

**Electricity
Distribution**

Flexibility Market Insights Report

June 2025

nationalgrid ▶ **DSO**



Introduction

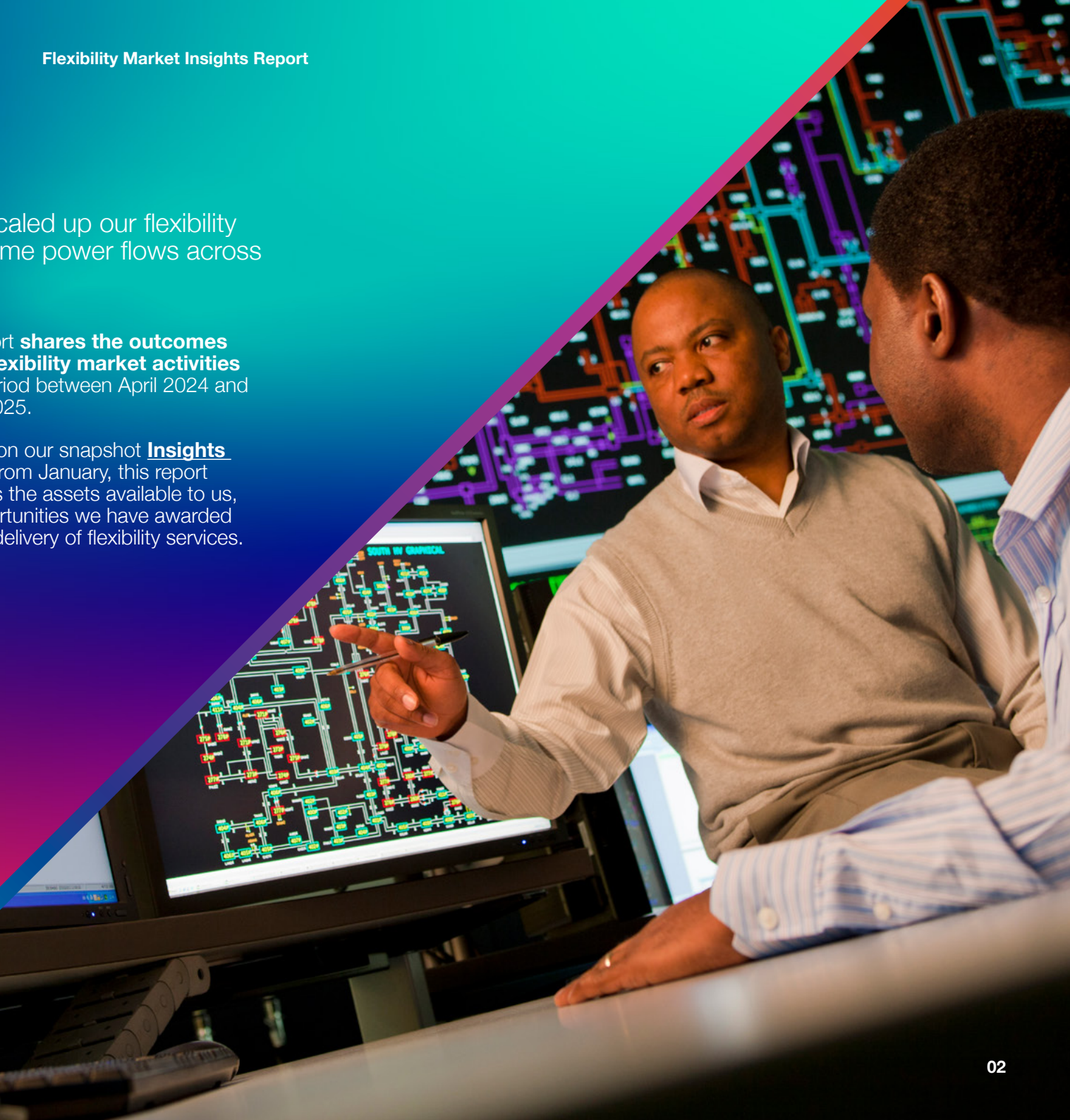
Since March 2024, we've significantly scaled up our flexibility markets, pre-emptively reducing peak-time power flows across the network.

Closer to real time, flexibility supports vital maintenance outages by altering demand and reducing the curtailment of renewable generation. These efforts **enhance network capacity** and agility, contributing to the UK's net zero transition whilst minimising costs for consumers.

We are making participation in flexibility markets **easier** and **more rewarding** than ever.

This report **shares the outcomes of our flexibility market activities** in the period between April 2024 and March 2025.

Building on our snapshot **Insights Report** from January, this report highlights the assets available to us, the opportunities we have awarded and the delivery of flexibility services.



Our year in numbers

19.8GWh

Of **flexibility procured** across our four license areas.

90%

Of registered assets are from **domestic households**.

221GWh

Of **flexibility sought** in our long-term flexibility market.

162,800

Flexibility assets signed up to our market platform. This is **more than double** the amount we had last year.

63 HV and 744 LV zones

Were launched for flexibility procurement, signalling market value upwards of £5m.

2.9GWh

Of **flexibility dispatched**. This is enough energy to power **392,000 homes for a day**.

70,000

Dispatch events, which is double the volume from last year.

3

New **Demand Turn Up** zones **launched** in September 2024. This service rewards customers for shifting their electricity use to times when there's a lot of power on the grid.



Market growth: Domestic Flexibility is rapidly scaling

We've made significant strides to **improve our flexibility market offerings**. This has included:

- The evolution of our **Market Gateway platform**, which is used for registration and tendering flexibility
- Adopting standardised processes developed through industry collaboration
- Ensuring that our flexibility opportunities increase and continue to give value to flex providers and our customers.

As an outcome of this effort, the number of flexible assets available to us has continued to grow rapidly, **from 75,000** in March 2024 **to over 162,800** in March 2025 **(117% increase)**. 125,000 of these assets are Electric Vehicle charge points, comprising **over 50% of all charge points currently connected** on our electricity network. Registered capacity has risen too, with **over 1400 MWs** now available. Despite comprising less than 1% of the total number of assets, commercial and industrial assets provide over 60% of this capacity. This growth shows commitment from both National Grid DSO and our Flexibility Service Providers to continue to scale flexibility and make it as **accessible to as many consumers as possible**.

Table 1: Amount of registered assets in Market Gateway as of March 2025

	Total Assets	Total Registered Capacity (MW)
Domestic	162,650	575
Commercial & Industrial	150	912
Total	162,800	1,487



Low carbon, high impact

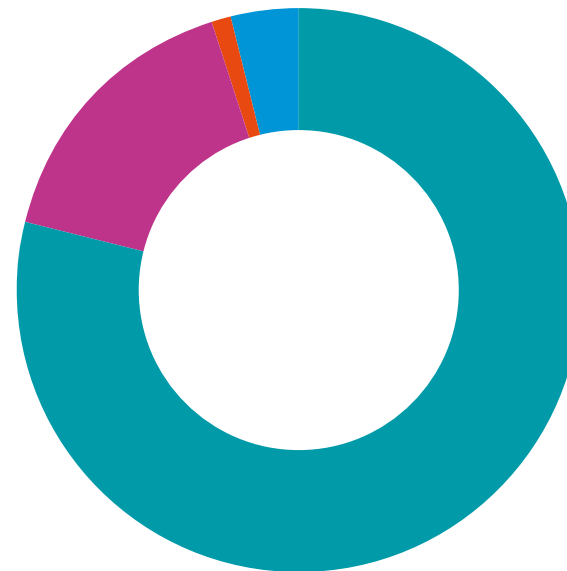
NGED sources flexibility from a range of technologies, with Electric Vehicle Charge Points making up the largest share by number of assets.

Other key technologies include heat pumps, batteries and household demand. Domestic participation is primarily low carbon, with **96%** of high-voltage and **93%** of low-voltage **accepted trades** employing **low carbon assets**.

This is driving progress towards a cleaner energy system, with the latest carbon intensity figure of our dispatch being **1.5g CO₂e/kWh** between April 2024 and March 2025.

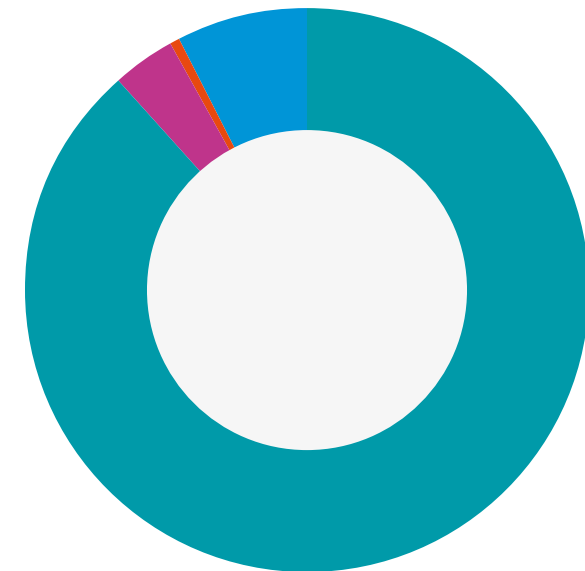
Figure 2: Technology demographic of assets in Market Gateway as of March 2025

Breakdown of Accepted HV Trades by Technology Type



- **80%** EV charge point
- **16%** Air source heat pump
- **1%** Other
- **3%** Household demand

Breakdown of Accepted LV Trades by Technology Type

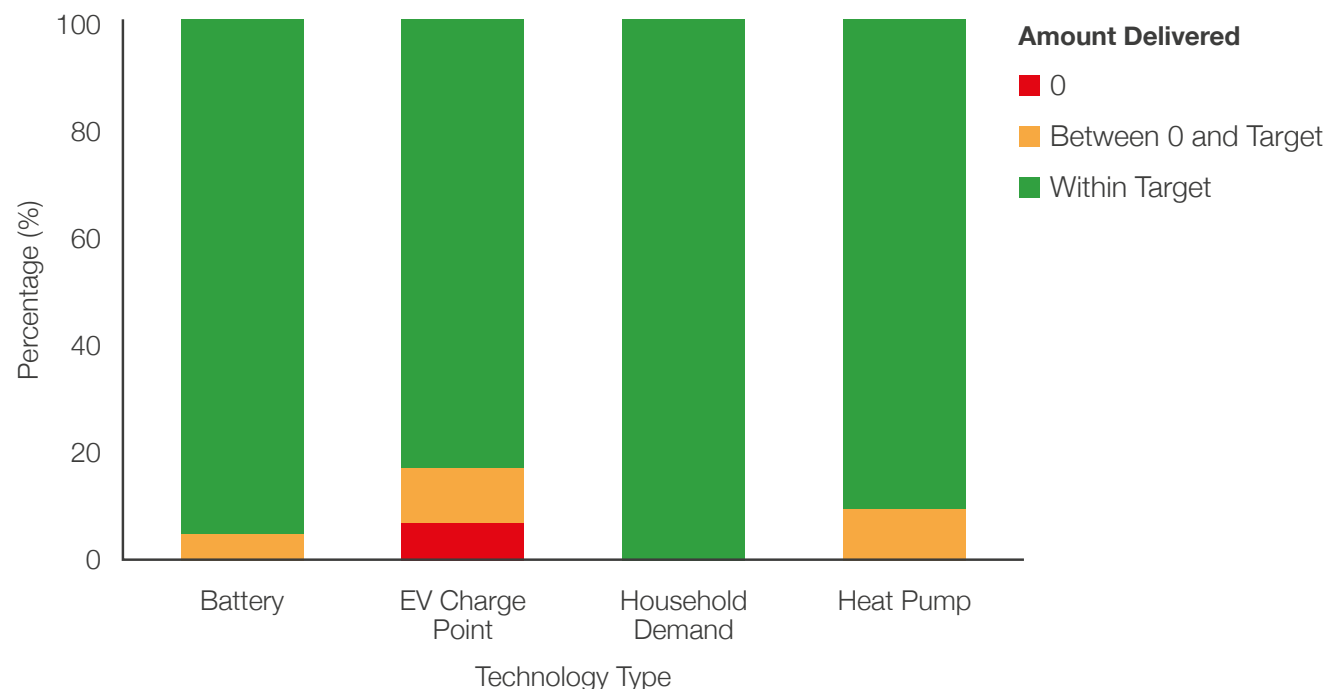


- **88%** EV charge point
- **4%** Air source heat pump
- **1%** Hybrid Heat Pump
- **7%** Household demand

Reliability in flexibility

Most assets deliver flexibility reliably, on average more than **90% of the volume instructed is delivered**. This does vary by technology, with household demand delivering 100% while electric vehicles lag at 89.6%.

Figure 3: Percentage delivered by the technology type



84.9% of all delivery events **achieve between 95-100% of their target delivery** across the whole event. However, there is still opportunity for further development, with **6% of agreed delivery failing to respond at all**.



Value and competition – More assets than ever are competing, driving down prices

Due to the **increase in assets** registered with us, our flexibility markets are now becoming more **competitive**.

In our last long-term procurement launched in autumn 2024, we awarded flexibility in HV zones at prices **34% lower than our ceiling prices**, and in LV zones at **18% lower**.

This resulted in savings of approximately **£75,000** which pass **directly to our customers**.

This is a great example of how increased participation leads to more efficient markets, driving down costs.

Earnings for flexibility services vary by product and market.

For example, consumers earned an average of **£18.54/MW/h** for **availability** and **£1,113/MW/h** for **usage** under the Scheduled Availability, Operational Utilisation product.

Other products offered even higher payments, with an **average of £3,584/MW/h under the Scheduled Utilisation - Settlement Periods** product in the short-term market.

At this usage price, a flexibility provider that turns down their demand on request by **1KW** between **4PM** and **8PM** will earn **£14.34**.

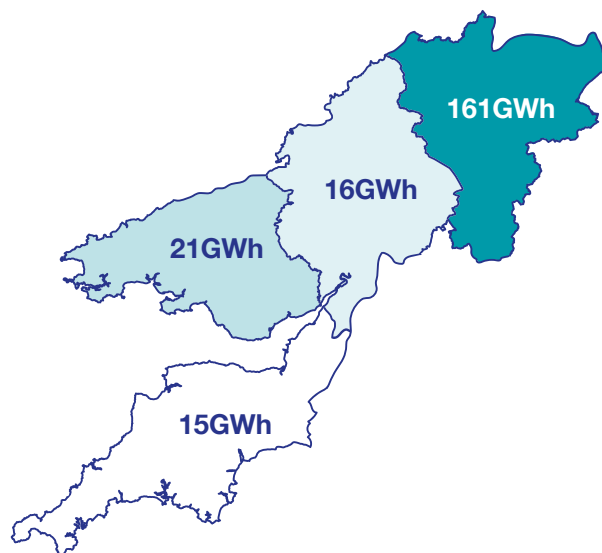
Zonal insights - Flex uptake by region

While NGED's 55,000 km² service area is fully assessed annually to determine where flexibility is required, **demand for flexibility isn't spread evenly**. Demand turn-down flexibility is only viable in locations where current or future demand is expected to exceed the capability of the cables, transformers and substations that make up our network.

This results in big differences in how much flexibility is utilised and dispatched across regions. The maps below offer views of the volume sought, and the response levels across NGED's four license areas.

Unrealised potential

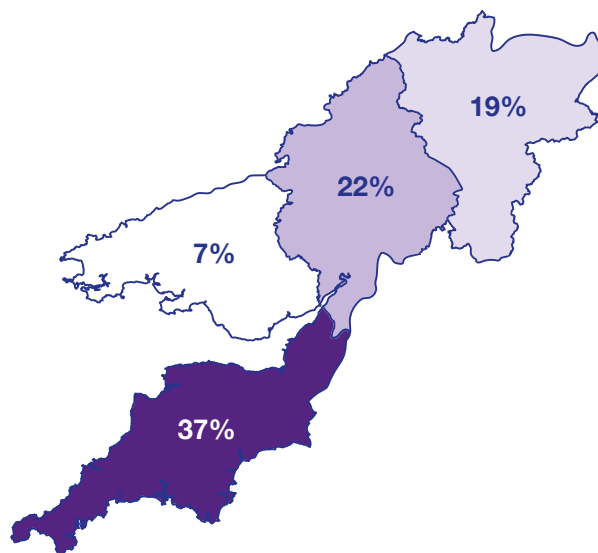
Across all our license areas, there are **16,000 assets** currently registered in live flexibility zones that are not participating.



Regional market opportunities

The **East Midlands** license area has the **highest volume sought** for availability in long-term markets, by a considerable margin.

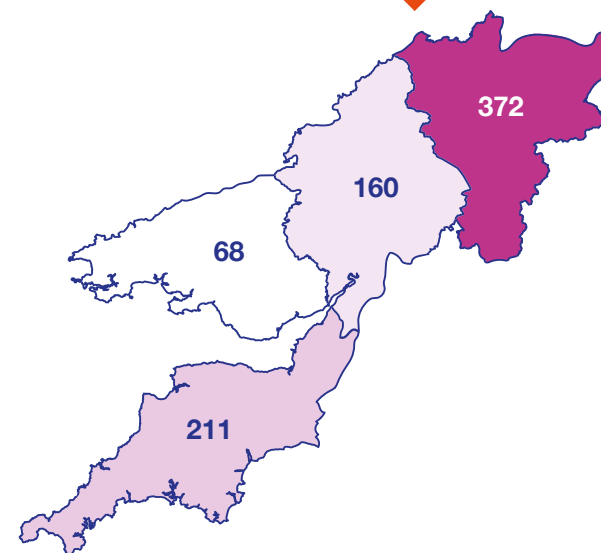
The split across each other license area is then similar.



Regional market response

The **South West** sees the **highest response to the volume of flexibility demand** in percentage terms. This metric indicates the extent to which the market supply meets the demand for flexibility.

Moving forward, we will engage with local authorities in the South Wales area to better understand the demographic of assets in this location which will help us to better target market participation.



Regional market size

Interestingly, when looking instead at the **average number of assets responding** to each opportunity, the **East Midlands has the most**, followed by South West, West Midlands and South Wales.

Rural and urban areas see similar response rates

Areas classed as **rural see a marginally higher response rate** compared to their urban counterparts, with 23% of demand responded to in rural areas compared to 20% in urban areas.

However, **rural areas see a lower number of assets responding** on average, with 226 in rural areas comparing to 316 in urban areas.

Further reading on the accessibility of flexibility can be found in a recent [report](#) between National Grid DSO and the Centre for Sustainable Energy.

Price appears to influence response rates

A final view indicates that areas with **higher ceiling prices respond to a greater percentage of flexibility demand**, with 41% response in areas of above average price comparing to 16% in below average.

Despite this, the number of assets responding on average between high and low price areas is similar.

Energising the Path Forward

The past 12 months have seen **significant growth and development** in the market, growth we expect to continue. To help drive our flexibility services forward we have ambitious plans for the next 12 months, which include the introduction of day-ahead markets.

As we design and implement our day-ahead market, we are particularly keen to **hear from stakeholders** around their views on market timings and notifications. If you have views and opinions around our day-ahead markets or how we can improve our flexibility services, please consider joining our newly established **focus groups**.



Get in touch at: NGED.flexiblepower@nationalgrid.co.uk



Want to participate in our Flexibility Markets?
Step-by-step instructions can be found on our website, from starting out registering assets on **Market Gateway**, through to delivering services.



Further Useful Links:

Flex in Five

A brief overview of Flexibility within National Grid DSO

Flexibility Map

Enter an asset location postcode to see whether it falls within an open flexibility zone

NGED Revenue Estimator

Estimate potential revenue from participation in our weekly flexibility markets

National Grid Electricity Distribution plc
Avonbank
Feeder Road
Bristol
BS2 0TB

nationalgrid.co.uk