

# Intelligent Octopus

## Harnessing Consumer Flexibility Today

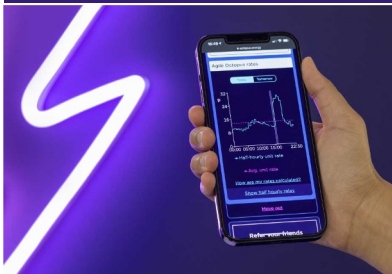
Vienna  
November 2022

# Octopus Energy Group overview:

Global integrated energy transition company

## Octopus Energy Group (OEG) 🐙

### Retail Energy



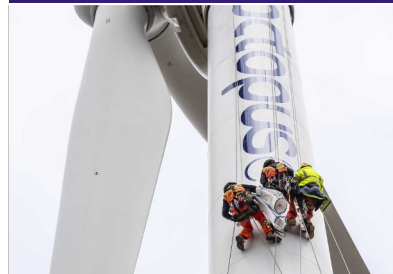
- **3.4m** (soon 5m) customers
- **10** countries
- **#1** for customer service
- **World-leading** consumer flex

### Tech Licensing



- Kraken SaaS: **25m** contracted accounts
- Kraken Flex SaaS: **1.5GW** contracted
- Kraken for **Utilities** - water and telco

### Generation



- **\$5B** generation assets managed
- **9** countries

### Services



- Electric Vehicles
- Proprietary heat pump hardware
- Installation
- Octo Hydrogen

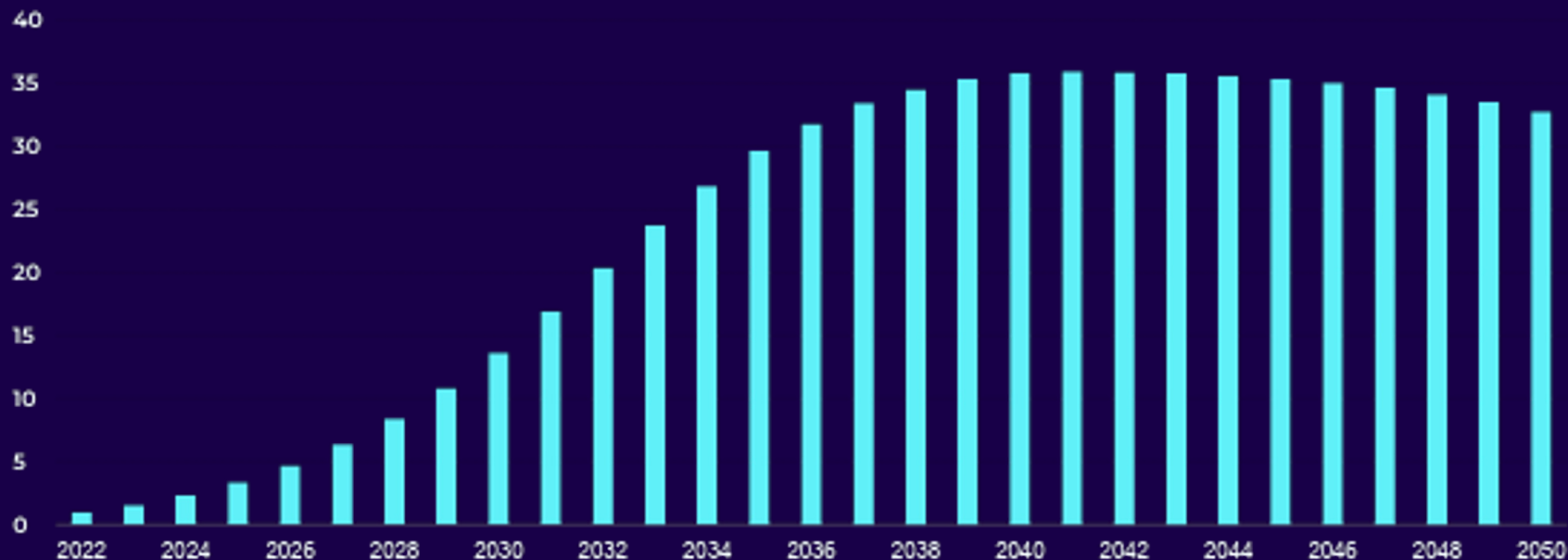


# Consumer Era

- *New clean technologies*
- *Increasing demand*
- *Need for flexibility*
- *Potential of consumer flex*

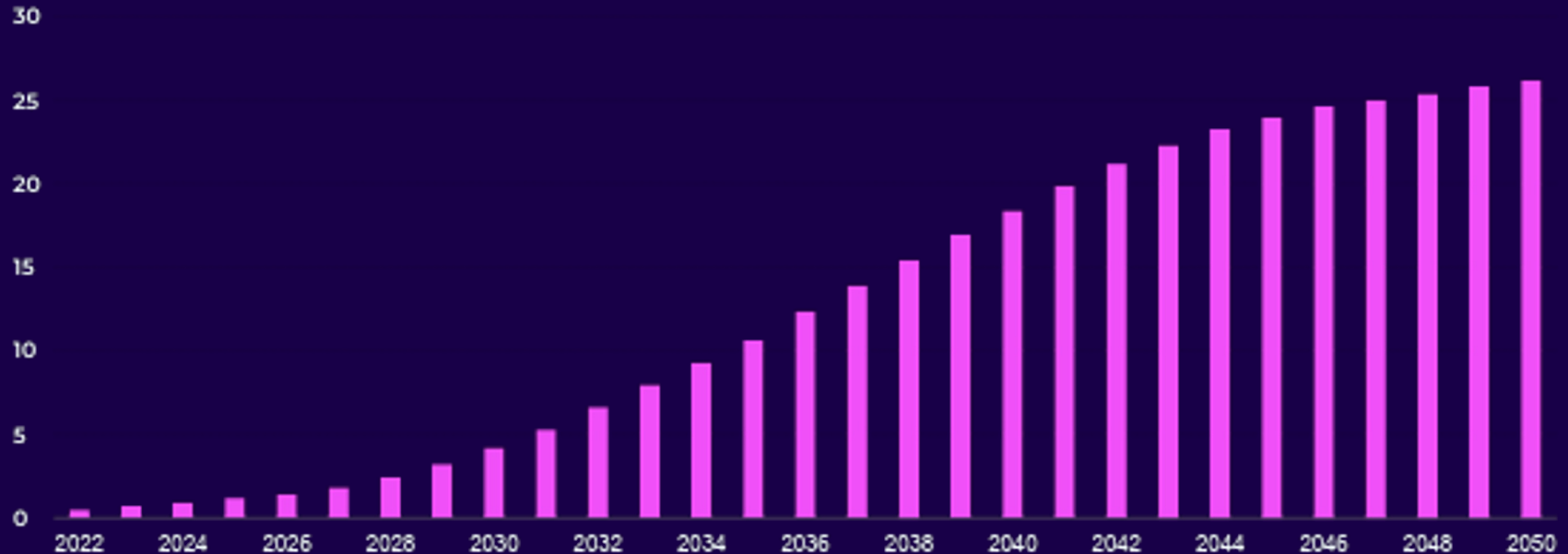
THINGS  
WILL  
CHANGE

# Electrification of transport will impact demand, UK alone will have over 35 million EVs by 2040

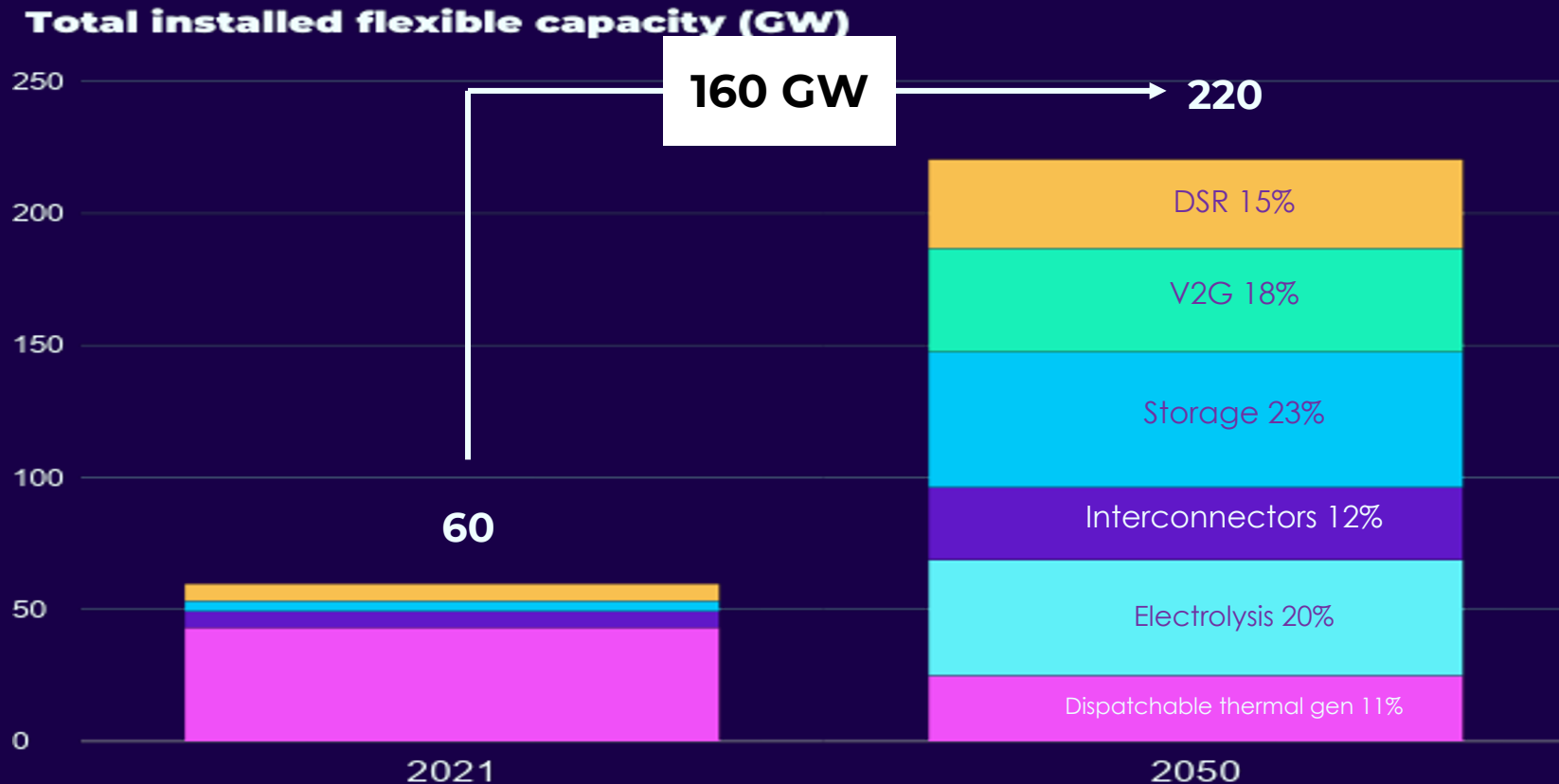


# Electrification of heat too will further impact demand. We expect UK to have over 25 million heat pumps by 2050

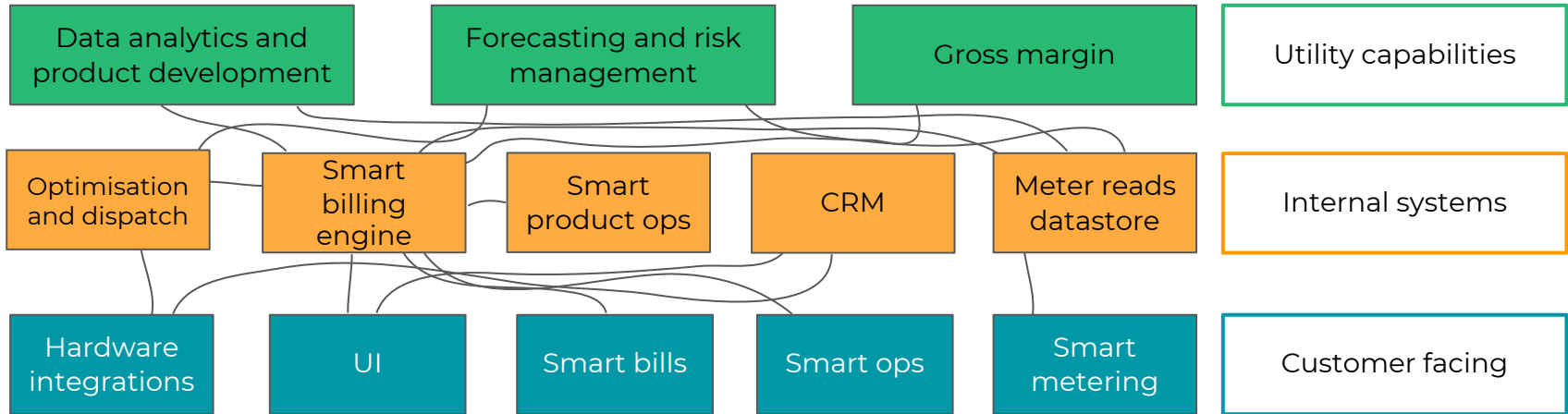
The UK is targeting the installation of 600,000 heat pumps per year



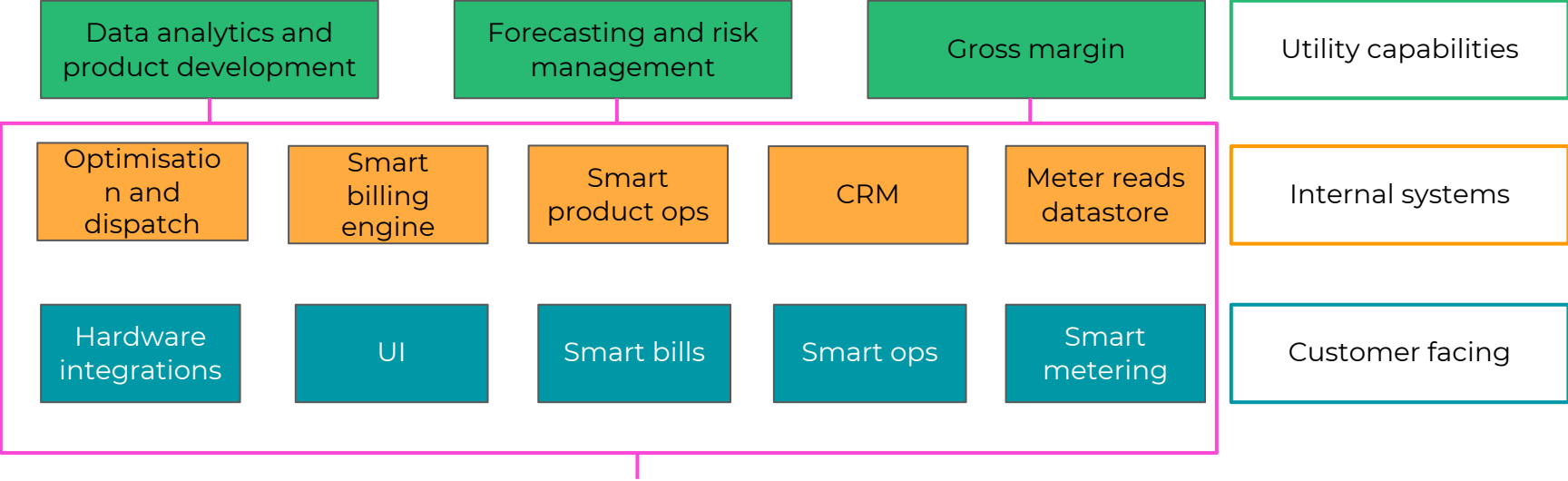
# UK alone will require additional 160GWs of flexibility by 2050



# Elements of a smart product stack

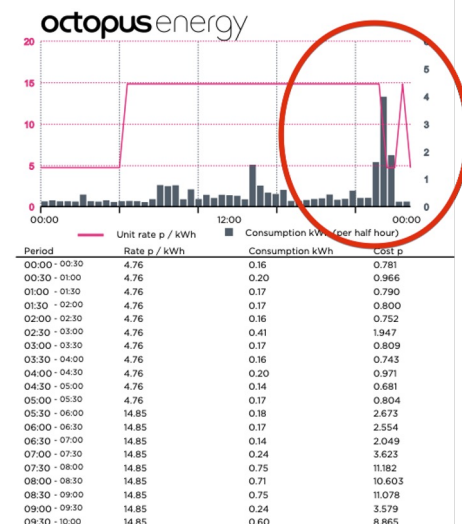
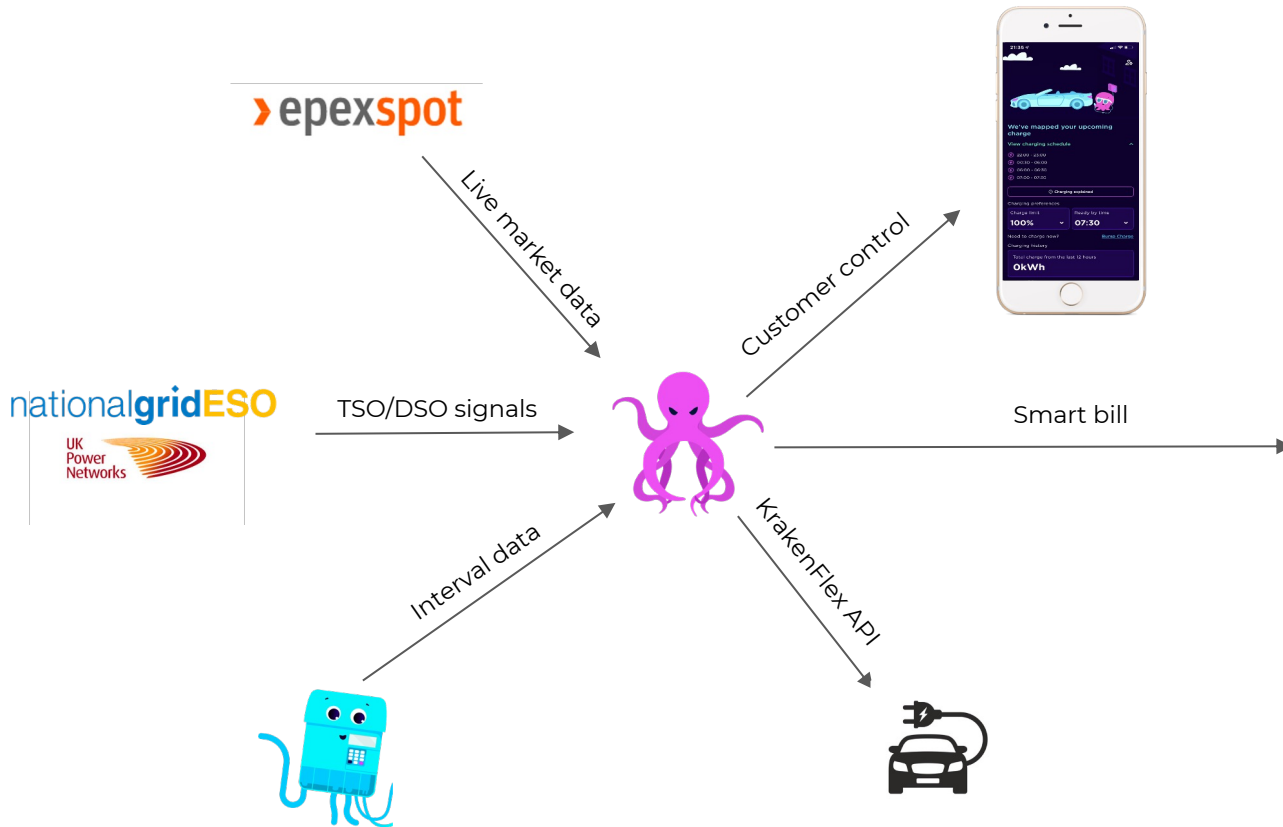


# Elements of a smart product stack

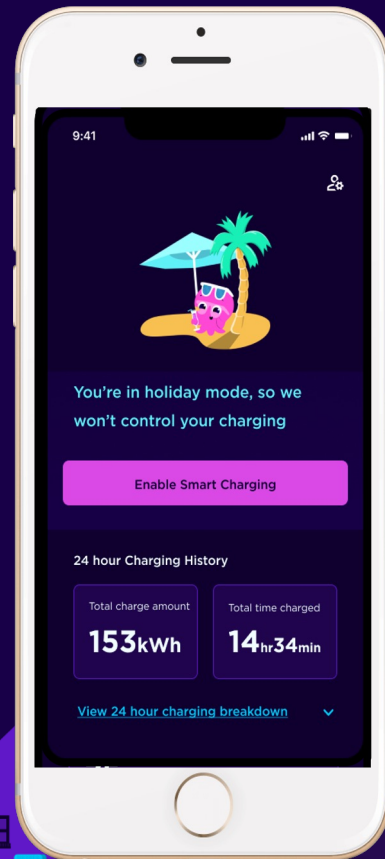
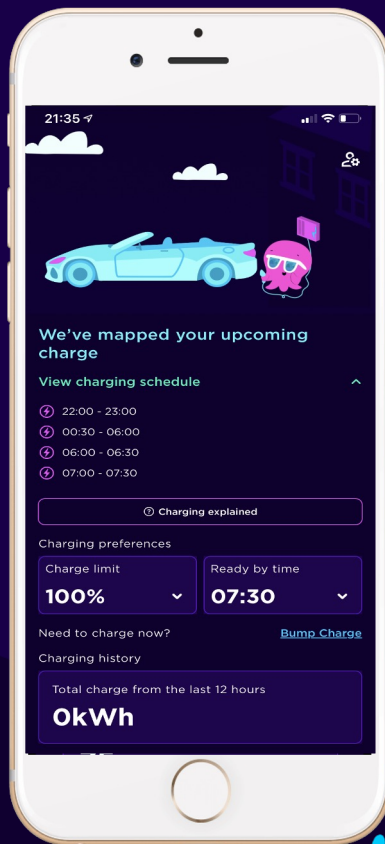
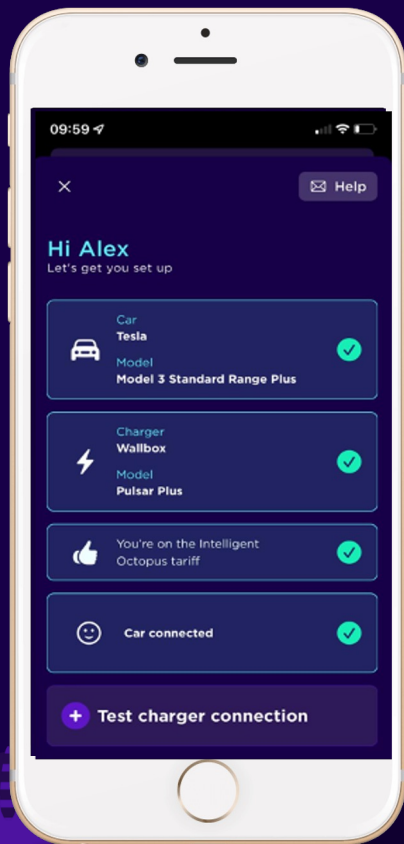




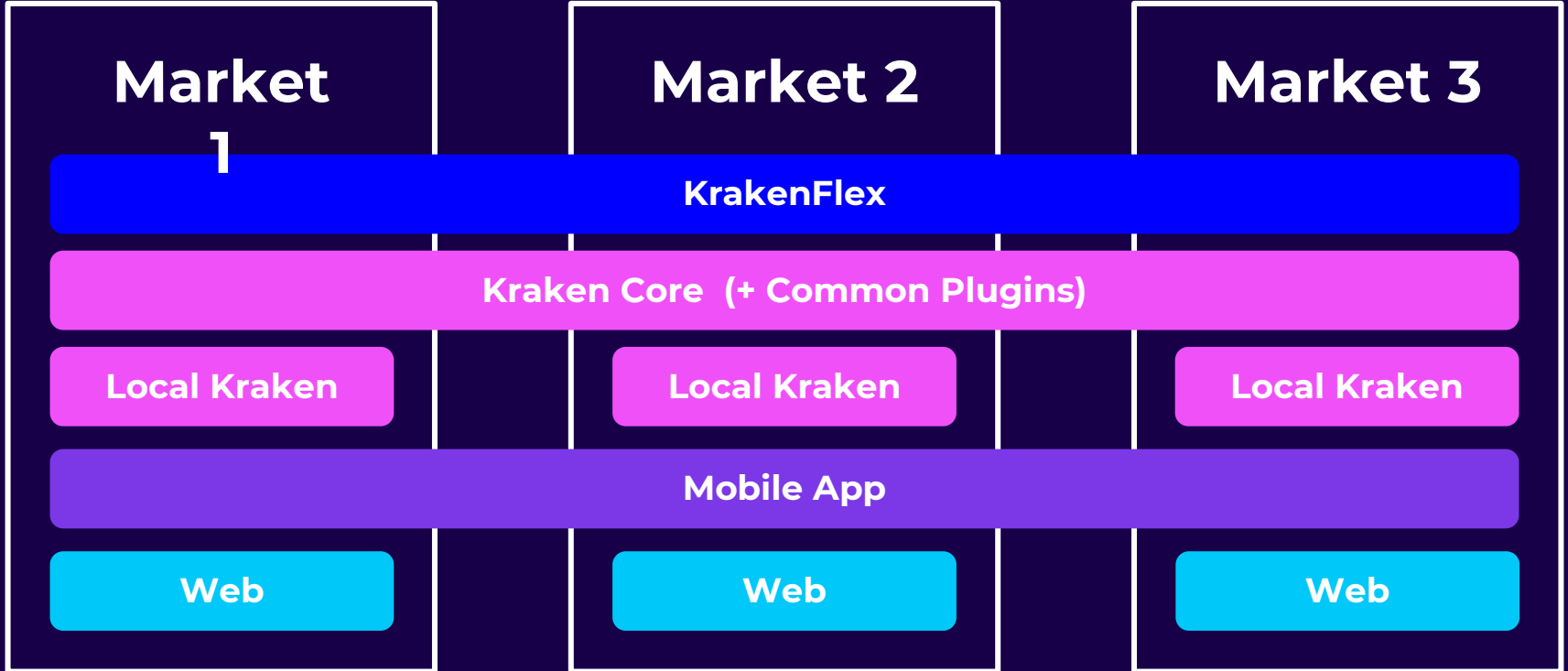
# Intelligent Octopus Dispatchable Dynamic Time of Use



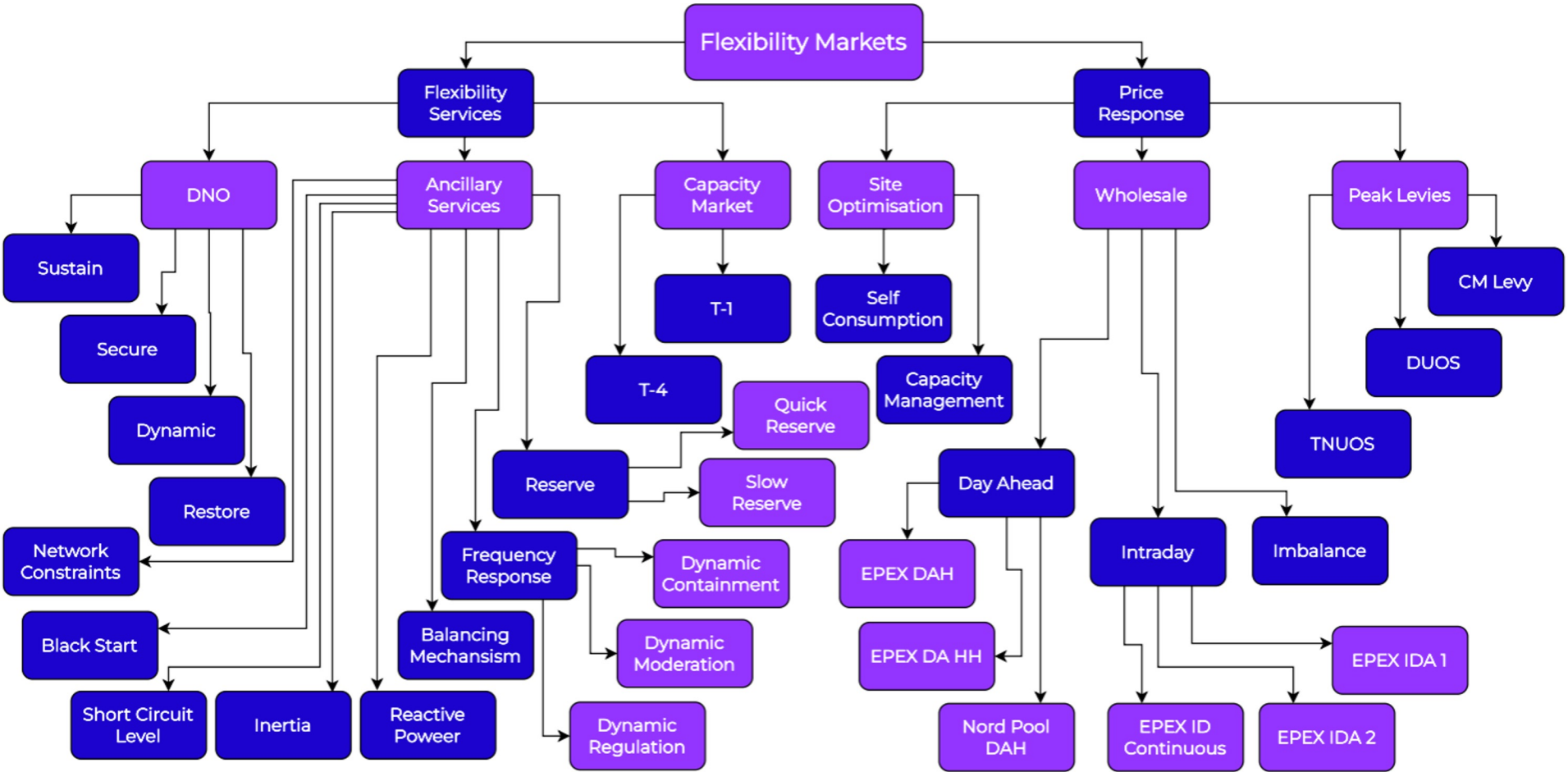
# Ultimate simplicity for users



# Global platform supporting local needs



# UK market landscape

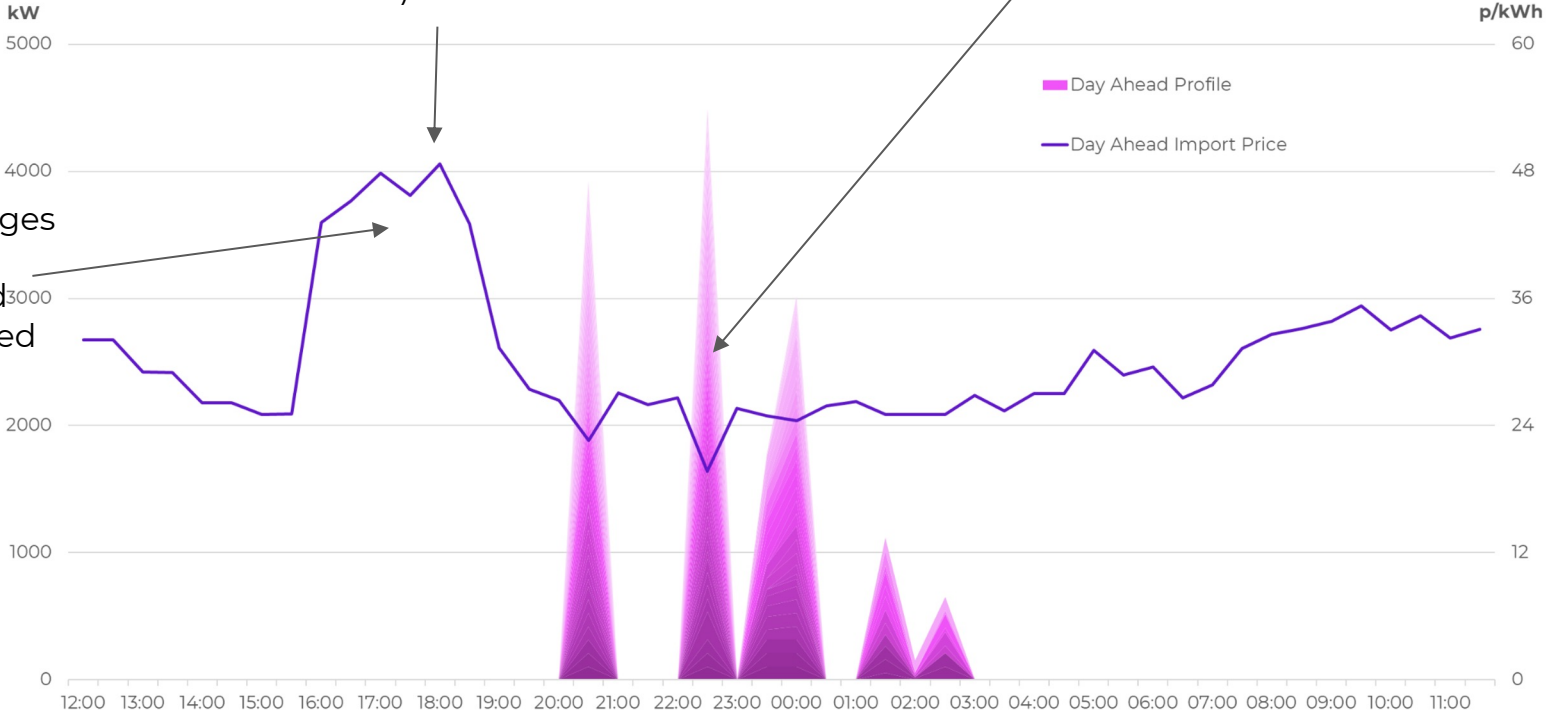


# Intelligent Octopus Optimisation v1.0

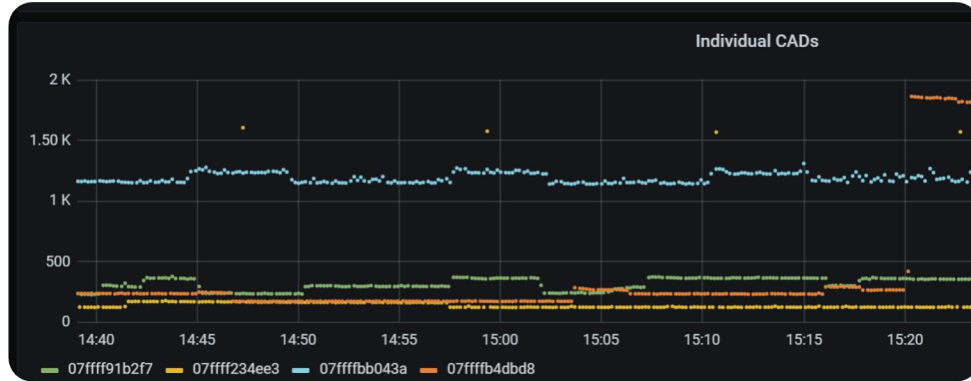
DSO pre-fault services built into day ahead schedule (eg peak avoidance)

Charging optimised against Day Ahead wholesale prices

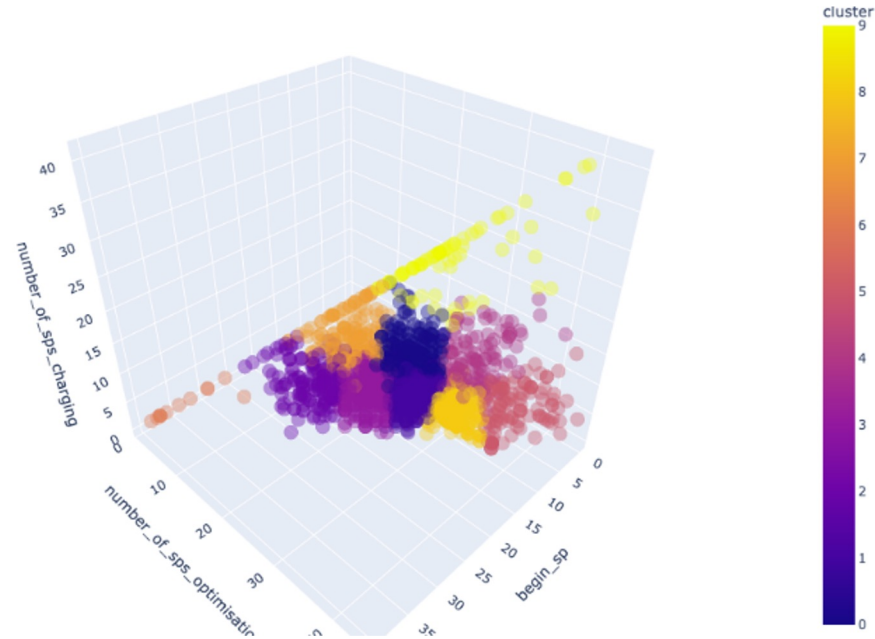
Peak charges are easily forecasted and avoided



# Building for scale and leveraging existing infrastructure



Octopus Home Mini (CAD Lite) enables high frequency metering solution



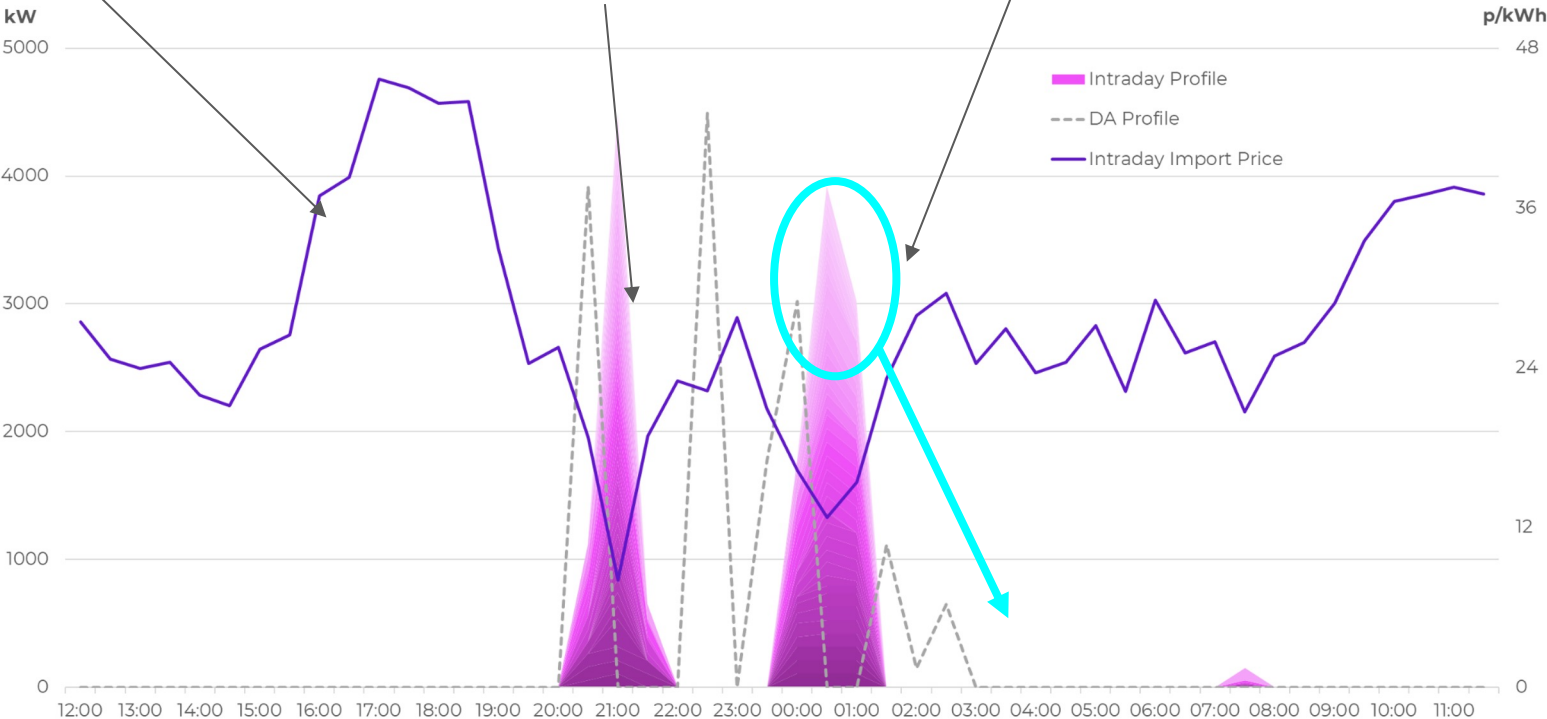
The complexity of accurate availability prediction for bidding into markets

# Intelligent Octopus Optimisation v2.0

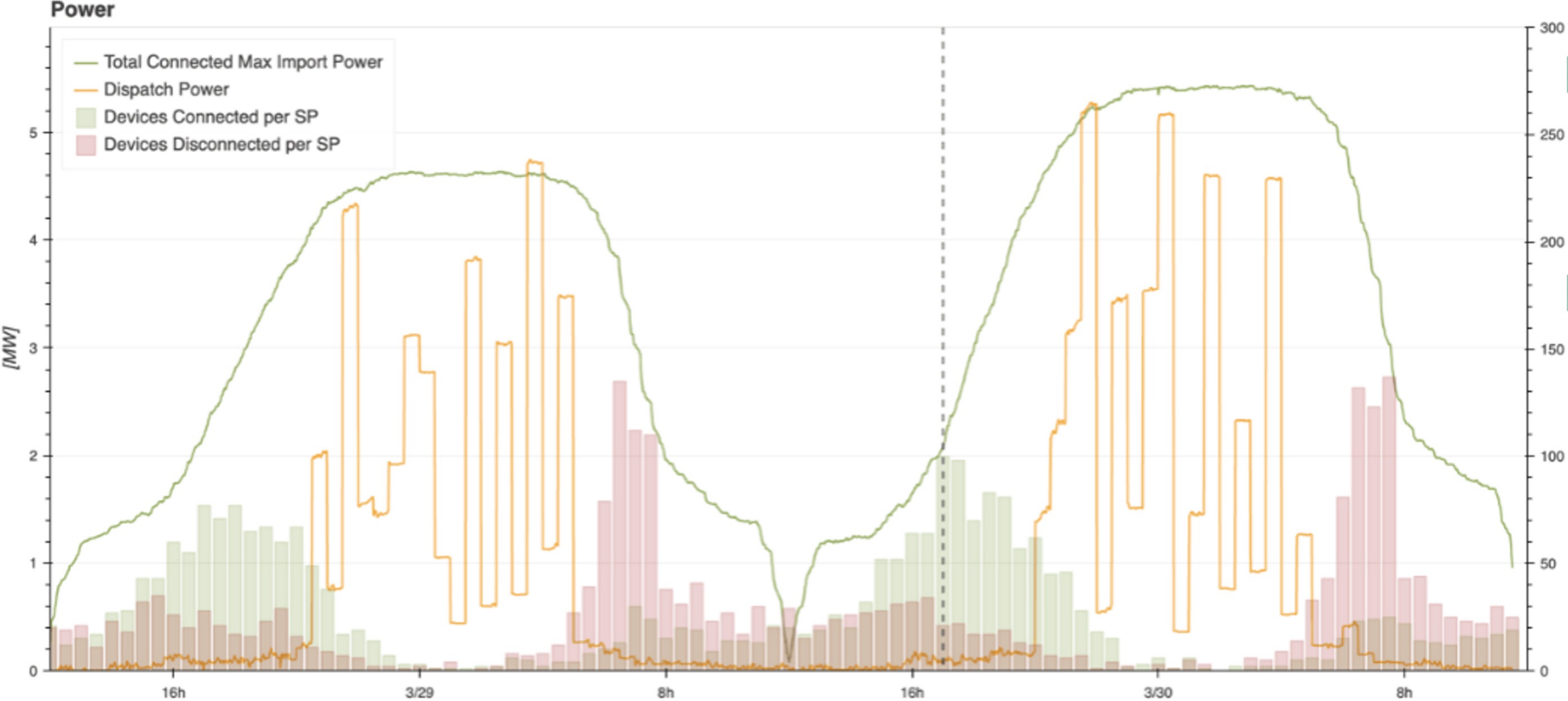
New price signal from intraday market triggers re-optimisation

Updated intraday dispatch profile

Schedule interrupted by volume instructions (eg from DSO or TSO Balancing)



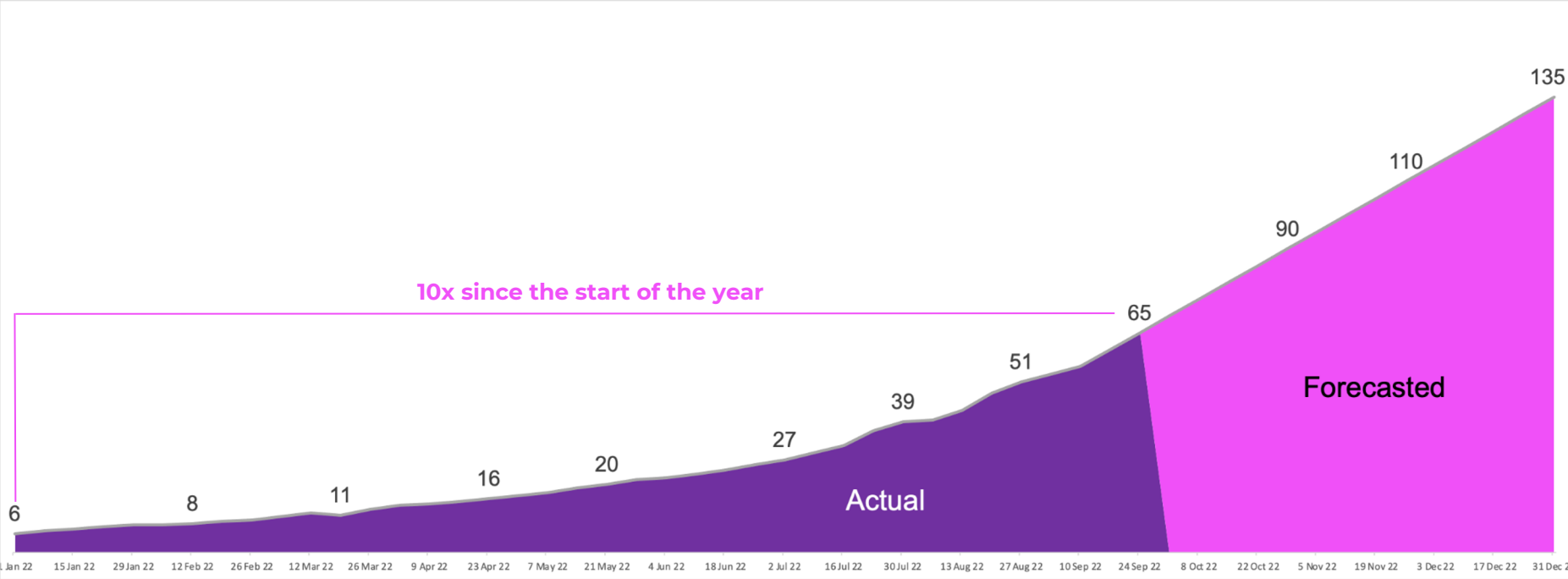
# Dispatch profile in a specific zone





# Do customers like it?

## MWs under management



# Enabling the UK's first ever zero-bills homes

Octopus Energy partnered with ilke Homes to build the first **zero-carbon, zero-bills** homes fitting them out with solar PV, heat pumps, batteries and complete device and home optimisation

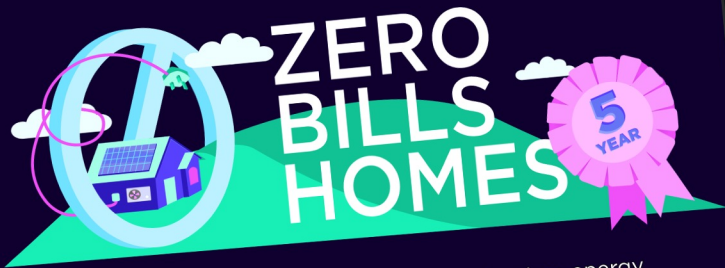
## Expansión

Octopus e Ilke lanzan plan de energía limpia sin facturas para los propietarios de viviendas

## pv magazine

**Octopus e ilke Homes venderán 3.500 casas modulares completamente autosuficientes con solar y baterías**

Get started with your



Your Zero Bills home is built with best-in-class energy efficiency plus solar panels, storage and smart technology to help you live clean and comfortable at zero cost.

Activate my Zero Bill Home

## FINANCIAL TIMES

Octopus and Ilke launch clean energy scheme with no bills for householders

Power supplier and home builder say renewable power plan will transform UK market



## EXPRESS

Octopus Energy throws UK energy crisis lifeline with plan to guarantee homebuyers **NO BILLS**

