

### POLICY BRIEFING

# France and UK are wellpositioned to learn from each other on self-consumption and peer-to-peer energy trading

**UCL ENERGY** INSTITUTE

- France has led the way on legislation, while the UK's regulatory sandbox is seen as highly innovative.
- Both countries share similar challenges, such as how to re-tool network charging and taxes to accommodate forms of collective consumption.
- Closer collaboration between the two countries would lead to more efficient learning and effective action – this briefing proposes key shared and individual priorities.

In June 2018, researchers from University College London and the Sorbonne brought together a range of policy, industry and academic stakeholders to discuss the regulation of self-consumption and peer-topeer (P2P) trading of energy in France and the UK. This note summarises the main points emerging from the event.

There are important differences in regulatory context between the two countries. In the UK, P2P trading is only allowed under trial conditions in a regulatory sandbox run by the regulator, Ofgem. A number of such trials are underway, and Elexon (the British organisation in charge of balancing/settlement) is considering how a multiple supplier model could operate in practice in its own sandbox. The sandbox model was admired by French participants for its support of innovation.

In France, a recent law gives people the right to self-consume energy they generate, either individually or collectively when they are part of the same legal entity and connected to the same low-voltage substation. The law is a strong signal of intent from the French government, but lack of action in other areas such as network charging and taxes means that collective self-consumption (CSC) remains uneconomical in practice.

We identified a number of challenges in common to both countries relating to peer-to-peer trading and collective self-consumption:

- How to reform network charging and taxes.
- How to ensure fair value for consumers.
- Understanding the impact on vulnerable consumers.
- Identifying a clear definition of P2P trading and CSC.
- Defining the rights and obligations of prosumers in legislation.
- Understanding requirements for, and limits to, data ownership and sharing.
- How to integrate new technologies, e.g. blockchain.
- What role there is or should be for local actors in encouraging collective self-consumption.
- Quantifying the economic and social benefits of collective selfconsumption and P2P.



# Now, both countries should:

- Establish clarity on prosumers' rights and obligations.
- Conduct assessments of the potential economic/social impacts of selfconsumption and P2P trading.
- Ensure that local stakeholders (e.g. community energy) and industry are closely engaged.

# The UK should:

- Consider light-touch legislation permitting local peer-to-peer trading as in France.
- Introduce and integrate sandboxes for all aspects of energy regulation (e.g. Ofgem and Elexon to coordinate).

## France should:

- ➔ Consider introducing its own regulatory sandbox.
- Ensure alignment between policy on collective self-consumption and taxes and network charging.

Please see page 2 for more detail.

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Tel: +44 (0)20 7679 9242 Web: www.ucl.ac.uk/bartlett/energy/ The workshop Regulating new electricity markets: UK and French expectations for self-consumption and peer-to-peer (P2P) energy trading was held on 28 and 29 June 2018 at the University College London's Energy Institute. Stakeholders had the opportunity to exchange views and experiences on the current regulatory and policy frameworks in their respective countries. The recommendations below are the outcome of these discussions, and are informed by research taking place under the following UCL Energy Institute-led projects: The Internet of Energy Things (P2P-IoET) project on the regulation of peer-to-peer energy trading and the Distributed Ledger Technology as a Disruptor of Energy Retail Markets project on the social impacts of P2P (Centre for Research into Energy Demand Solutions (CREDS)).

## **Recommendations for both countries**

- Conduct assessments of the potential economic and social impacts of P2P and CSC on energy consumers, and their compatibility with broader energy sector arrangements, such as traditional energy supply contracts signed by a consumer with a single supplier.
- Recognise that active consumers, or 'prosumers', will engage in peer-to-peer transactions in which they will continue needing consumer protection. Consumer law safeguards should be extended to consumer-to-consumer (C2C) transactions. Prosumers should be recognised in legislation, and sector-specific rules or guidelines setting out their **rights and obligations in P2P and CSC** should be drafted.
- Recognise the crucial role played by local stakeholders, including public sector bodies, in the
  uptake of renewables through self-consumption and peer-to-peer energy trading. They are trusted
  within communities and can become a key intermediary between energy consumers and market
  actors. There should be increased dialogue with industry and community stakeholders involved in
  self-consumption pilots, to learn from their experiences and obtain their input on the barriers
  presented by the current regulatory framework.
- Assess the short- and long-run impacts of self-consumption (individual and collective) on distribution and transmission network **operating costs**, to help inform network charging reform.

#### **UK-specific recommendations**

- The regulatory sandboxes currently operated by the energy regulator (Ofgem) and balancing and settlement administrator (Elexon) should evolve towards becoming **one integrated sandbox** covering all codes regulating the energy sector. The possibility of connecting the sandboxes to new or existing funding processes, to ensure that a wide range of organisations can participate, should be explored.
- Following the sandbox trials, consider introducing 'light touch' legislation allowing for peer-to-peer energy trading at a local level (with limits on voltage and installation capacity), as in France. The taxes and charges to be paid by consumers should also be covered by this law.

#### France-specific recommendations

- Consider launching a regulatory sandbox, as in the UK. The lessons learned from this will provide valuable input into the currently-ongoing discussion regarding the regulatory framework on P2P and CSC.
- Explore the possibility of reforming **network charging and taxes** which consumers are subject to, in a way that does not preclude economic viability of CSC, if appropriate by reflecting the fact that production and consumption of renewable energy take place within the same locality.

In sum, the United Kingdom and France have two of the most forward-thinking regulatory and policy frameworks around self-consumption and peer-to-peer energy trading at European level. These frameworks have enabled the roll-out of pilots but are still in need of improvement and clarification. Both countries can learn from each other's successes and shortcomings by sharing experiences and guiding each other. For instance, the United Kingdom could provide guidance to France on the creation of a regulatory sandbox in the energy sector, and France could share its insights with the UK on its collective self-consumption legislation. The creation of a proposed 'Global Observatory on community self-consumption and peer-to-peer energy trading' under the scope of the International Energy Agency, led by the UCL Energy Institute, would provide a potential forum for this exchange.