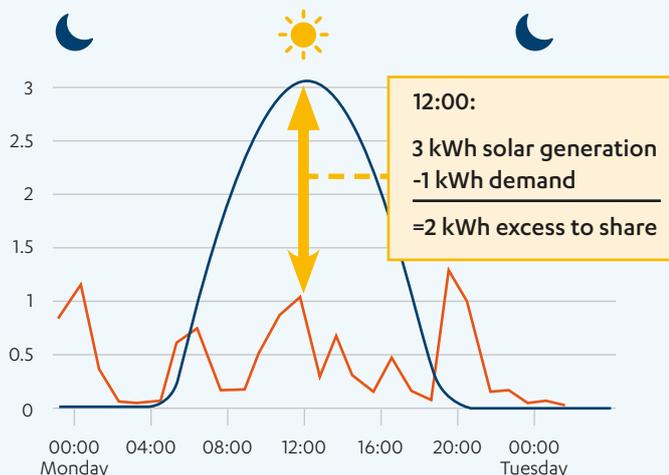
All consumers should be able to reap the benefits of renewable energy, independently from owning a rooftop with solar panels. Energy sharing allows direct access to affordable renewables from your neighbour, family or community. The ongoing reform of the EU's electricity market should make this consumer empowerment as easy as possible.



### Energy sharing in a nutshell:

- Where?** Energy sharing is a new model for consuming renewable electricity collectively and remotely. There are, however, not many of these offers in the EU yet. Consumer organisations would like to see more of them and for them to be more visible. While single households can already directly consume the solar power from the panels on their rooftops, energy sharing involves several consumers based elsewhere than where the electricity is produced.
- Who?** Members of an energy community, households, small- and medium-sized enterprises and/or public authorities could allocate amongst themselves the electricity from one or several installations such as solar panels or wind turbines.
- Why?** Participants normally benefit from a lower price per kilowatt-hour of shared electricity compared to high retail electricity tariffs. In 2022, **average households could save up to €1,100.**<sup>1</sup>
- How?** Consumers join an energy sharing scheme in parallel to their retail electricity supplier. The sharing can be facilitated by other consumers like neighbours, an energy community, local authorities, a company or another retail supplier. Once they have signed up for an energy sharing contract, consumers get access to a pool of renewable energy installations. When a solar panel or wind turbine in this pool produces more electricity than its owner can consume, the spare kilowatt-hours are shifted to the peer consumers with the help of smart meters. They automatically track when peer consumers' demand overlaps with kilowatt-hours available for sharing.

### Example: Energy sharing potential of a solar rooftop panel



What happens on a daily-basis when a four-person household installs an average solar installation (4 kilowatt) on their rooftop. The self-generated power can cover much more than the household's demand during daytime.

Source: [https://data.open-power-system-data.org/household\\_data/](https://data.open-power-system-data.org/household_data/), week of 29 May 2017

— kilowatt-hours rooftop solar self-generation  
 — kilowatt-hours household electricity demand

## Energy sharing maximises the value of households' solar panels



As the household's demand does not always match the solar supply, only a third of the solar electricity can be consumed at the same time on-site. If the household tries to sell the excess to the wholesale electricity market, remuneration will be low because during sunny midday hours, all solar panel owners will try to get rid of their excess. Sharing the non-used solar power with other consumers for a certain fee can thus increase the revenues of the solar self-generator.

## Energy sharing makes renewables accessible to all



Many households cannot install solar panels because they live in an apartment or are tenants. Vulnerable consumers and energy-poor households often cannot afford solar panels. Energy sharing enables these households to cover at least a part of their electricity demand through affordable renewable electricity. It bears an important potential to combat energy poverty. Social housing companies have already started to roll-out energy sharing for their tenants.

## Energy sharing is inclusive and pays off across regions



Energy sharing allows for higher savings on consumers' bills when it is deployed not only around one solar installation within a locally limited neighbourhood. On a cross-regional level, it can integrate more consumers and match generation such as wind farms that also produce during the night. And you might want to share some kilowatt-hours with members of your family living in another region.

## Energy sharing reduces grid costs



If renewable electricity is generated and consumed at the same time, this reduces the cost of managing grids. Such local self-optimisation of consumers prevents grid congestion and helps to accommodate additional power flows with less grid expansion.

## What should policymakers do?

- 1. Guarantee established consumer rights and protections** whenever consumers engage in energy sharing. The reform of the electricity market rules should clarify the rights and responsibilities of consumers, grid operators and third parties.
- 2. To make energy sharing more accessible and economically attractive, consumers should be able to participate in energy sharing across an entire country.** This will better match renewable supply and demand at all times.
- 3. Network charges should be cost-reflective.** They should reward energy sharing schemes that ease local electricity grids.

Find out more about BEUC's proposals for reforming the EU electricity market in our position paper, ['Reaping the benefits of renewables for consumers'](#).

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1. Benefits of collective self-consumption for an average household (4,000 kWh electricity demand) across seven EU countries with solar and wind supplying 4,000 kWh of shared energy; [Ovaere, Marten: Collective energy sharing: Cost-Benefit Analysis and Survey Evidence of the Willingness to Invest, 8 March 2023.](#)