



Mixergy Smart Hot Water

Peter McBride, Sales Director

mixergy®

AS WE TRANSITION AWAY FROM GAS AND
ELECTRIFY THE HOME, WE WILL HAVE TO DO
MUCH MORE WITH MUCH LESS ENERGY

THE DECARBONISATION OF HEAT CHALLENGE

As we transition away from **gas** and electrify the home, we will have to do **much more** with much less **energy**



Gas peak capacity is 65KW** of power

Space heating
Domestic hot water
Cooking



Electricity peak capacity is 18.4** KW of power

Domestic appliances
Lighting
EV charging



As we transition away from gas and **electrify** the home, we will have to do much more **with much less energy**



Electricity peak capacity is 18.4** KW of power

Space heating
Domestic hot water
Cooking
Domestic appliances
Lighting
EV charging



Without instantaneous heat ...



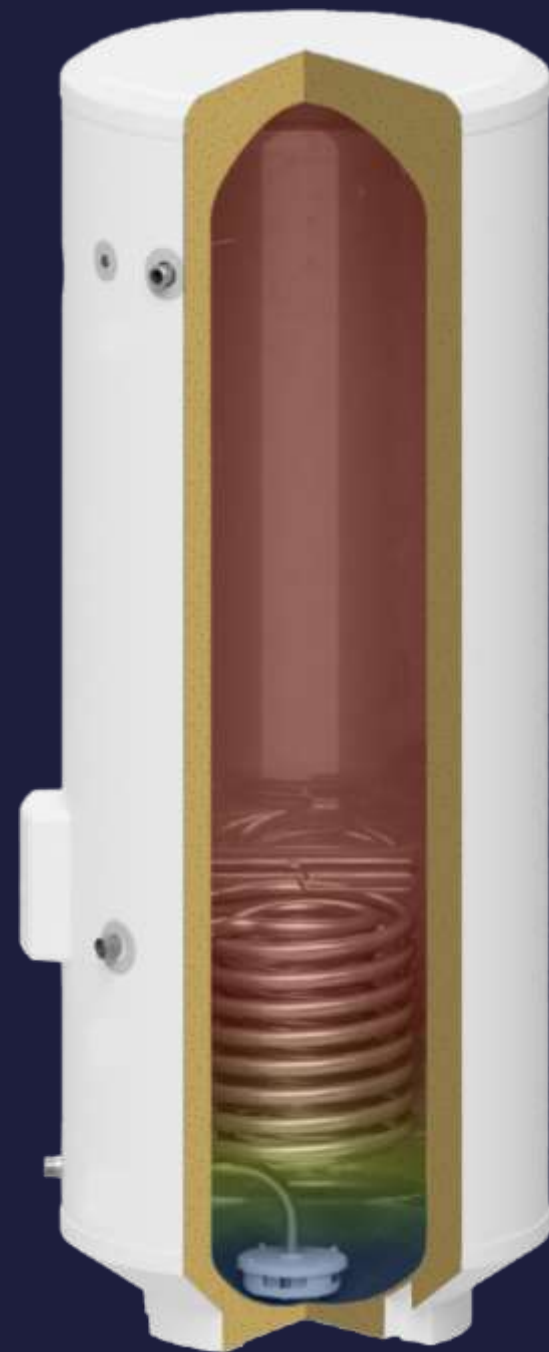
Every home needs a cylinder for hot-water storage and/or heating optimisation



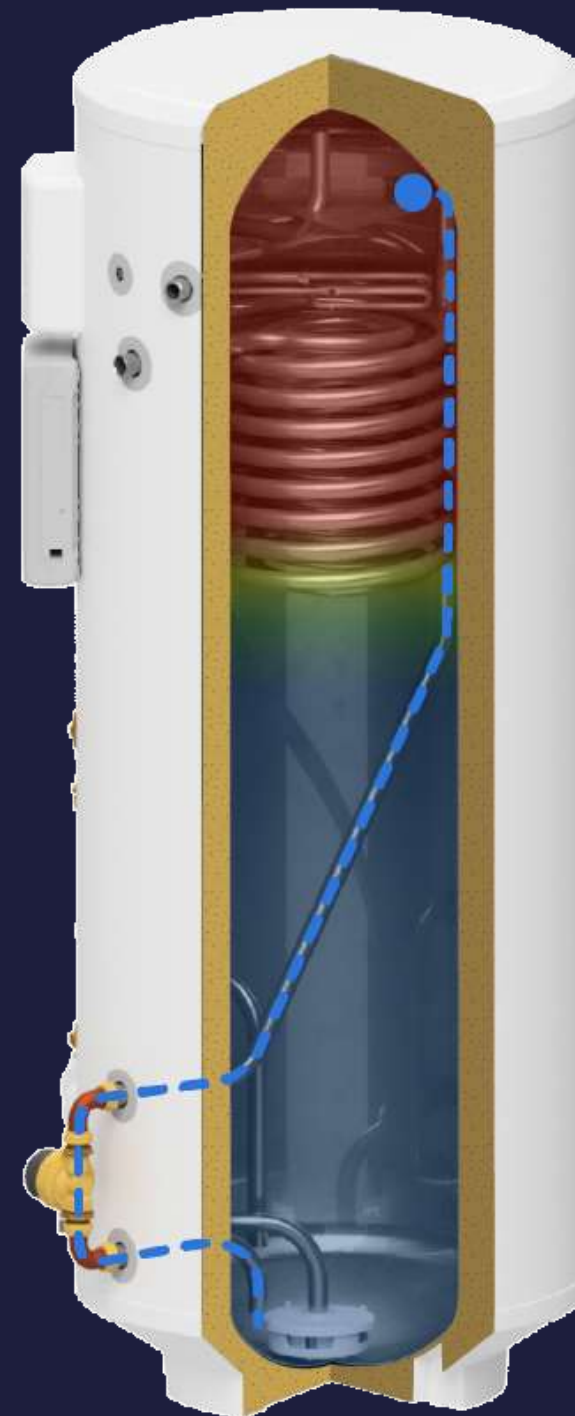
IMAGINE IF EVERY HOT WATER CYLINDER
WAS SMART, WORKED JUST LIKE A
BATTERY, AND CONNECTED TO THE GRID

OUR MISSION

HOW WE TRANSFORM HOT WATER



TRADITIONAL HOT WATER
STORAGE



mixergy® 

Patented Top-down Heating

Heats only what you need, up to 40% more efficient than traditional tanks.

Precision-Level Sensing

Our sensor sees exactly where hot water is. No guessing. No waste.

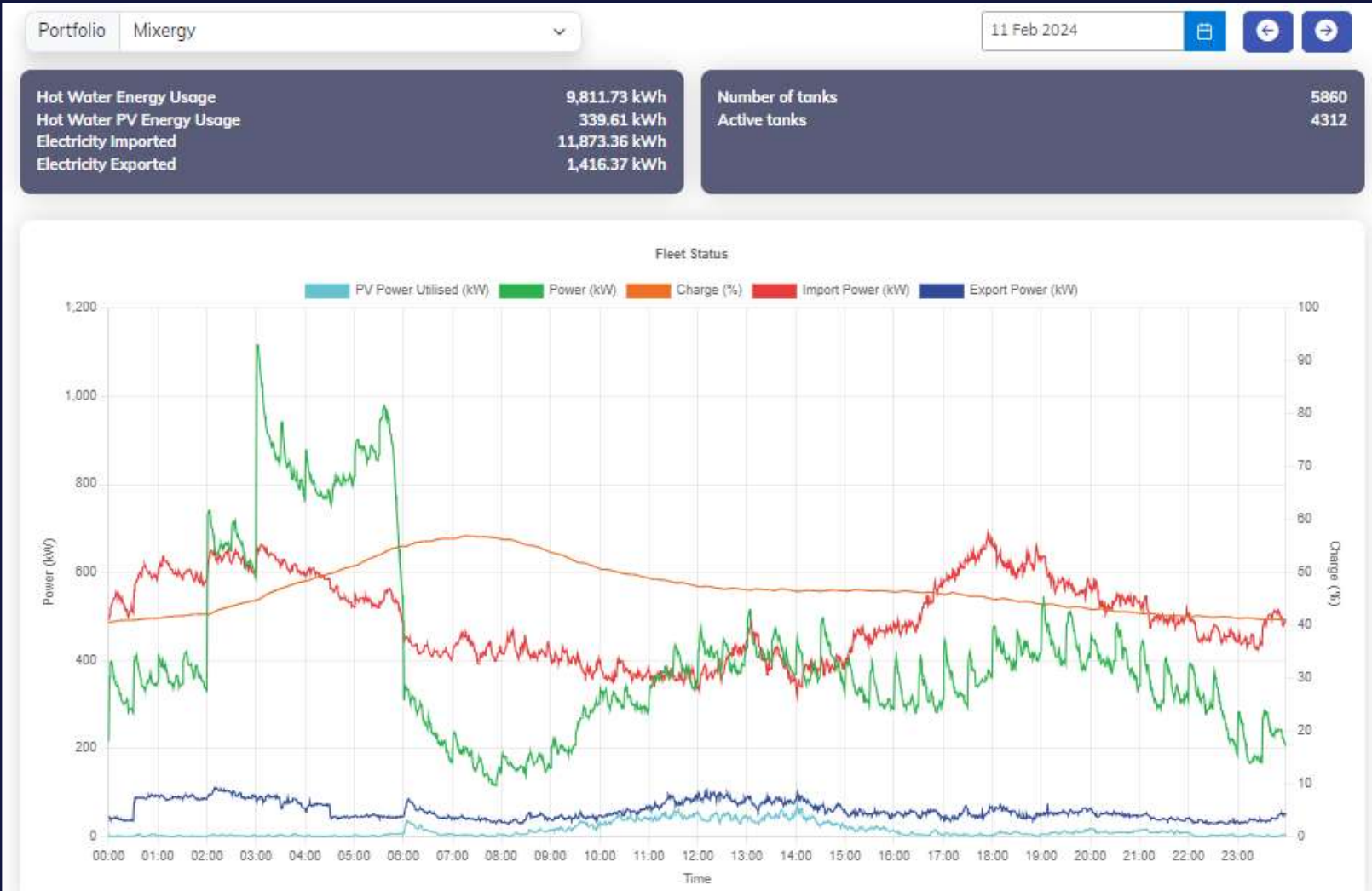
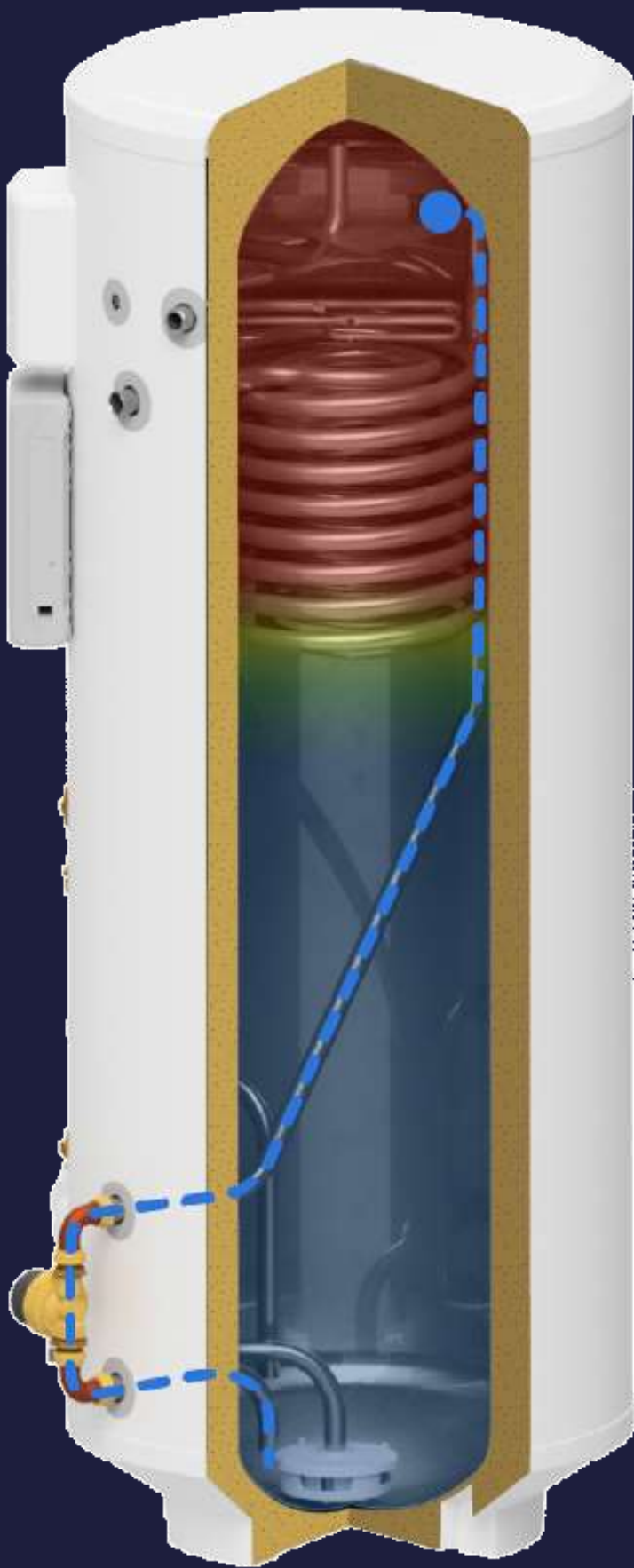
Grid-Ready Intelligence

Supports demand shifting, smart tariffs, and dynamic scheduling.

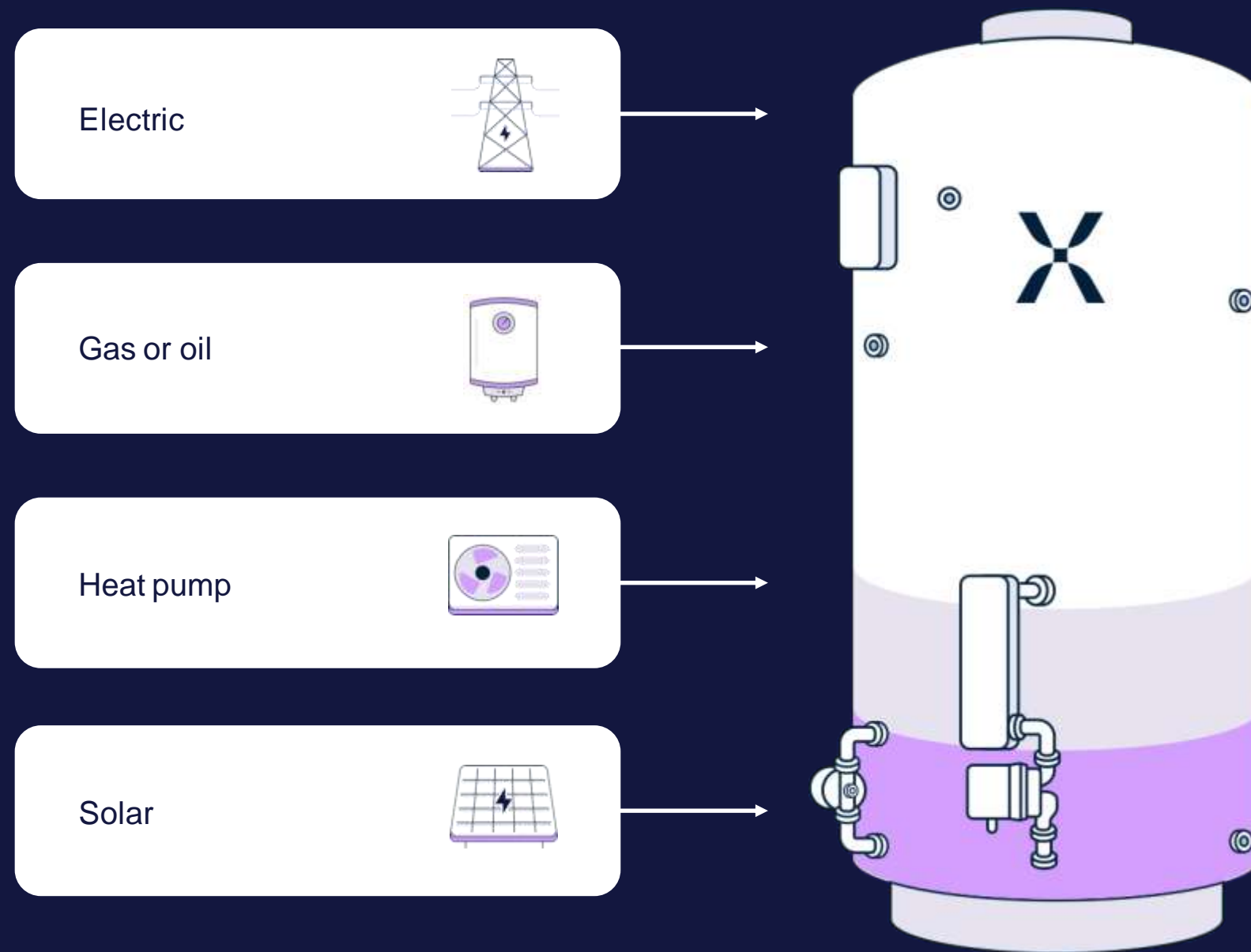
Smart, Modular Controls

Built-in flexibility for any heat source-gas, electric, solar, or heat pump.

We don't just track data...we manage and optimise it



Mixergy provides a clear path to transition from fossil fuel heating to low and zero carbon alternatives.



All Mixergy tanks are heat pump and solar PV ready

With a 25 year warranty, Mixergy tanks are future-proofed to support a household's journey to net zero living.



DESIGNED TO SAVE ENERGY X



Lower Bills by Design

We reduce hot water bills—saving up to 60% when paired with solar PV and Octopus Agile.

Cut Carbon, Not Comfort

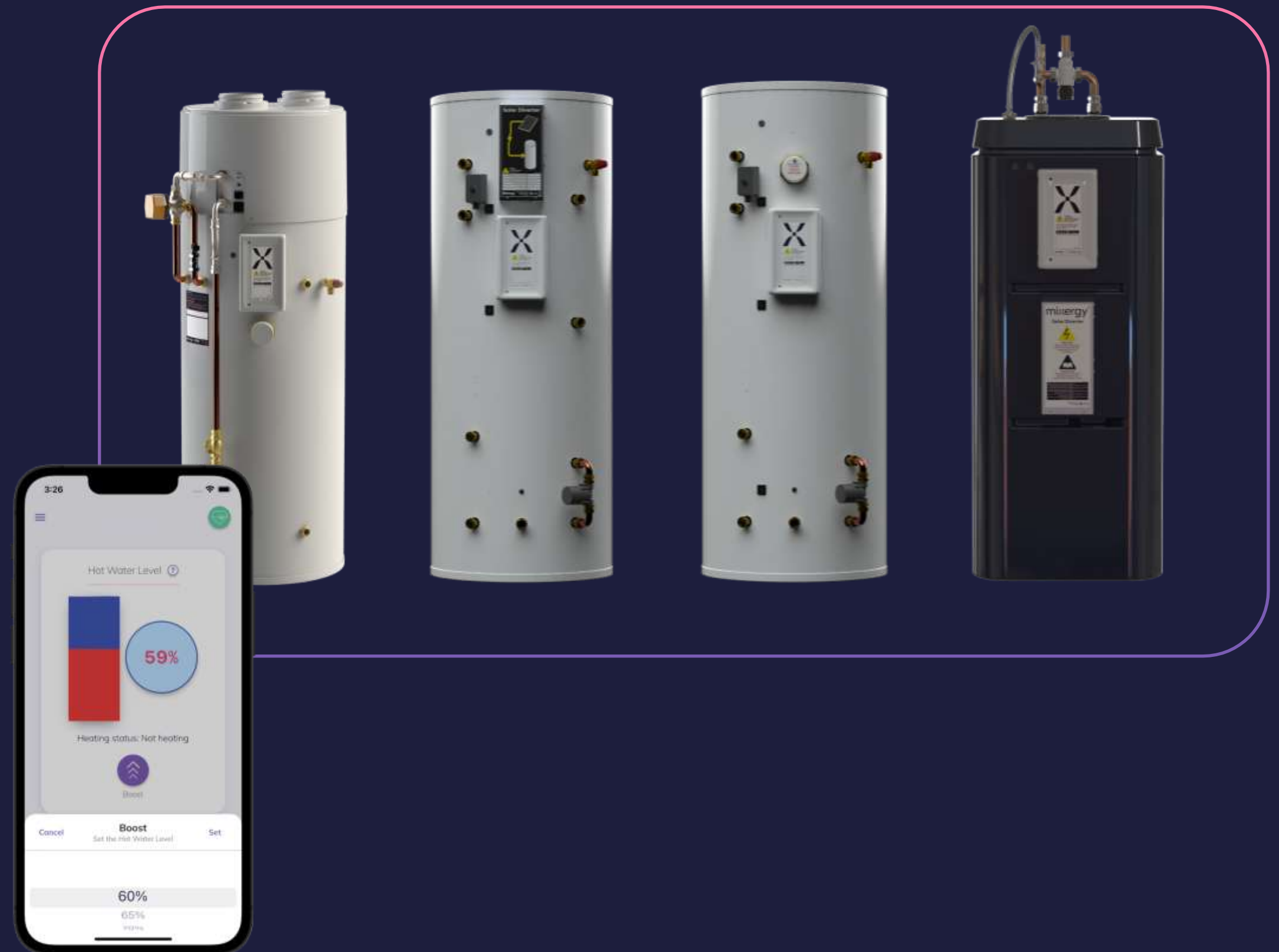
Uses less energy while enabling smart load shifting, reducing building carbon emissions without compromising performance.

Smarter Compliance

Our SAP-optimised tech improves ratings and helps boost EPC scores, reducing the need for additional solar.

Built for Net Zero

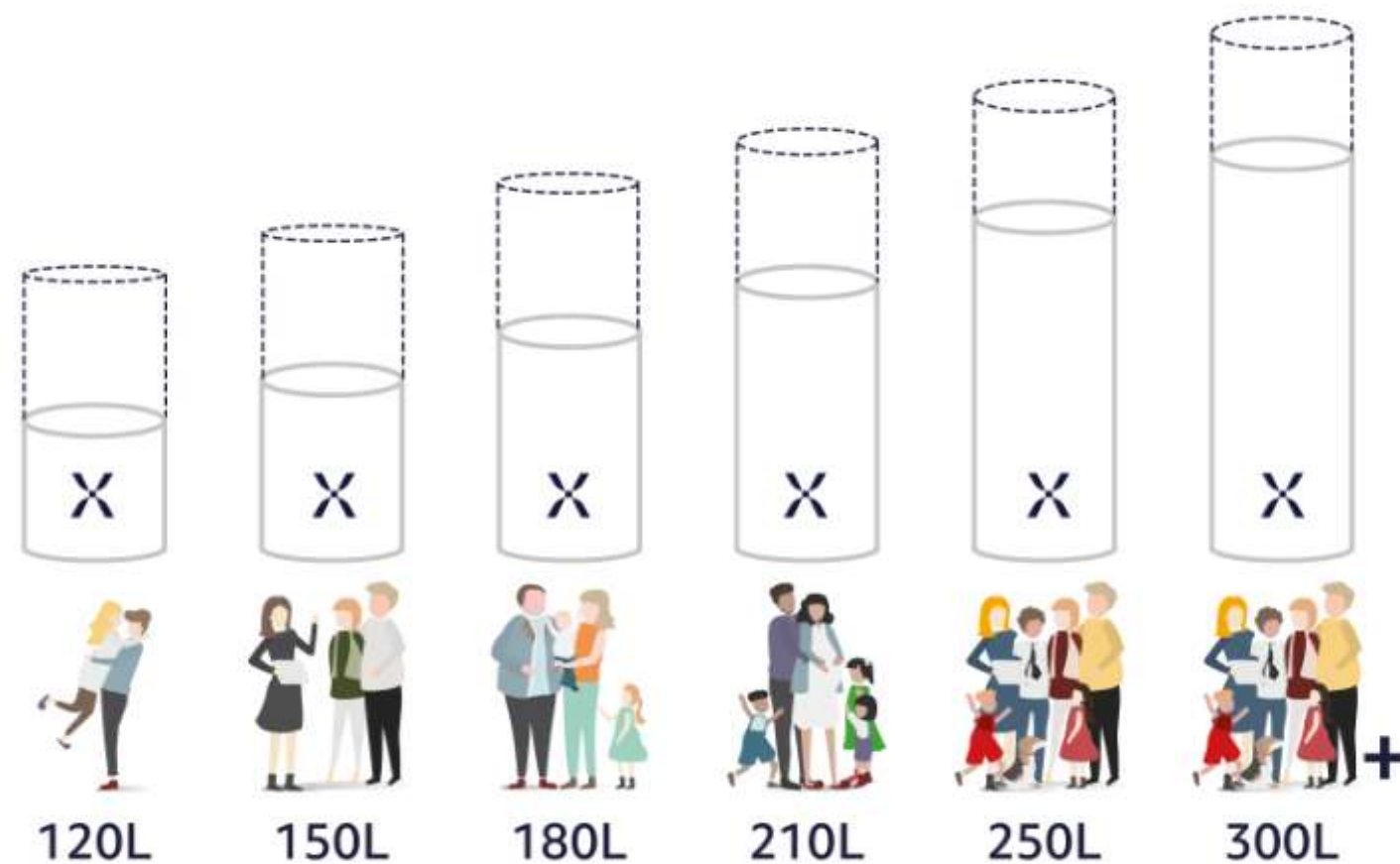
We're #1 in our product category and already recognised in the Home Energy Model.



Prevent Hot Water Dilution

As a result of:

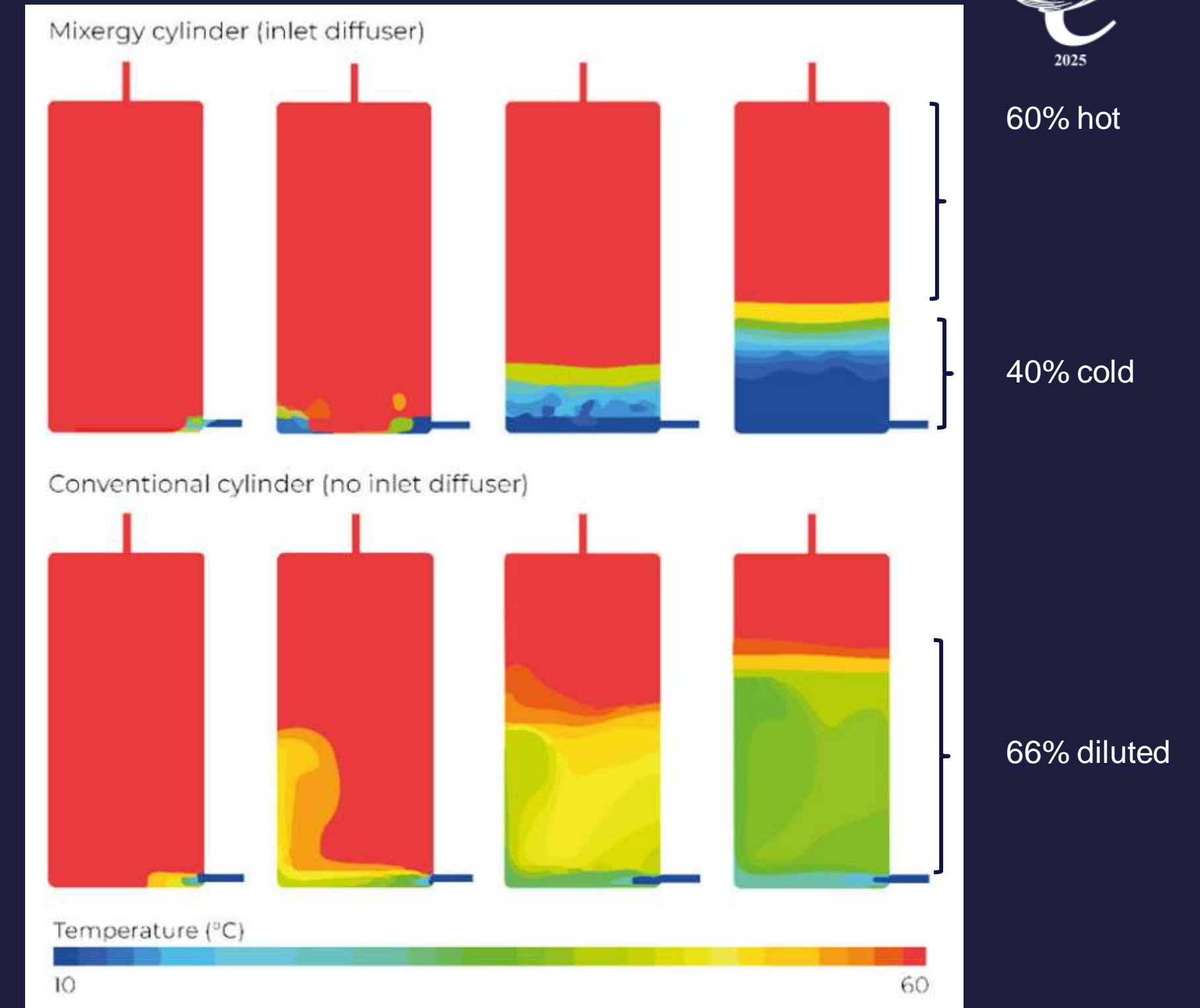
- 1) Knowledge of state of charge
- 2) Ability to rapidly reheat
- 3) Prevention of dilution on discharge



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National Physical Laboratory (NPL):

<https://www.npl.co.uk/case-studies/verifying-cutting-edge-environmental-technologies>

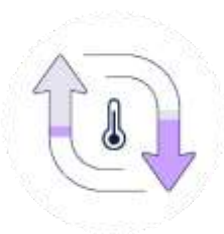


Above: 60litres discharged from a 180l conventional vs. 180l Mixergy tank.

SMART CYLINDER DATA FOR REAL-TIME INSIGHTS, COMPLIANCE, AND FLEET EFFICIENCY

HOW OUR DATA TRANSFORMS EFFICIENCY

FLEET MANAGEMENT & REMOTE MONITORING



Monitor cleansing cycles for legionella



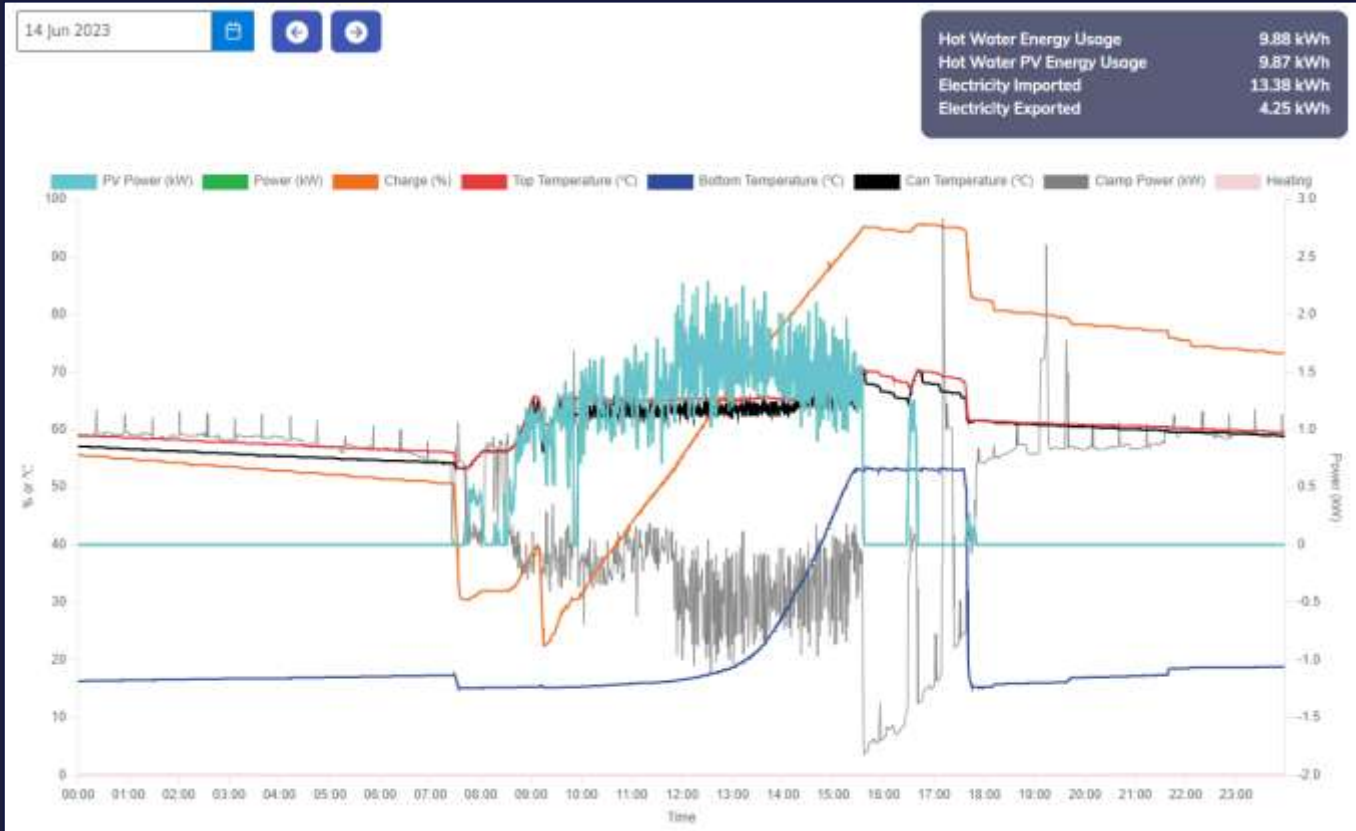
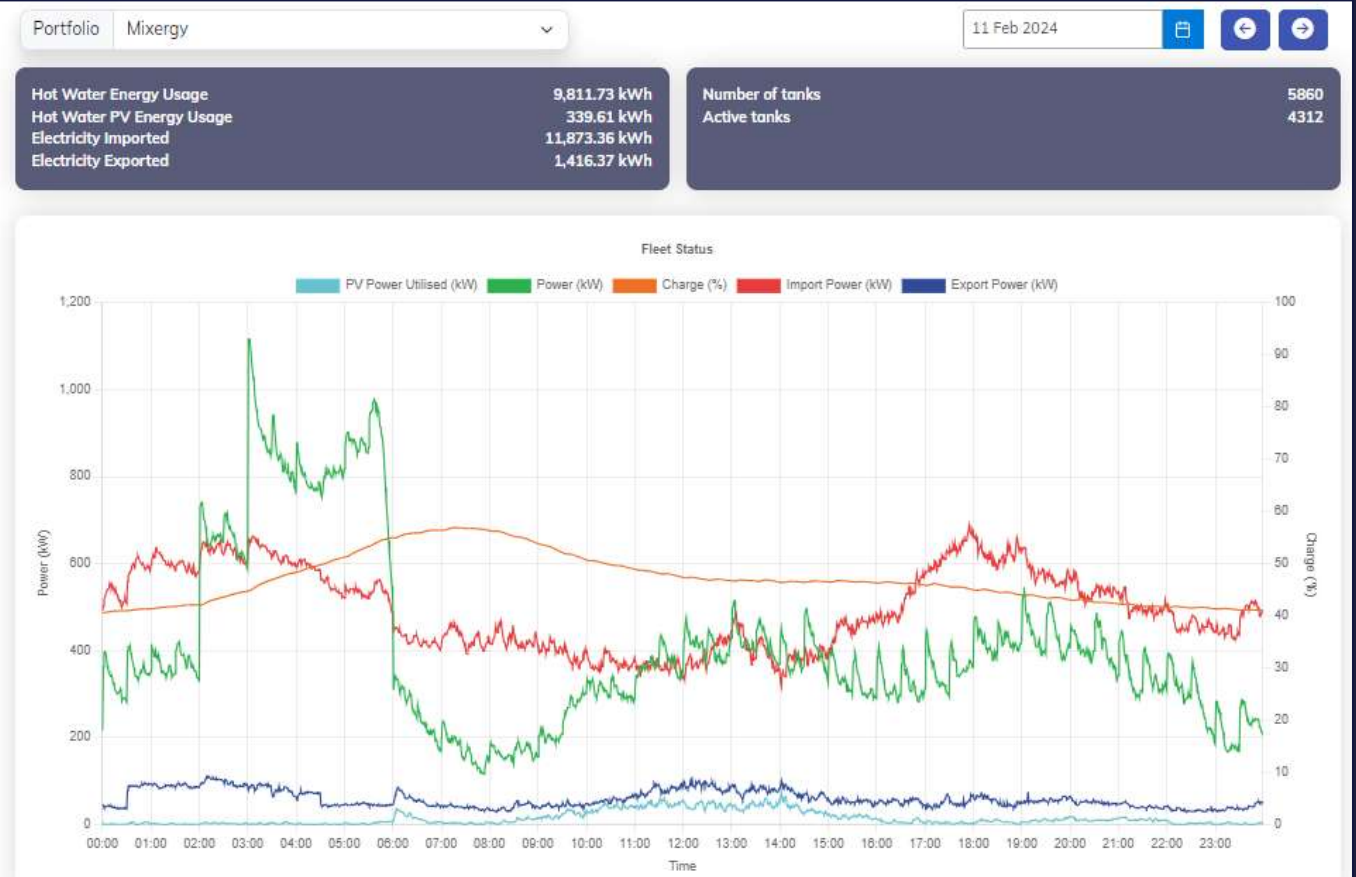
Speed up fleet response times by spotting issues early



Support residents/homeowners remotely



Understand the whole fleet carbon reduction and money savings

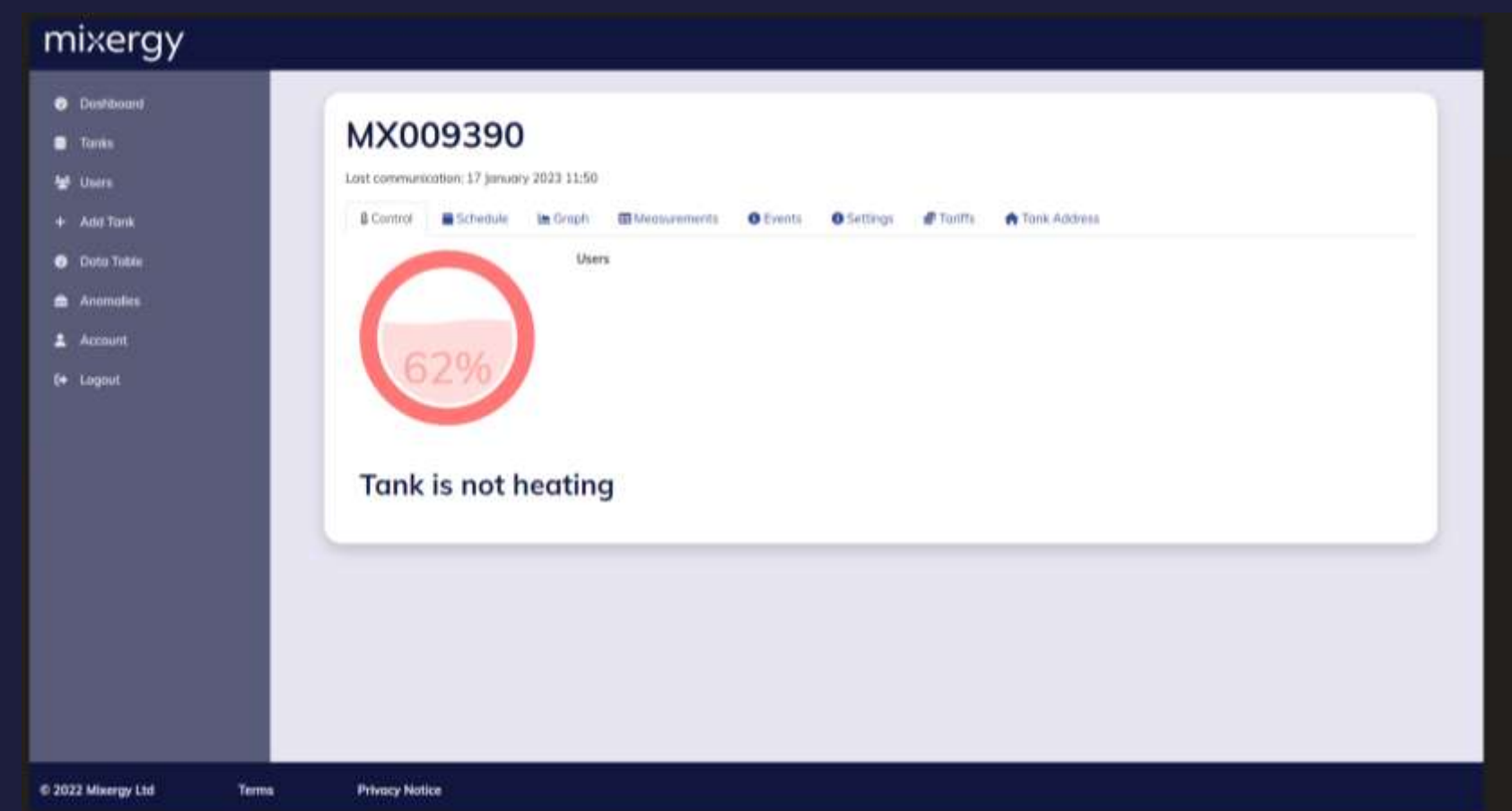


Easy to control

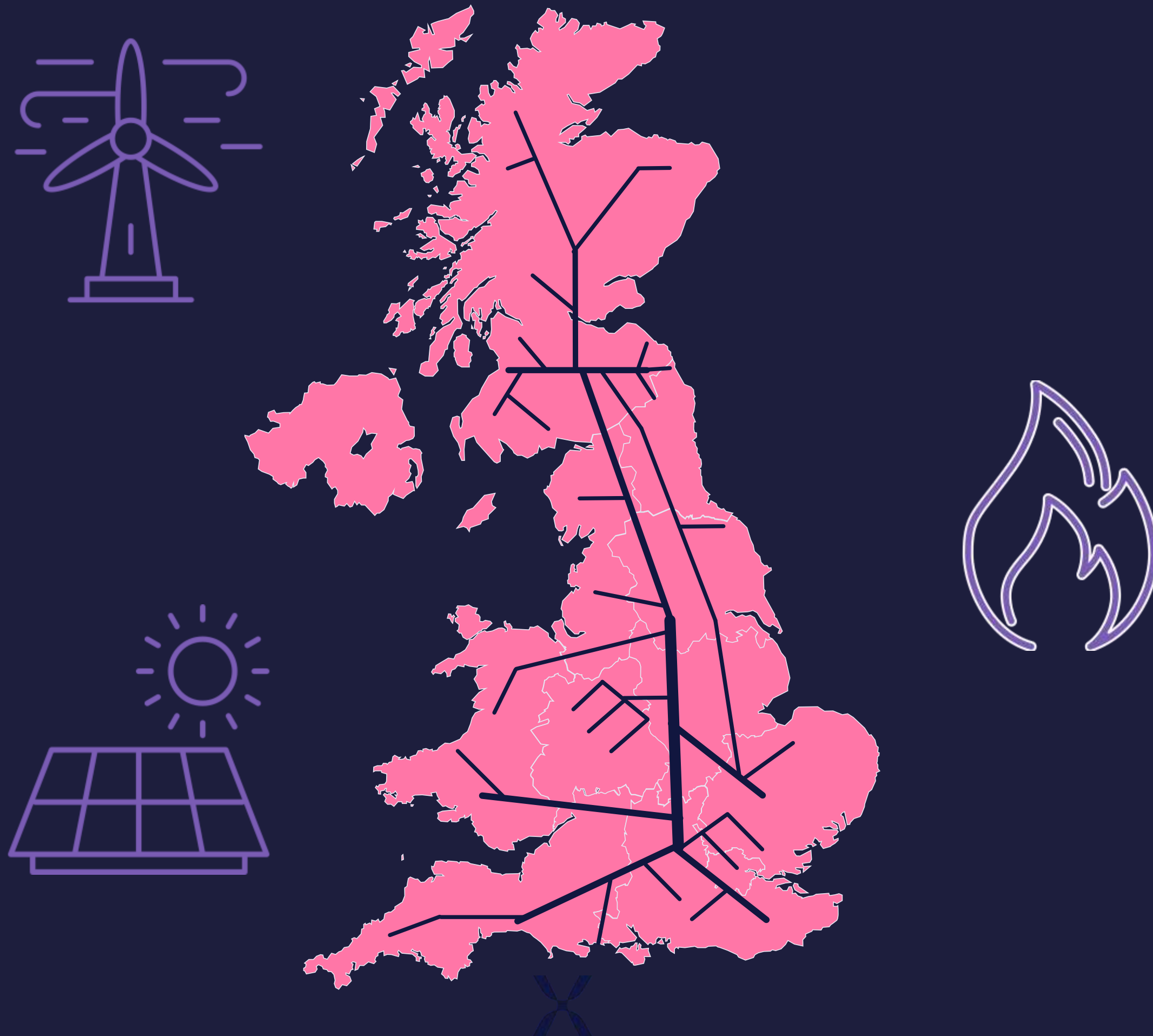


There are 4 ways to control your hot water:

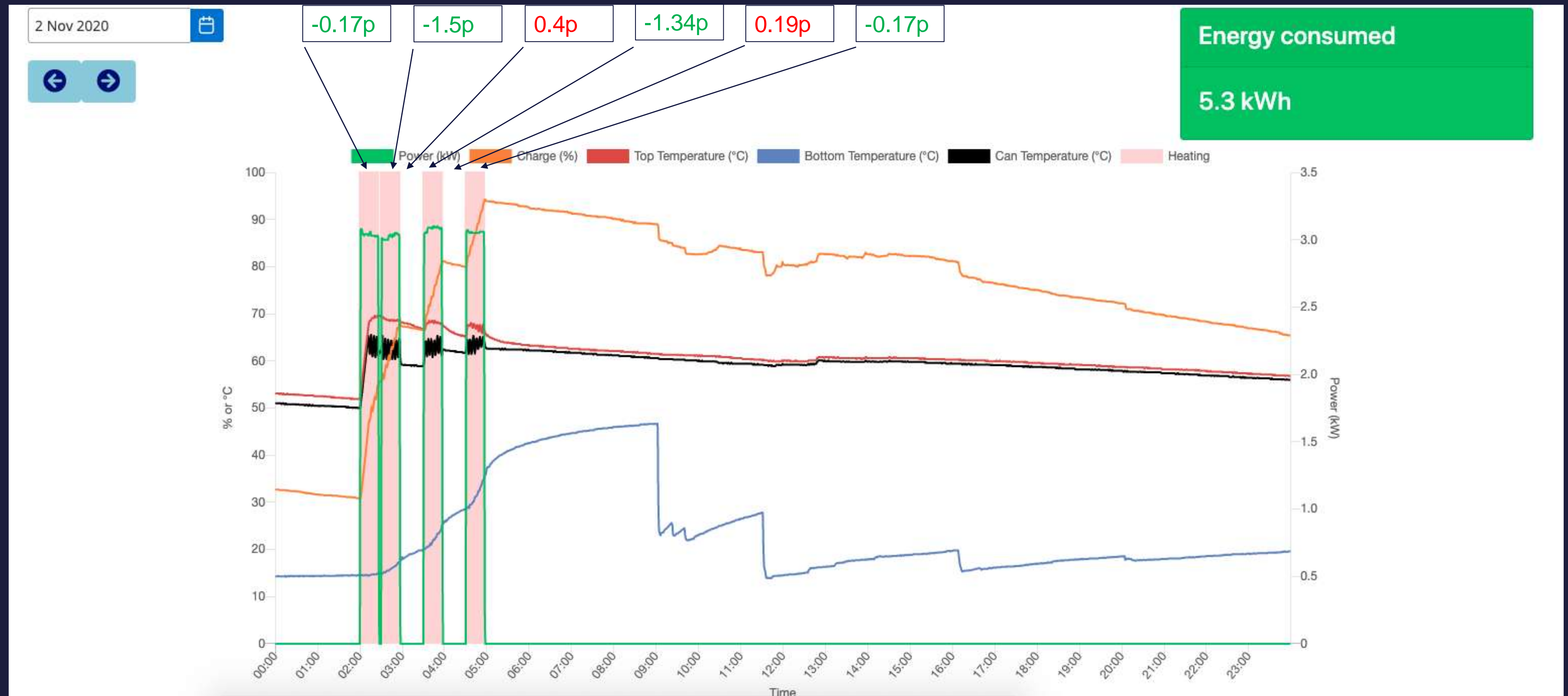
- 1) Remotely using the Mixergy App
- 2) Locally via the Mixergy tanks hard wired gauge
- 3) Remotely via www.mixergy.io on their computer
- 4) Alexa or Google Voice assistant



Renewable Energy & Network Constraints



Tariff optimisation using machine learning



ACHIEVE EPC GAINS AND SAP COMPLIANCE, WITHOUT THE HEADACHES

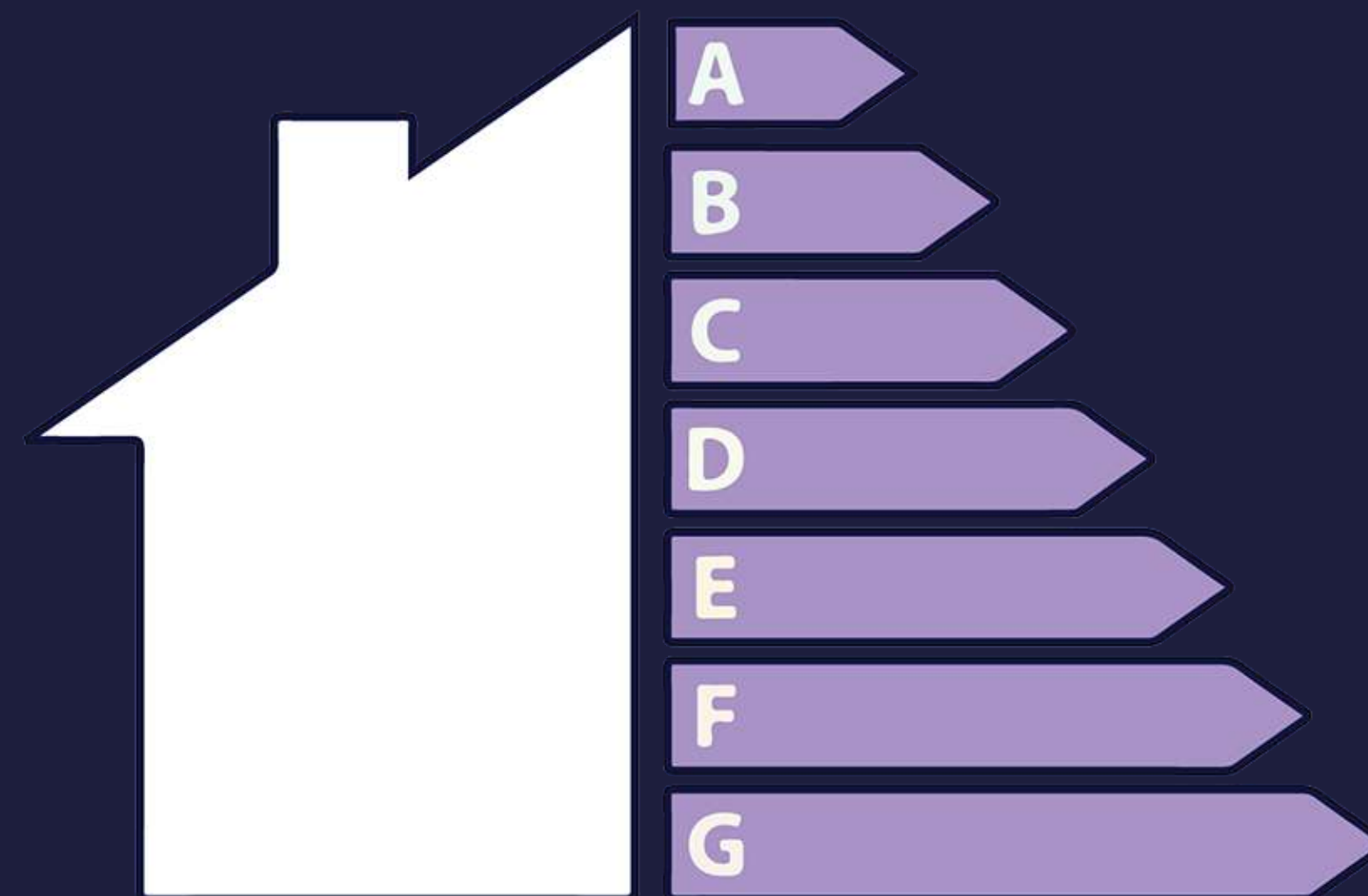
In retrofit projects, Mixergy is proven to offer an average gain **of 4 points** in an EPC rating (when combining with solar PV, and that's on top of the PV gain).

We can improve ratings by **up to 14 points**, depending on the amount of PV installed.

When combining solar PV and heat pumps, you can reduce to zero carbon with up to **50% less PV**.

Mixergy has the ability to **offset carbon** and needs less energy to heat water.

Mixergy iHP X delivers top SAP scores and is fully aligned with Home Energy Model requirements.



BIRMINGHAM CITY COUNCIL

Challenge

- Meet **Net Zero by 2030** while reducing tenant energy costs
- Upgrade water heating systems with minimal disruption
- Tackle **fuel poverty** and meet **EPC targets**

Solution

- Installed nearly **1,000 Mixergy 'heat-what-you-need'** cylinders
- Enabled **remote diagnostics** and non-disruptive upgrades
- Delivered **machine-learning-driven efficiency**

Why It Worked

- Mixergy's smart technology aligned with **net-zero strategy**
- Easy installs = **high tenant buy-in**
- Scalable, efficient, and **future-proof**

Results

£286,745 Saved on Energy Bills in 2 Years

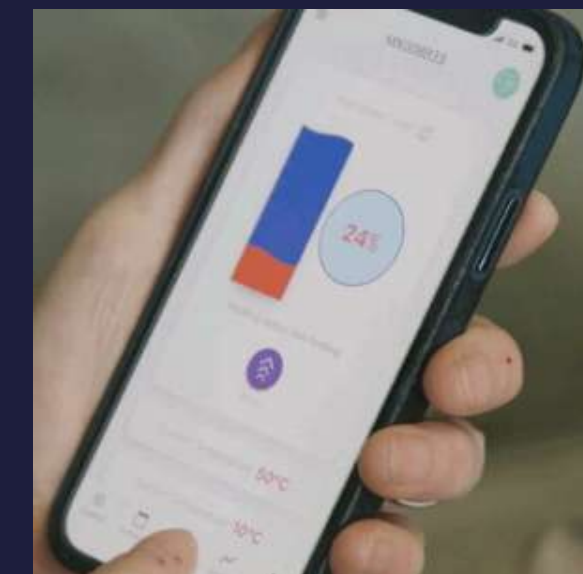
Tenants collectively saved **£286,745**—averaging about **£286 per household**.

172 Tonnes of CO₂ Emissions Eliminated

That's like removing **40 petrol cars** from the road each year.

328,587 kWh in Energy Savings

Equivalent to powering **100 average UK homes** for a full year.



HAVEBURY HOUSING

Challenge

- **Support vulnerable residents** with lower-cost, lower-carbon heating
- **Transition away from oil** without major infrastructure change
- Maximise use of **existing solar PV systems**

Solution

- Installed Mixergy smart hot water cylinder with **embedded solar diverter**
- **Replaced inefficient electric showers** with mixer showers
- **Enabled seamless integration with oil boilers** and other home systems

Why It Worked

- Mixergy turns the hot water tank into a **thermal battery**
- **Supports solar-first heating**, then oil backup when needed
- **Works alongside EV chargers** and other smart devices
- **Easy** for contractors to install and residents to use

Results

185 Days Without Oil

The Mixergy tank ran entirely on solar PV for **over half the year**.

3× Lower Carbon Emissions

By blending solar and oil, the tank emitted just **113 kg of CO₂**, compared to **373 kg** if oil had been used exclusively—a **70% emissions cut**.

837 kWh of Free Solar Energy Used

The tank smartly captured **837 kWh** of excess solar—**enough to power a fridge for nearly 5 years**.



BIG SAVINGS, BIGGER IMPACT



BRITISH LAND



100% Gas Removal
<1yr Payback
600 kWh/week saved

BIRMINGHAM CITY COUNCIL



325,587 kWh saved
£286,000/year saved
172 tons CO₂ cut

WEMBLEY STADIUM



25% Energy Saving
£328,475/year saved
296 tons of CO₂ cut

CALA



50% free hot water
256 CO₂ cut
10x faster hot water heating

MY OWN HOME'S NET ZERO JOURNEY

Challenge

- **System designed to operate at high temperatures** pipework and emitters
- **Transition away from gas** without major infrastructure change
- **My wife** convincing her the CapEx required will be beneficial and taking up precious garden space to house the heat pump
- **4 bed detached** 145sqm home 2019 build

Solution

- **Installed Mixergy smart hot water cylinder with embedded solar diverter** works as a heat battery
- **Replaced Gas boiler with a Heat Pump** low carbon solution
- **Installed solar PV array 6.37kwp, Home battery 9.5kwh, EV charge Point and Induction hob**
- **Energy Tariff** Time of use and SEG

Why It Worked

- **Mixergy** turns the hot water tank into a heat battery
- **Solar and battery** enables low carbon energy, storage and load shifting
- **Heat Pump** low carbon and highly efficient combined SCOP Jan 25 - Dec 25 389% (Space Heating 408% DHW 370%)
- **Induction Hob** low carbon cooking
- **Time of use tariff** enables load shifting at cheaper rates and lower carbon intensity and SEG

Results

**-£447.87 Total Energy
Bill Jan 25 - Dec 25**

**3660 kWh Import
Consumption**

**7507 kWh of Free
Solar Energy**

No monthly energy bill I get paid

Total electrical import Jan 25 – Dec 25

Total solar generation Jan 25 – Dec 25

My home is carbon negative I produce more low carbon energy then I consume





CONNECT ON
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