

National Grid Electricity Distribution (NGED)

NG Plc and NGED Overview – January 2026



A woman with long brown hair, wearing a grey hard hat with a logo, safety glasses, and an orange high-visibility jacket with reflective silver stripes, is walking through an industrial facility. She is smiling and looking upwards and to the right. She is wearing dark gloves and holding a flashlight in her right hand. The background is filled with complex industrial machinery, pipes, and structural beams, creating a sense of depth and scale. The lighting is dramatic, with strong highlights and deep shadows.

nationalgrid

An Overview

At the heart of a transforming energy system

We are an energy company playing a vital role in connecting millions of people to the energy they use while continually seeking ways to make the energy system smarter, more affordable and cleaner.

Across the UK and US we are active in the energy value stream from generation through to supply.



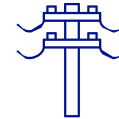
GENERATION:

The production of electricity from fossil fuel, nuclear power stations and from renewable sources such as wind and solar.



TRANSMISSION:

Transmission networks transport energy over long distances at high voltage (electricity) and high pressure (gas) safely and efficiently from where it is produced to the distribution network



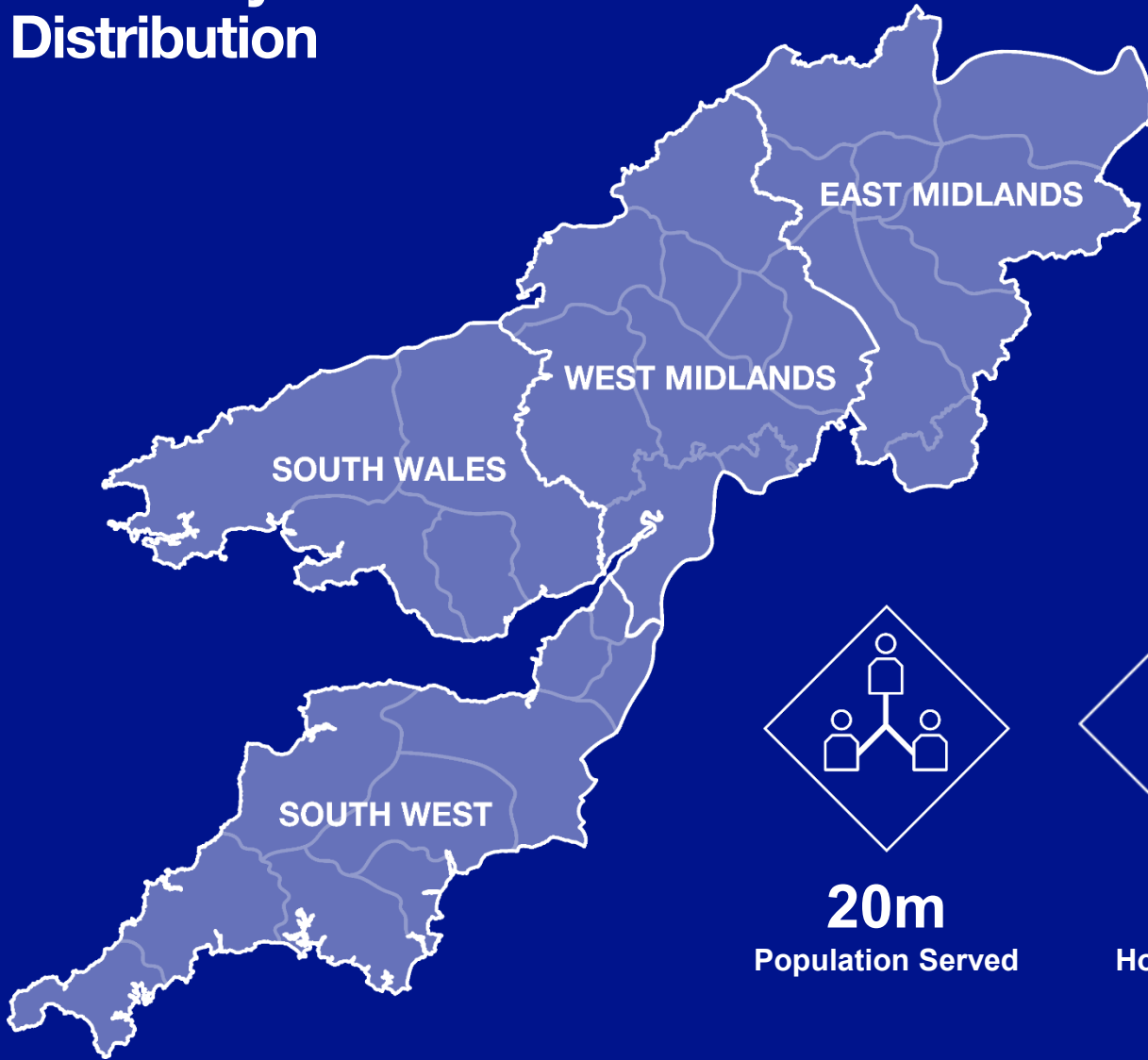
DISTRIBUTION:

Distribution network takes high-voltage electricity and high pressure gas from the transmission networks and deliver it at lower voltages, and less pressure to homes and businesses for customer use.



SUPPLY:

Supply of electricity and gas involves buying and selling it to customers as well as customer service and billing. Customers include industrial, commercial and residential.



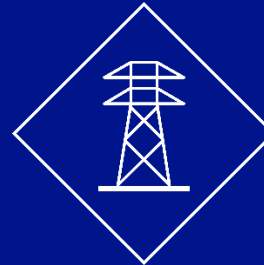
We are the UK's largest electricity distribution network



20m
Population Served



8m
Households



220,000 km
Lines and cables



60
Depots



185,000
Transformers

Our Commitments & Strategic Priorities

Our Responsible Business Charter (RBC) outlines our commitment to responsible business across three pillars: Our environment, our customers and communities and our people.

Our strategic priorities have increased to include a new focus on the investment and innovation required to build the grid of tomorrow, today.

**Enable the energy transition
for all**

**Build the networks of the
future now**

Deliver for our customers

Operate safely and efficiently

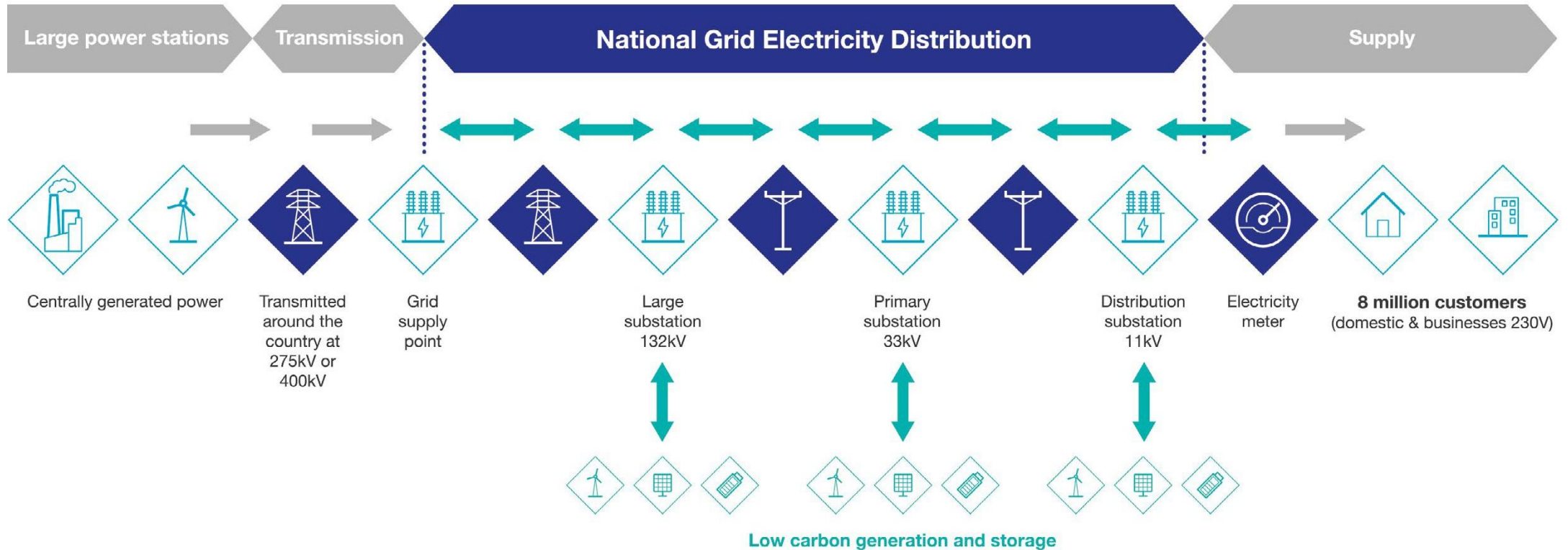
**Build tomorrow's
workforce today**

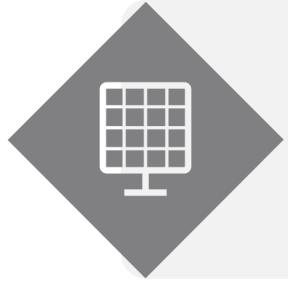
Our Distribution Demand



National Grid Electricity Distribution

Where we fit in

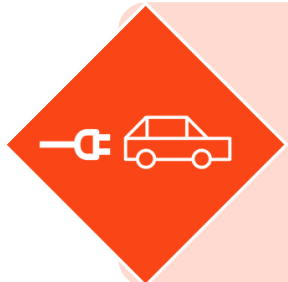




Clean Power 2030 – less than 10% of electricity generated by fossil fuel by 2030

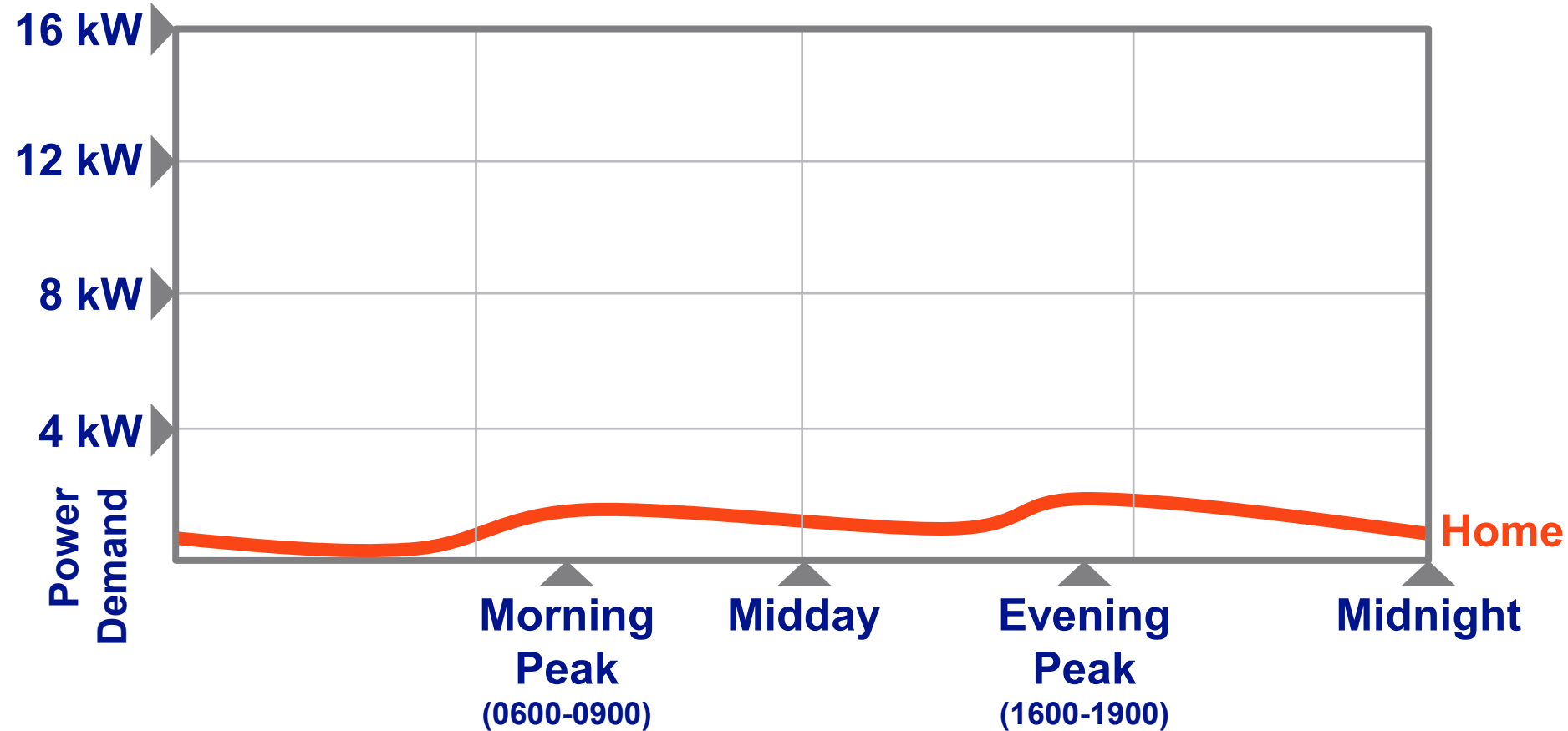


Gas is currently the primary source of domestic heating in UK ~80% of homes. Currently from 2027 no new homes can have a gas boiler and no new gas boilers from 2035

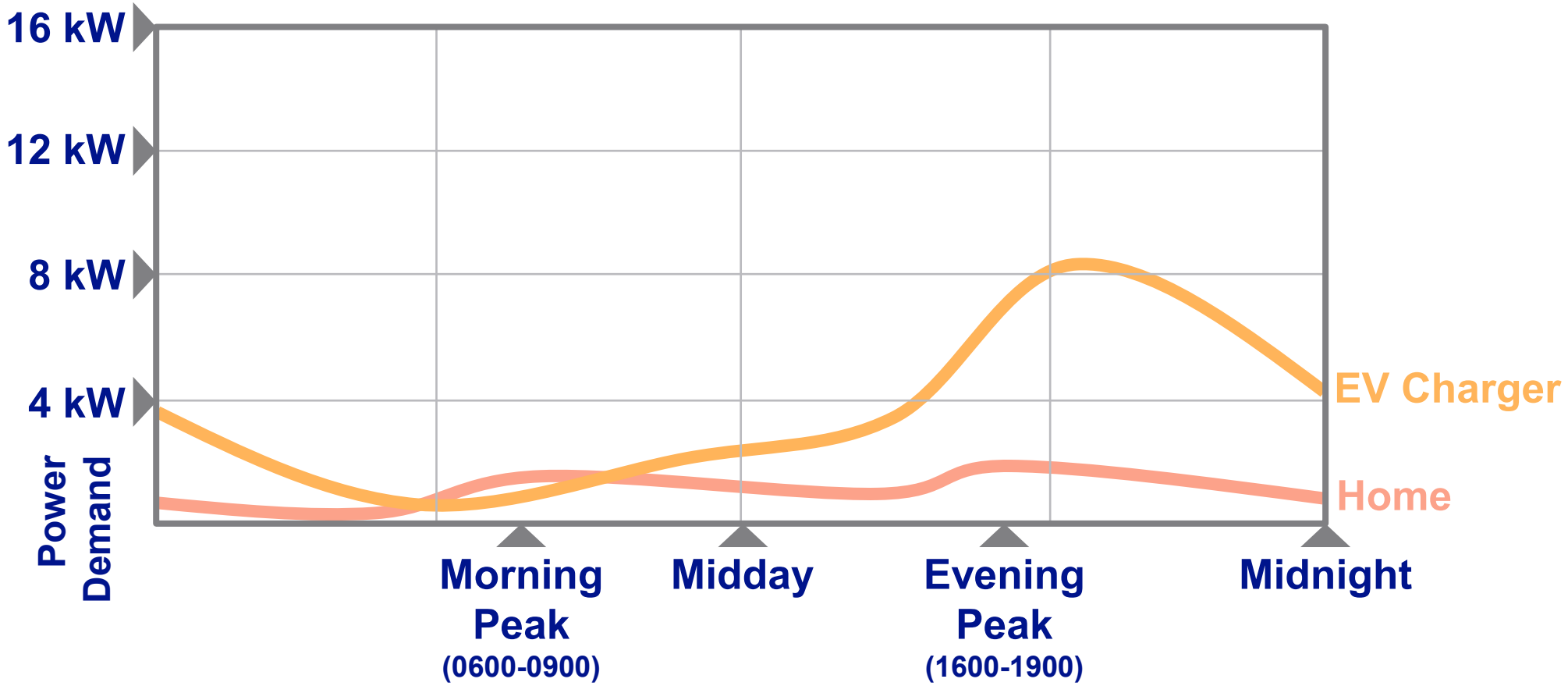


Currently from 2030 no new cars can be purely petrol or diesel. From 2035 new hybrid vehicles will no longer be allowed.

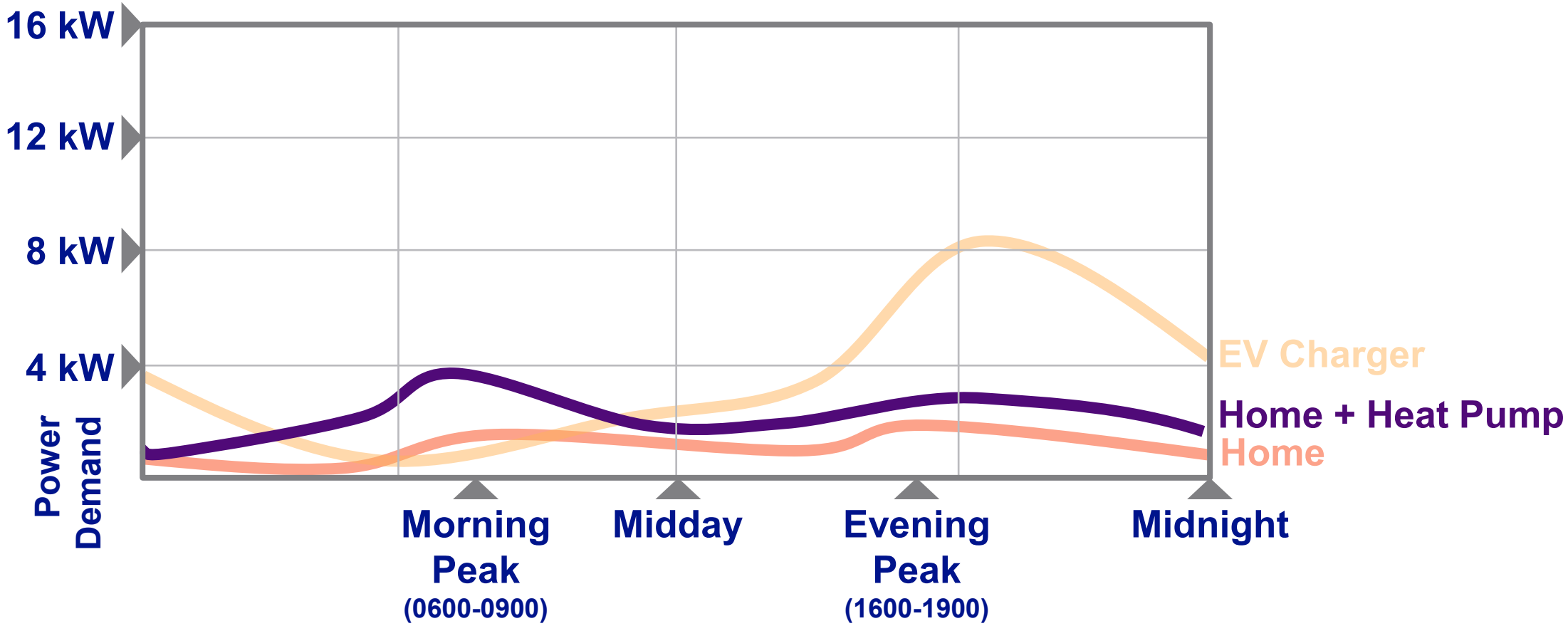
This is what the electricity use of a typical home with a gas boiler looks like over the course of a day



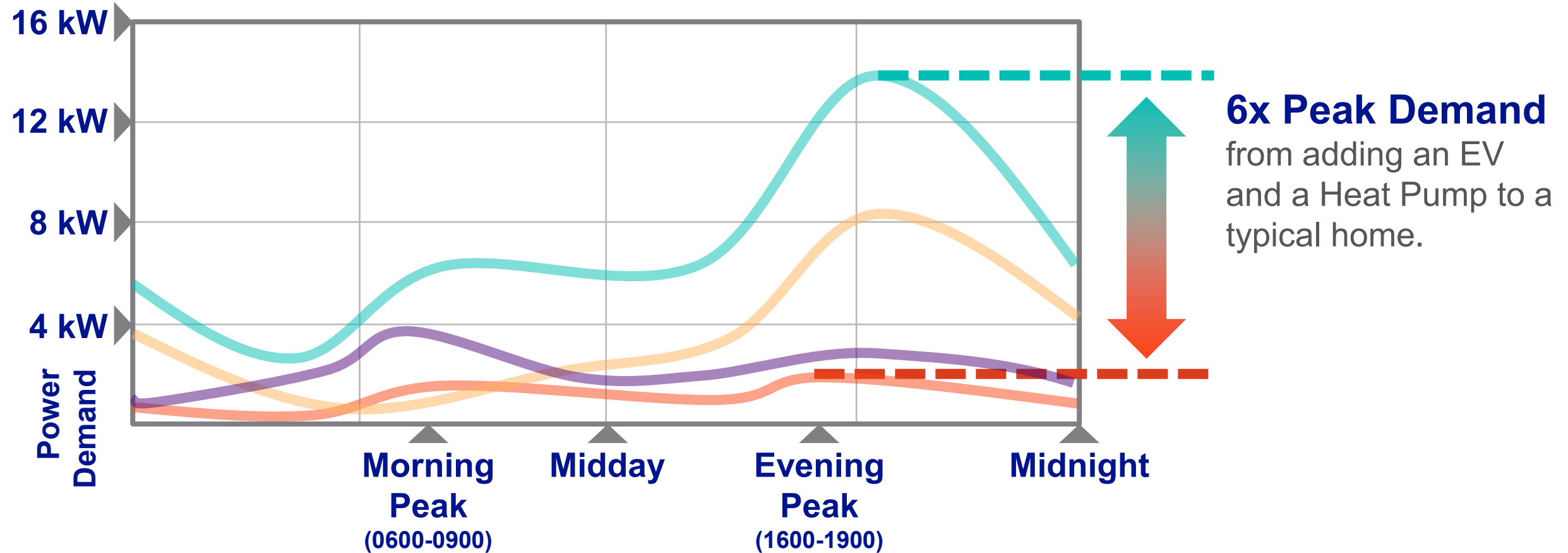
This is what a home EV charger's electricity use looks like: it similar (or bigger) than the rest of the home



This is what home electricity use looks like if you replace the gas boiler with an air-source heat pump (but no EV yet)



If you add the EV charger and the heat pump both to the same home, this is what the electricity use might look like

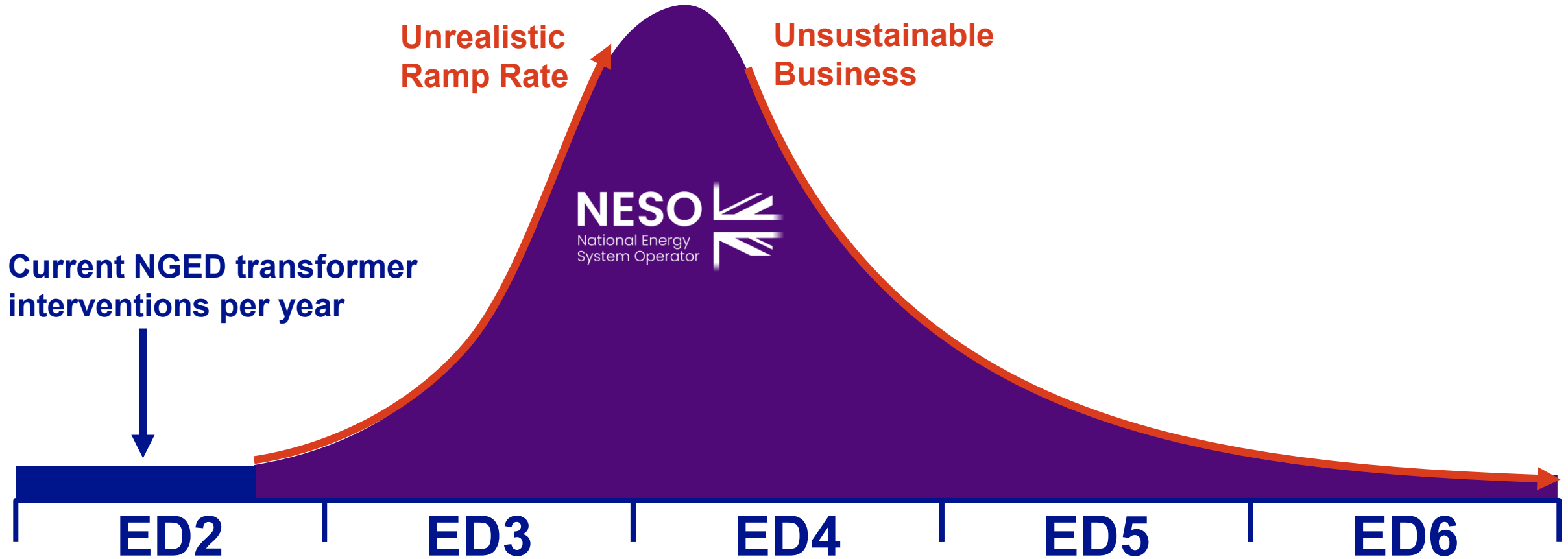


On our secondary network, we want to deliver a safe, steady and sustainable ramp up in reinforcement delivery

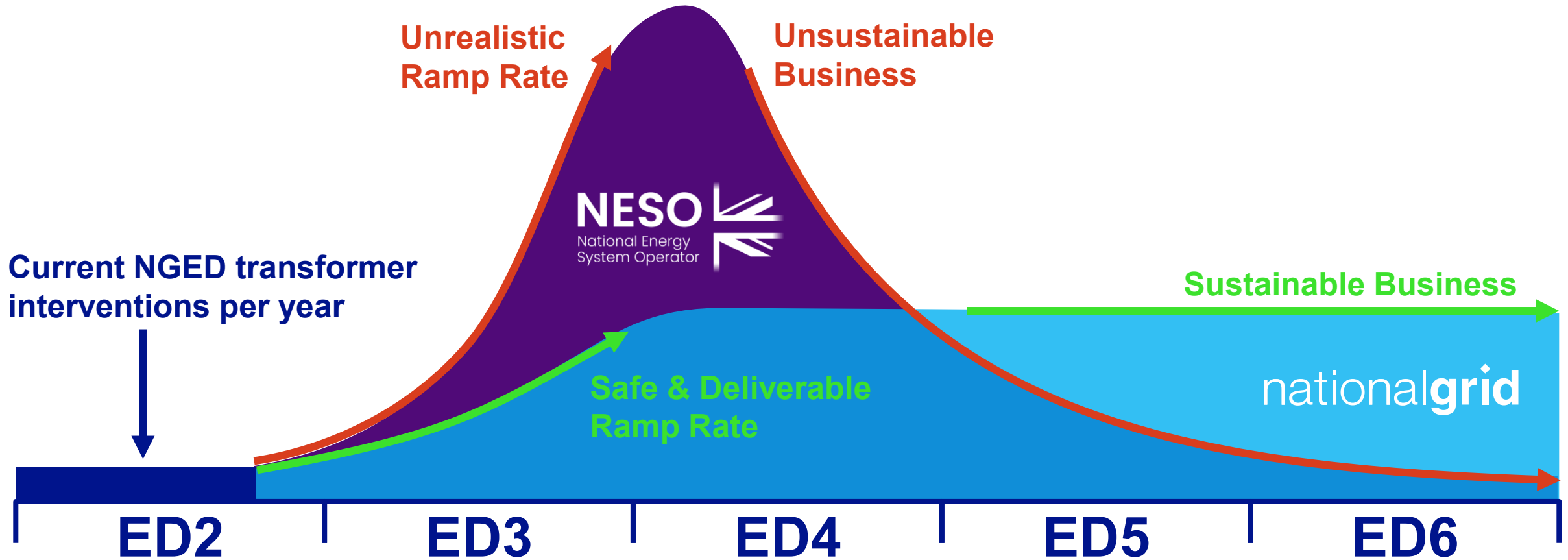
Current NGED transformer interventions per year



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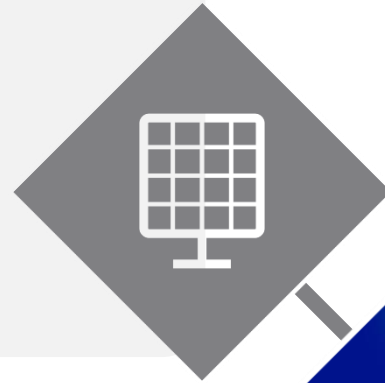
Through Smart technology we can reduce the build

Solar Panels

Generates electricity for you to use without needing to pay for any from our network.

Helps you: reduce your electricity bills by using energy you generate yourself from your roof.

Helps us: operate a more resilient network by relying more on local energy and less on importing power from outside of our region.



Smart Heat Pump

Uses electricity to produce low carbon heat for your home, often able to use off-peak power.

Helps you: reduce your carbon emissions & use cheaper off-peak electricity to heat your home.

Helps us: reduce your peak demand from our network, so we don't need to build as much network infrastructure for our customers.



Smart EV Charging

Pairs with smart or timed tariffs to charge your vehicle using off-peak electricity.

Helps you: reduce your vehicle usage costs by charging with cheaper rates, including overnight.

Helps us: reduce your peak demand from our network, so we don't need to build as much network infrastructure for our customers.



Battery Storage

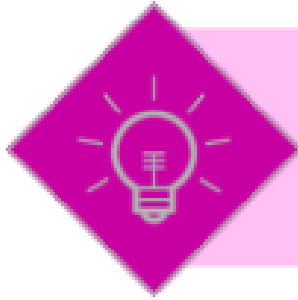
Stores electricity you generate yourself or imported from our network to be used later.

Helps you: use cheap off-peak electricity at any time of day, including during peak times.

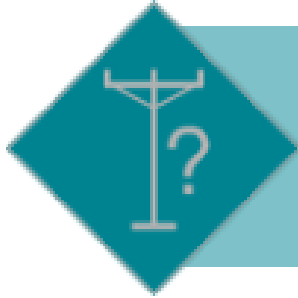
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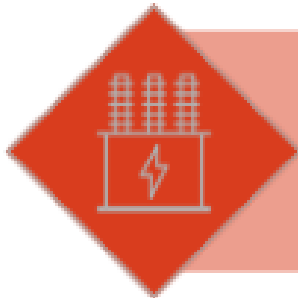
Final Thoughts



Demand growth in the UK has been relatively flat in GB over the last 10 years



Government policies to decarbonise heat and transport will drive increased demand on the system



Smart solutions can reduce the peak demand and the size of network that we need to build but there is still lots of work ahead of us

national**grid**



**Electricity
Distribution**