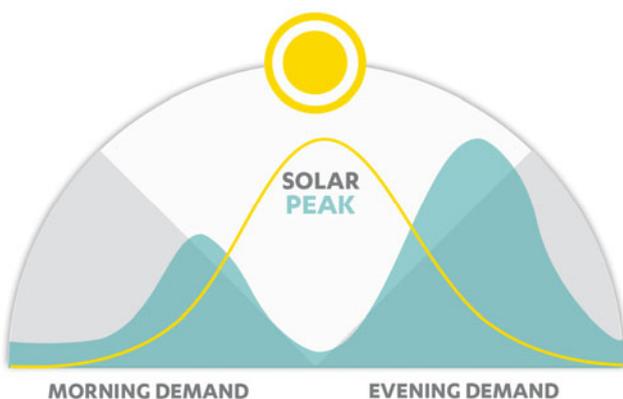


FACTSHEET Electricity aggregators

Why change the way we use electricity?

For decades, the electricity system worked in a simple way. Centralised power plants had to produce enough electricity to meet demand. This electricity would then be distributed via the electricity grid to households, industries and businesses.

But change is afoot. To curb climate change, more and more electricity is being produced by renewable sources like the wind or the sun. These sources are variable. We might not be able to consume all the electricity produced by solar panels at midday, for example, because we might not be at home when the sun is shining most. Batteries can help, but storage remains a very expensive solution. Making electricity consumption more flexible is a promising alternative which would keep electricity prices under control.

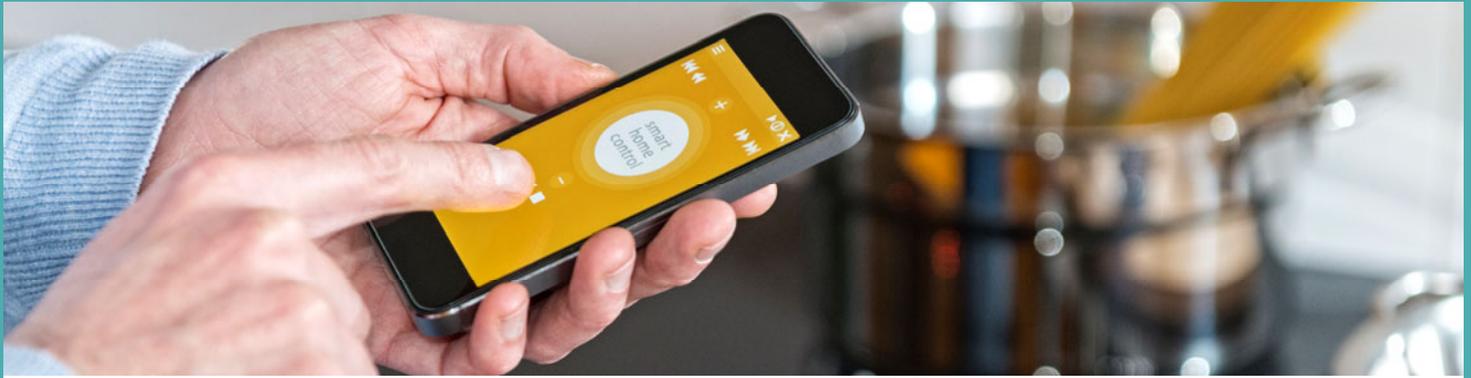


The peak in electricity demand by households occurs in the morning, when people are getting ready for work or school, and in the evening, when they are back and need electricity to heat and light their homes, cook, or shower. However, electricity production from solar panels is at full speed at midday, when the sun is shining and most people are not at home. Demand-side flexibility can help take advantage of the excess electricity produced by solar panels by 'moving' part of the consumption at the time that solar panels are the most productive.

Consumers can be incentivised to be more flexible in their consumption. For instance, by signing up to an electricity contract with dynamic pricing, consumers can get a lower price for using electricity when electricity demand overall is low. One company in the UK pays consumers to consume electricity when production from renewables is high and charges a higher price when power is consumed during a peak. Another way is through signing up to a new type of electricity company called an aggregator, which may be a competitor to traditional electricity suppliers.

What are electricity aggregators?

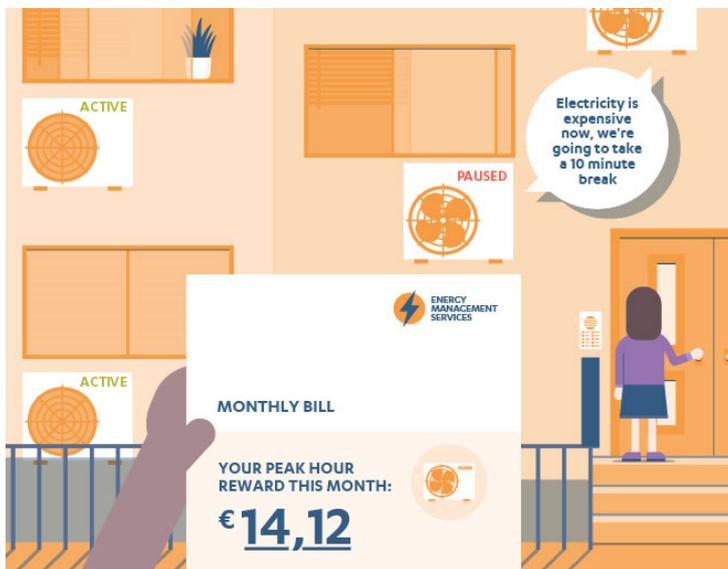
Through smart devices and apps, aggregators group and adjust the energy consumption or production of several customers. In France, where consumers rely a lot on electric heating, one company offers to temporarily interrupt electric heating for a group of homes when there is a spike in electricity demand and sells this flexibility in wholesale markets. Likewise, an aggregator could also buy up the electricity produced by consumers using solar panels and re-sell that on the wholesale market.



What's the novelty for consumers?

Today consumers know they can save money by reducing their electricity consumption through more efficient appliances or improvements at home. But aggregators can provide consumers with monetary incentives to reduce or increase their consumption when the grid needs it. This can lead to more efficient electricity networks and lower bills for everybody.

For instance, an aggregator can set up an agreement with several households, allowing him to temporarily reduce their air conditioning when there is high demand for electricity in return for a financial reward. It then sells this flexibility i.e. the electricity not consumed, on electricity markets.



The business interests of suppliers and aggregators often clash, the former sell electricity while the latter have an interest in reduced electricity consumption, so it's important that aggregators aren't blocked from entering the market. If they are allowed to enter the market, they should have to abide by the same consumer rules as traditional energy suppliers, for example on contracts and bills.

BEUC recipe for making aggregators a success for consumers

The EU is currently overhauling the energy market's rules. BEUC recommends EU law to follow certain principles.

- **Fair competition.** Consumers should be free to engage with the independent aggregator and supplier of their choice, without facing obstacles from either type of company.
- **Rewards.** Consumers offering their flexibility in electricity use should receive monetary benefits. In addition, because consumption gets spread out more and peaks in consumption are less intense, the grid would require fewer upgrades. This would lead to lower system costs which should be passed on to all consumers.
- **Safeguards.** Aggregators should have consumer protection obligations similar to those the energy legislation foresees for suppliers e.g. for clear contracts. Consumers producing their own electricity should enjoy the same level of protection as other consumers.
- **Cooperation across sectors for all around consumer protection.** Services by aggregators will come with smart devices and apps. This will inevitably open a whole new array of challenges for energy regulators e.g. privacy, cybersecurity and safety. Policy makers and regulators will need to work out of silos to address these challenges.