

# CrowdFlex

A forecasting model of domestic demand and flexibility.

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# Why CrowdFlex?

## **We need a smart, flexible energy system:**

- Finding new ways to balance supply and demand.
- Help reduce operational costs related to constraints and energy balancing.
- Reduce system costs through less grid investment.
- Saving money for consumers.
- Supporting the uptake of renewables and accelerating whole system decarbonisation.

# CrowdFlex so far:



Establishing domestic flexibility as a reliable energy and grid management resource.



Building a forecasting model informed by large-scale consumer trials.



Summer trials complete.  
Winter trials underway.



Strategic Innovation Fund (SIF)  
Beta phase project.



# Summer Trials

## Utilisation

**(turn up, down & mixed response)**

**37,000 participants / 31 events**



Consumers encourages to shift their energy use into or out of event time windows.

## Availability

**(EV charging)**

**1,300 participants / 31 events**



Piloting availability payments for flexibility, to allow remote dispatch of EV chargers.

# What did we learn?

**Payments, timings and notice period all influence consumer response.**

## **OVO's trials:**

- Turn up events achieved up to a 3x greater energy shift than turn down.
- Turn up events could help utilise renewable energy and reduce curtailment.

## **Ohme's trials:**

- Best recruitment message focused on 'getting paid'.
- Increased average overnight plug-ins from 30% to 45% and daytime plug-ins from 10% to 18%.



# What's Next?

## Winter Trials Underway:

- 200 events.
- More participants, potentially over 100,000 for utilisation and up to 20,000 for availability 'plug-in' events.
- Summer trials results were used to refine the winter trials design and increase understanding of behaviours.
- Consumer surveys.



# Find out more:

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