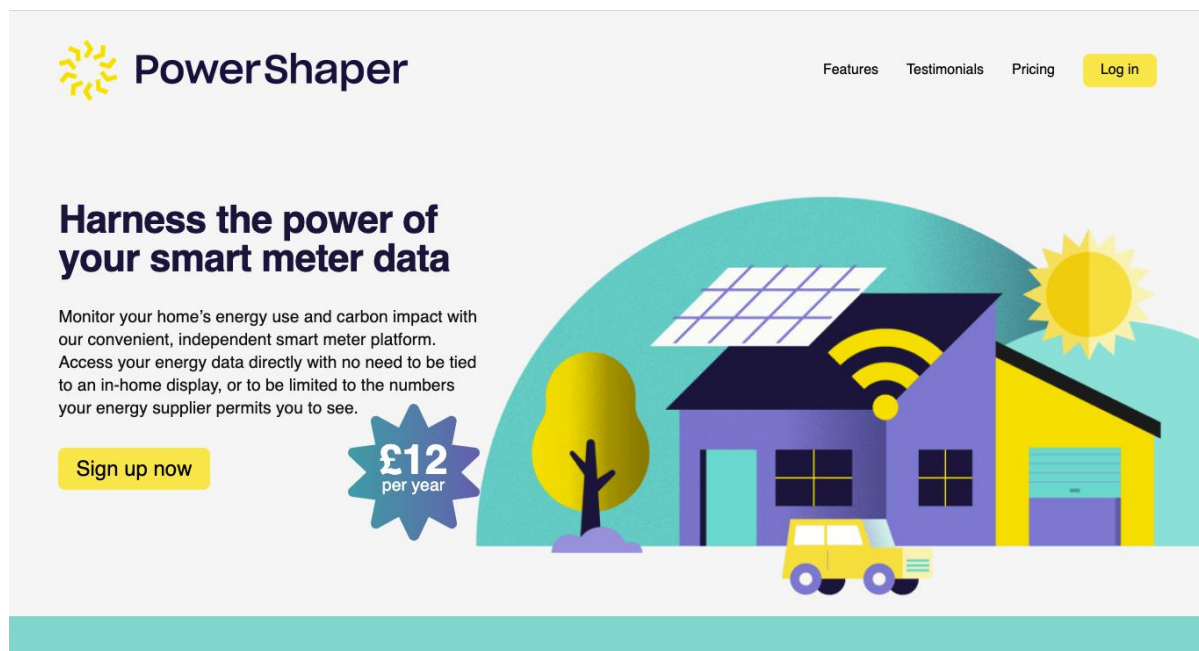# Next Generation end of project case study: Carbon Co-op – Energy Data Co-operative

About Carbon Co-op:

The Carbon Co-op was founded to enable members to take a collective and pro-active response to the challenge of climate change. The co-op has had an interest in digital systems since its inception and over time has developed a growing suite of digital tools and services. The support from Next Generation was used to build on this foundation to enable it to build an Energy Data Co-op.

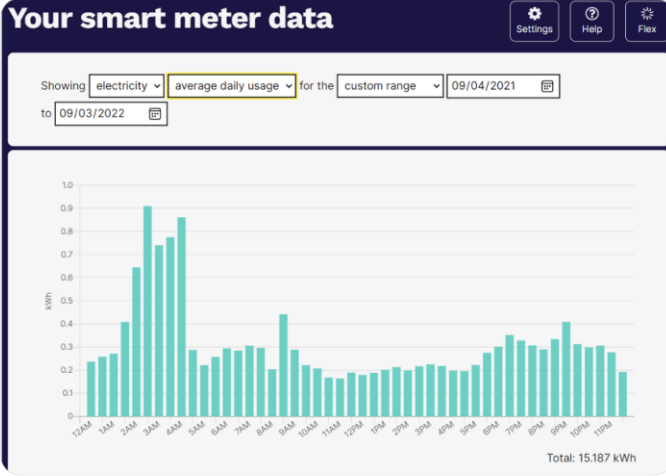## About this innovation project and its impact:

Carbon Co-op's Energy Data Co-op model looks to generate income through data and digital tools in combination with other services. The co-op focused on developing 3 types of service, the production of which was guided and informed by the use of well-established innovation tools and practices including Service Design, Agile Development and open innovation.

The 3 services are detailed below: the Powershaper Monitor, the Impact Tracker and Building Performance Evaluation toolkit.

1. **Powershaper Monitor https://powershaper.io .** Powershaper Monitor allows householders to access and download high-definition smart meter gas and electricity data. This can be used by householders to evaluate the impact of energy efficiency and low carbon installations.
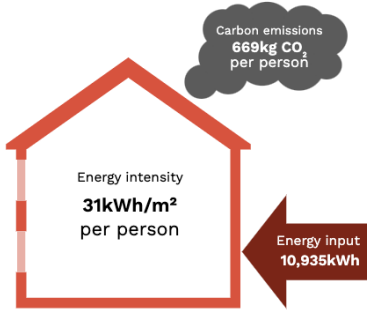
2. **The Impact tracker: https://hub.carbon.coop/impact-tracker .** The Impact Tracker service is a simple online tool that enables people to benchmark their home energy performance.

3. **Building Performance Evaluation toolkit.** This service encompasses a range of hardware (sensors) and software (dashboards) tools that enable householders and practitioners to directly monitor the impact of domestic energy efficiency measures.

At the end of the pilot, Powershaper Monitor was the most mature product with 105 people using the service. It was originally intended that individual householders would be the main customer for this service, but over the course of the pilot it became apparent that there is a significant potential market for this, and potentially the other services, amongst organisations that need or wish to establish the impact of their work on energy efficiency. Carbon Co-ops are continuing to develop the 3 services. For example, the Powershaper Monitor and Building Performance Evaluation tookit are being integrated into 'OpenEnEffs', an Innovate UK-funded project that it looking to develop a scalable and open evaluation approach for energy efficiency interventions.

Advice for other groups considering this approach:

Carbon Co-op identified 3 main lessons from their work:

1. If you don't have any experience in digital or data technologies getting involved in hacker or maker space groups is a good place to start. For example, https://www.meetup.com/eco-home-lab-manchester/

2. Commit to open-source development so that others can benefit from and build on your work.

3. If you run into a problem that requires a new solution don't be afraid to have a go at addressing the challenge. For inspiration see https://www.meetup.com/techforgood/

Key messages for policymakers:

- Government should do more to promote the roll out of smart meters. These are a critical piece of enabling infrastructure for digital service providers.
- Government and regulators should mandate the use of common open data standards to enable local energy markets, and to allow community energy groups to participate on a level playing field.
- DNOs should be encouraged to engage more closely with Community Energy partners to help kick start local flexibility markets.

If you want to know more:

Jonathan Atkinson, Jonathan@carbon.coop

https://www.next-generation.org.uk/innovation

CAG CONSULTANTS