



# 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 ...

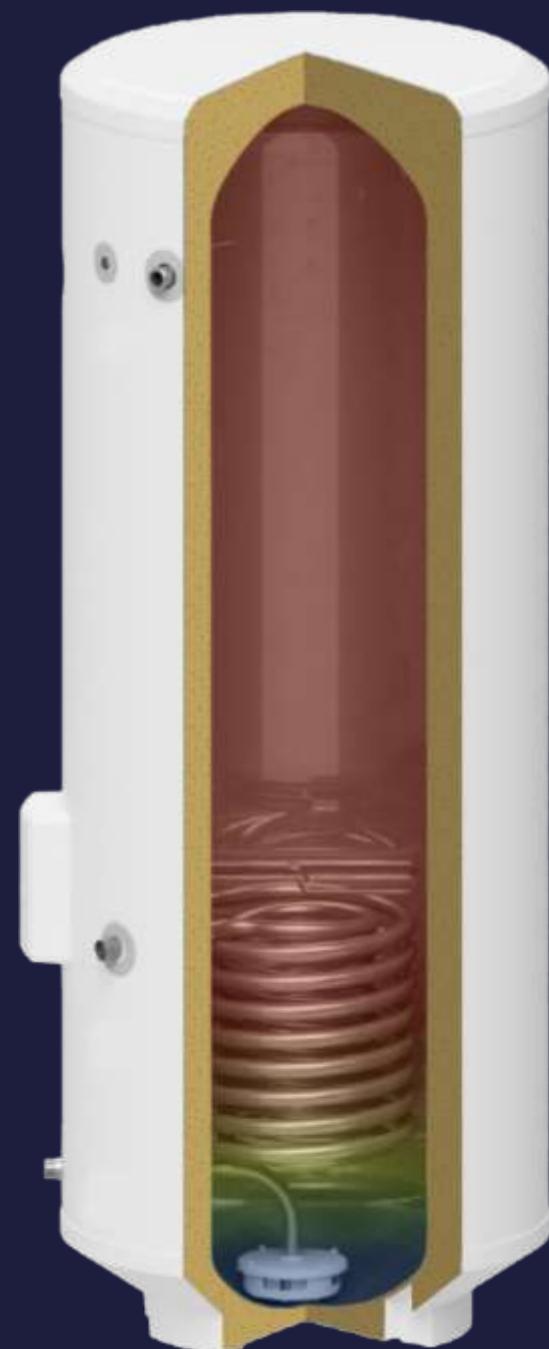
**Every home** needs a cylinder for hot-water storage and/or heating optimisation



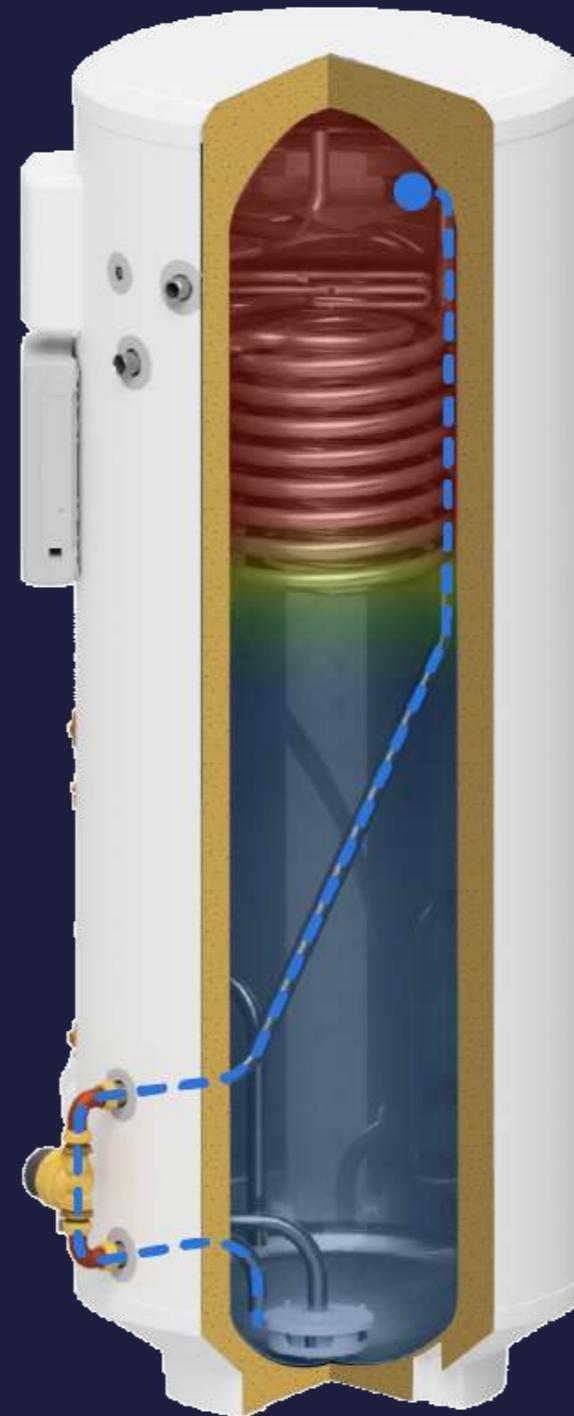
IMAGINE IF EVERY HOT WATER CYLINDER  
WAS SMART, WORKED JUST LIKE A  
BATTERY, AND CONNECTED TO THE GRID

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.

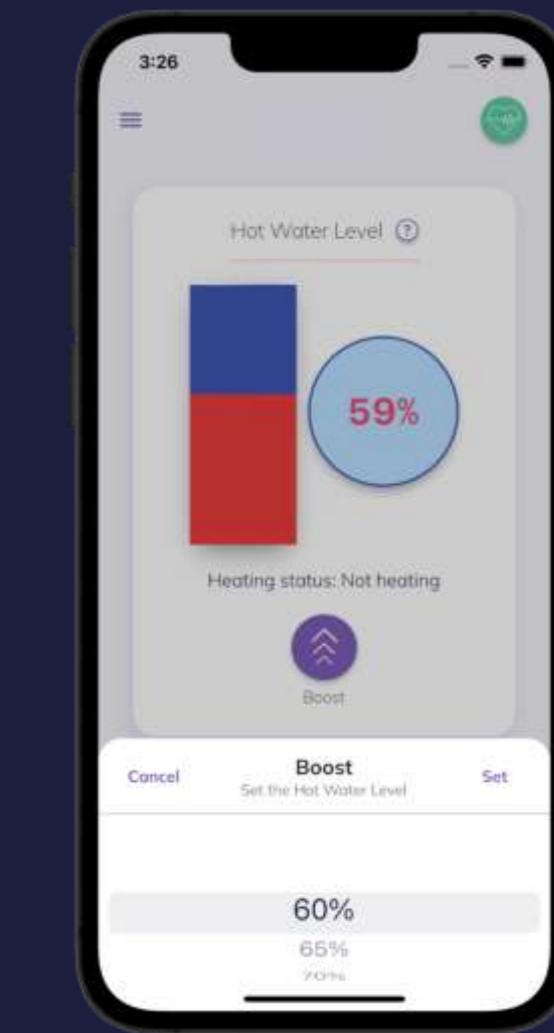
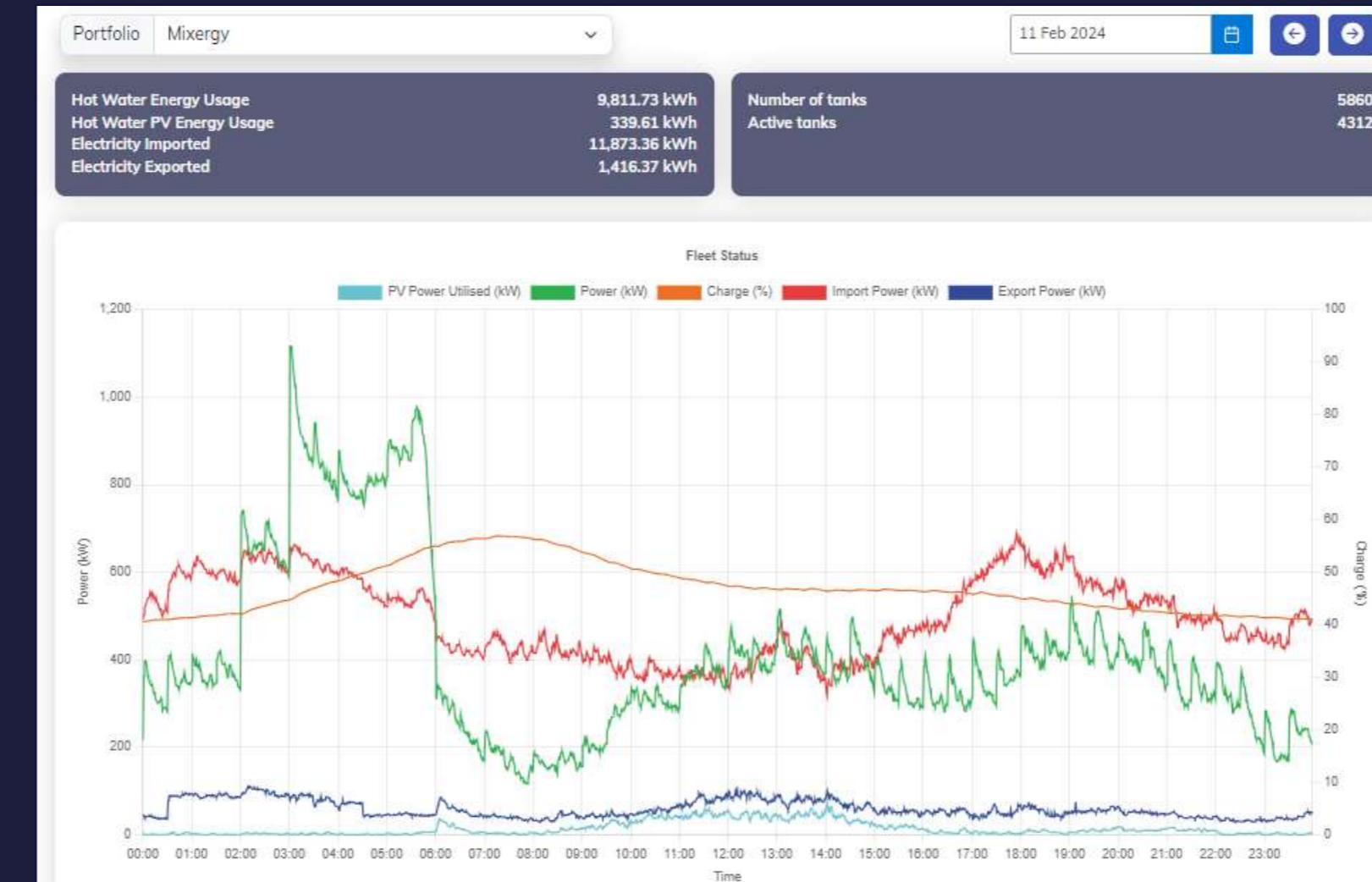
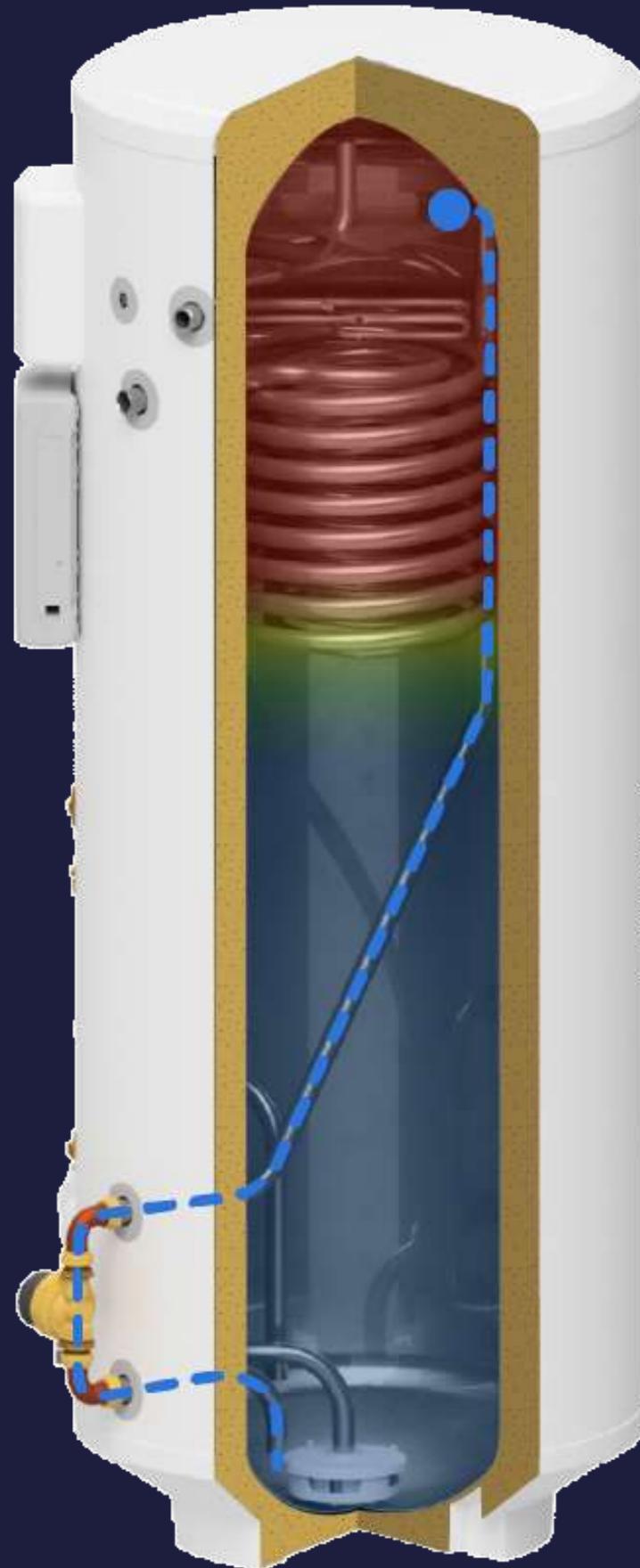
## Grid-Ready Intelligence

Supports demand shifting, smart tariffs, and dynamic scheduling.

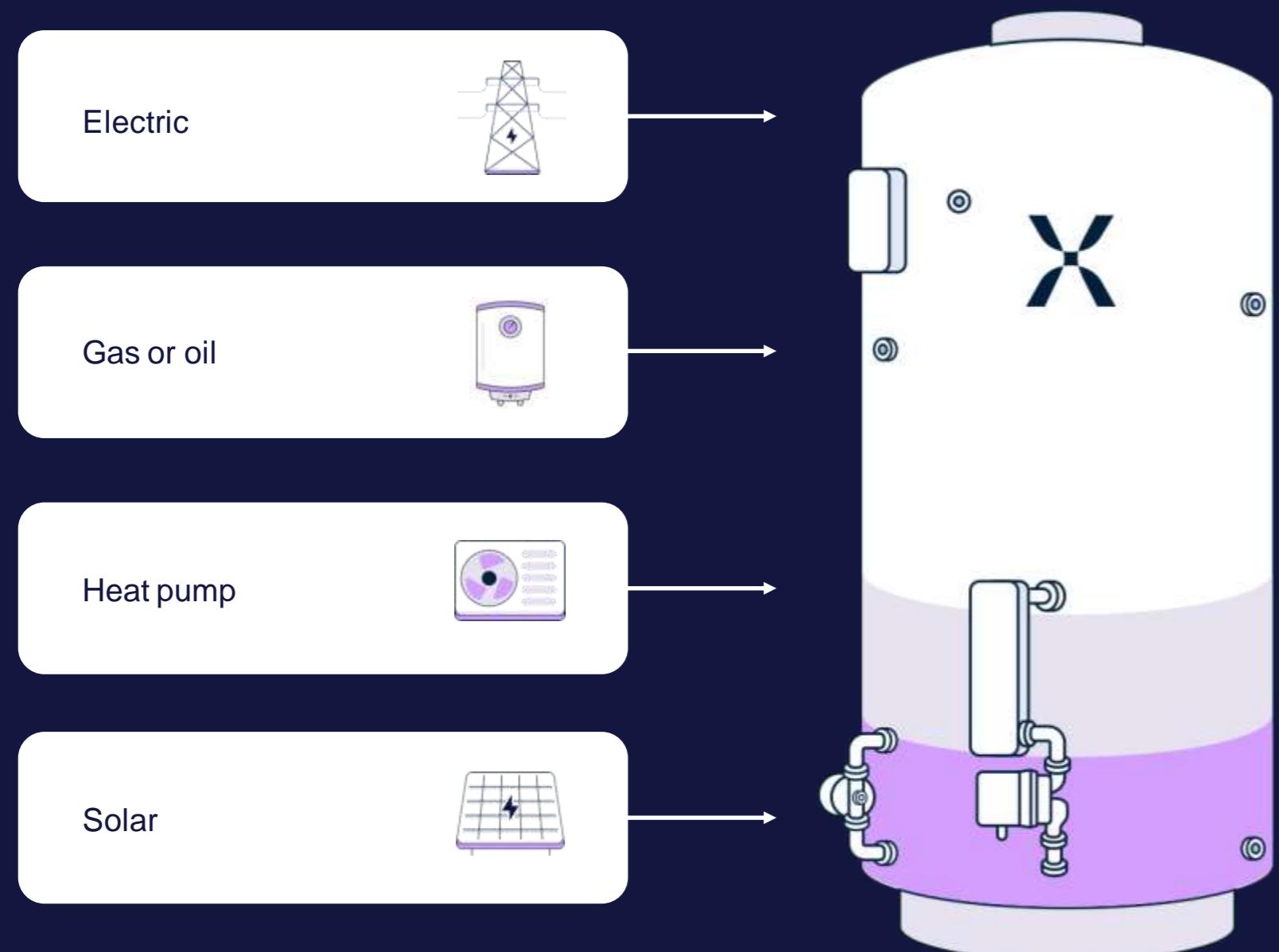
## Smart, Modular Controls

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.



Adaptive energy technology



# 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

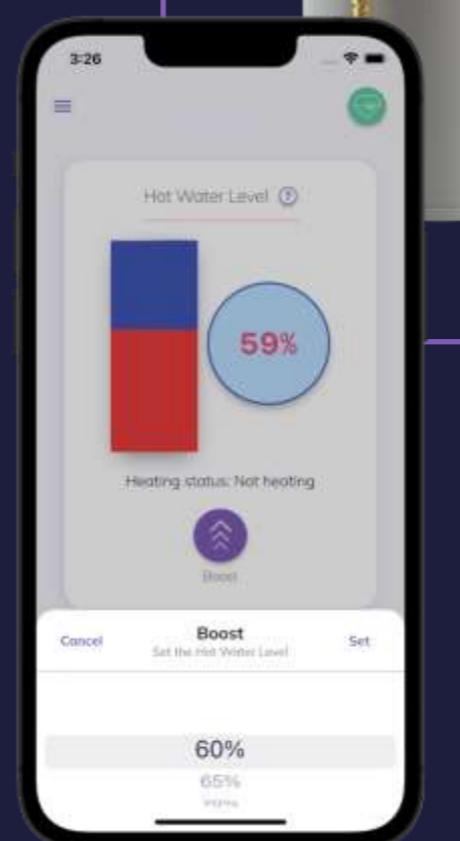
Uses less energy while enabling smart load shifting, reducing building carbon emissions without compromising performance.

## 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.

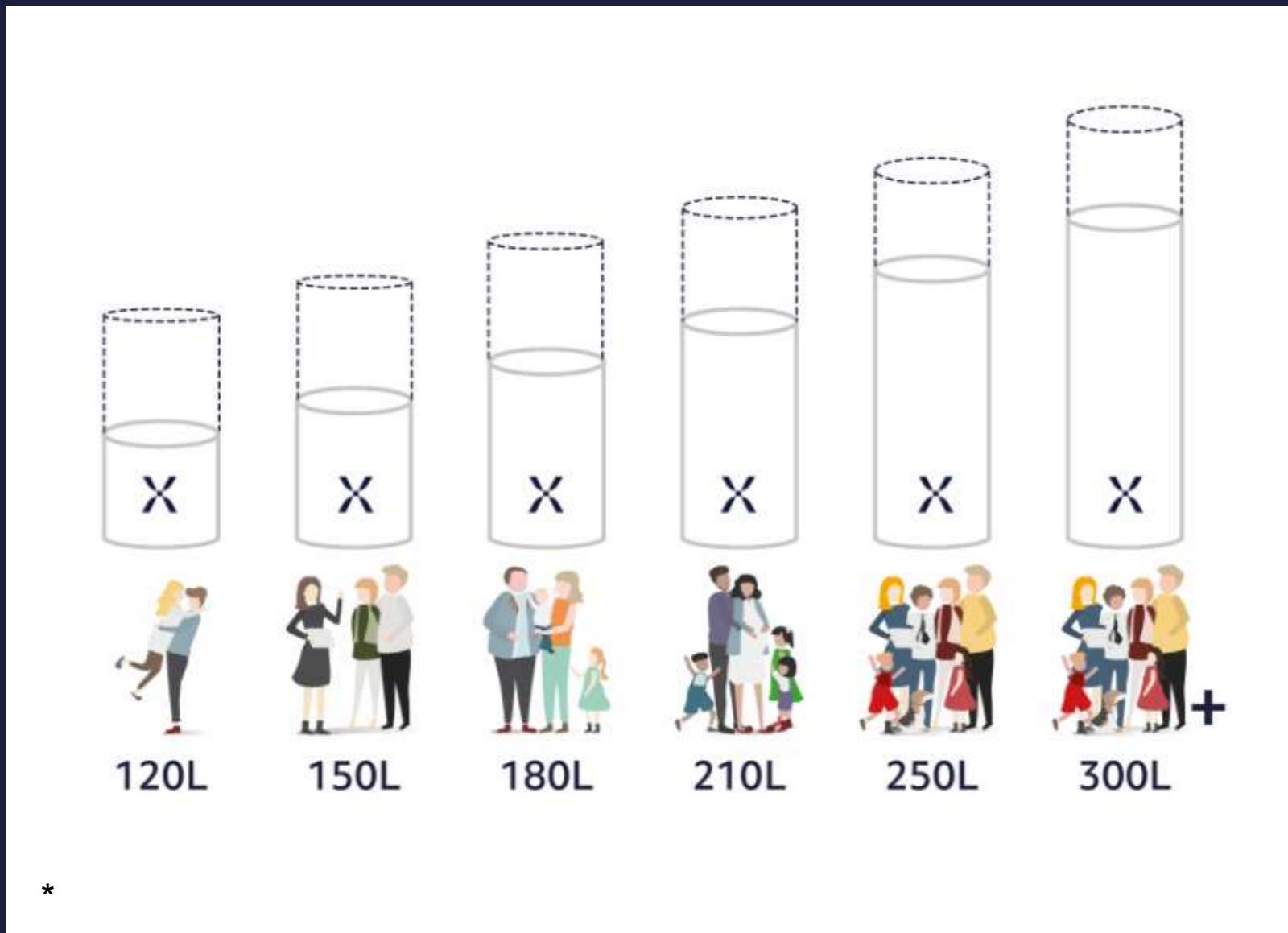


# Prevent Hot Water Dilution



As a result of:

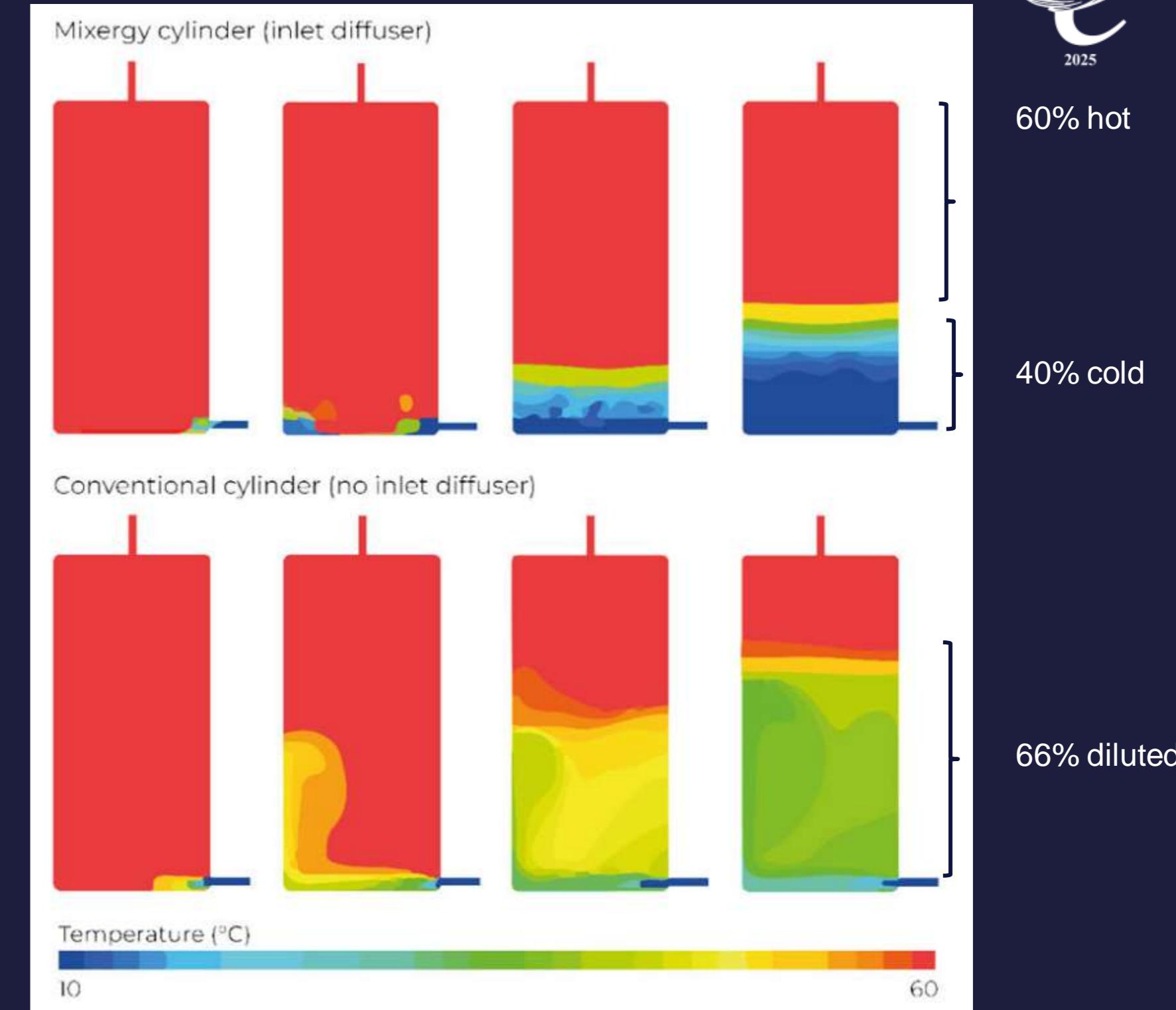
- 1) Knowledge of state of charge
- 2) Ability to rapidly reheat
- 3) Prevention of dilution on discharge



\*

National Physical Laboratory (NPL):

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



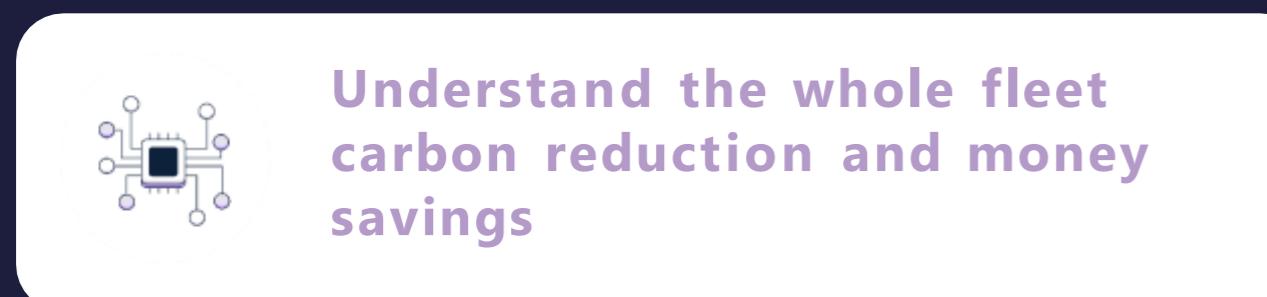
Above: 60litres discharged from a 180l conventional vs. 180l Mixergy tank.



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

HOW OUR DATA TRANSFORMS EFFICIENCY

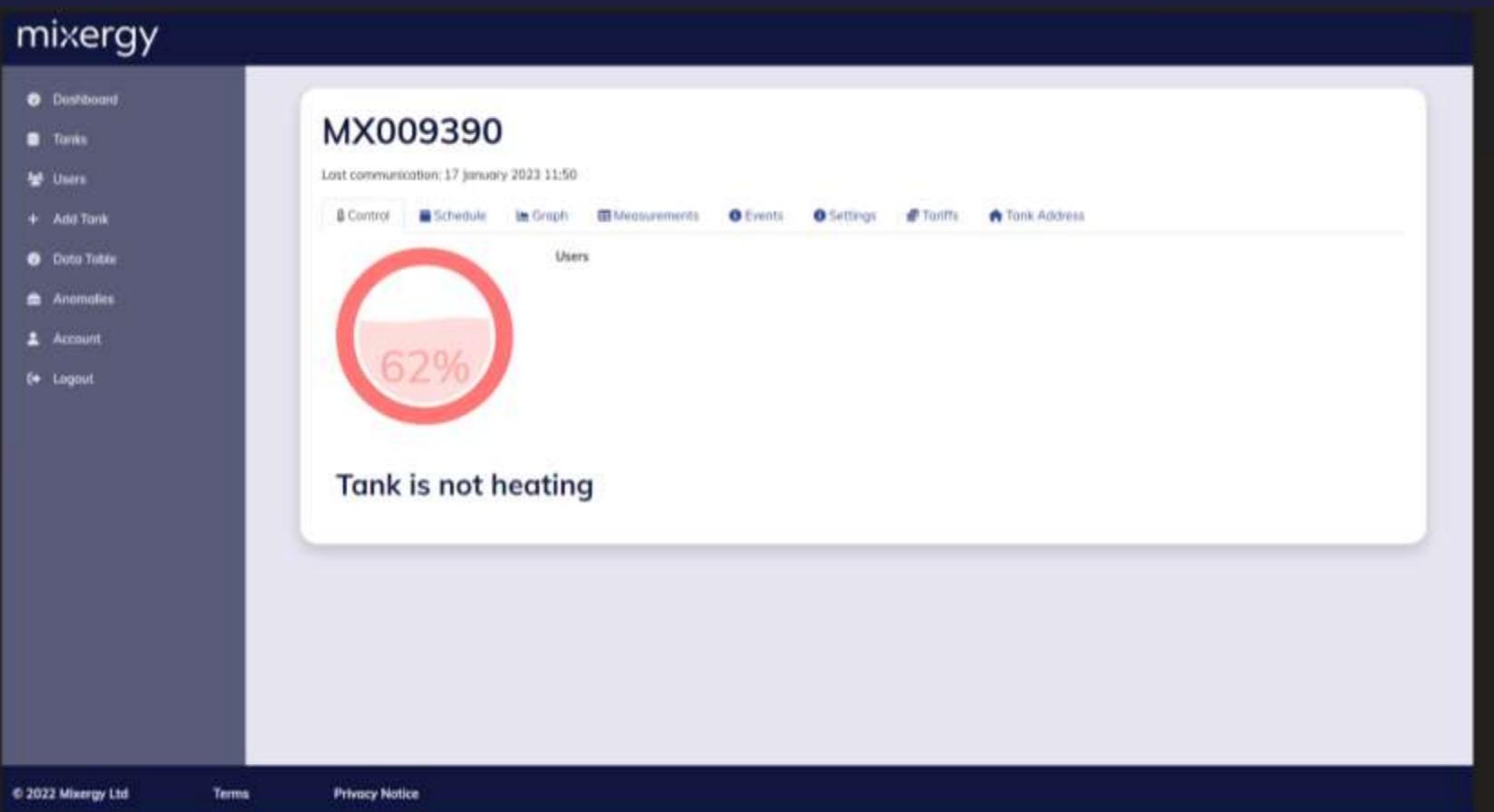
# FLEET MANAGEMENT & REMOTE MONITORING



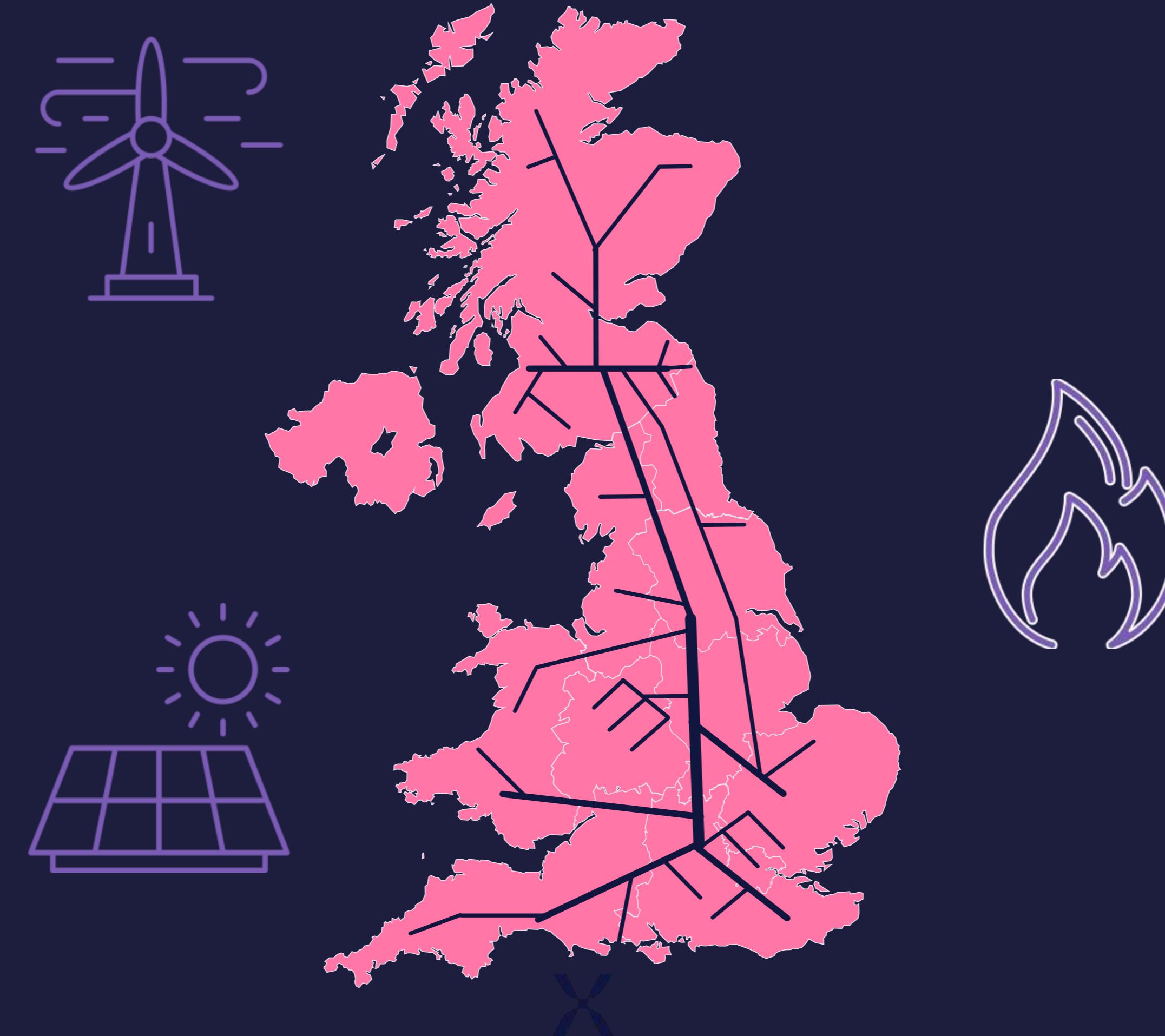
# Easy to control

There are 4 ways to control your hot water:

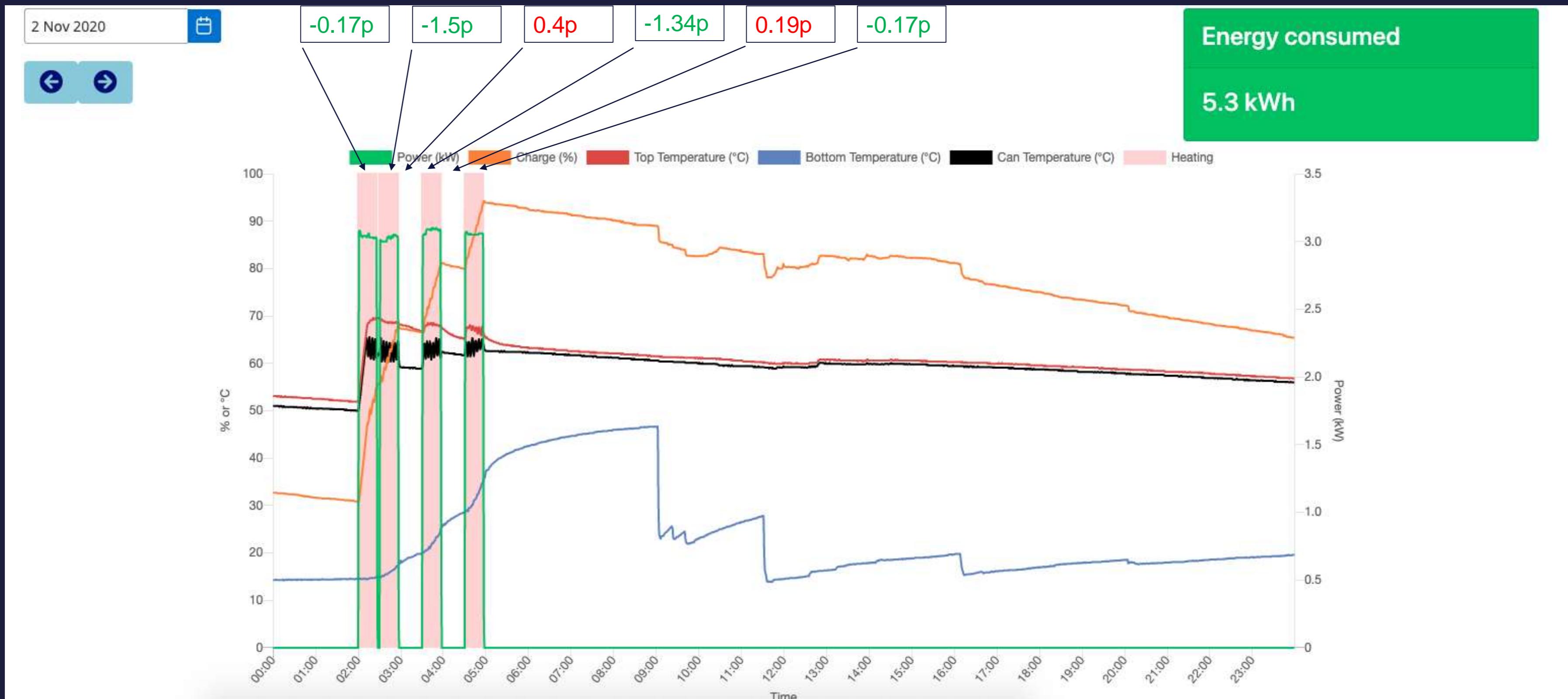
- 1) Remotely using the Mixergy App
- 2) Locally via the Mixergy tanks hard wired gauge
- 3) Remotely via [www.mixergy.io](http://www.mixergy.io) on their computer
- 4) Alexa or Google Voice assistant



# Renewable Energy & Network Constraints



# Tariff optimisation using machine learning



# ACHIEVE EPC GAINS AND SAP COMPLIANCE, WITHOUT THE HEADACHES

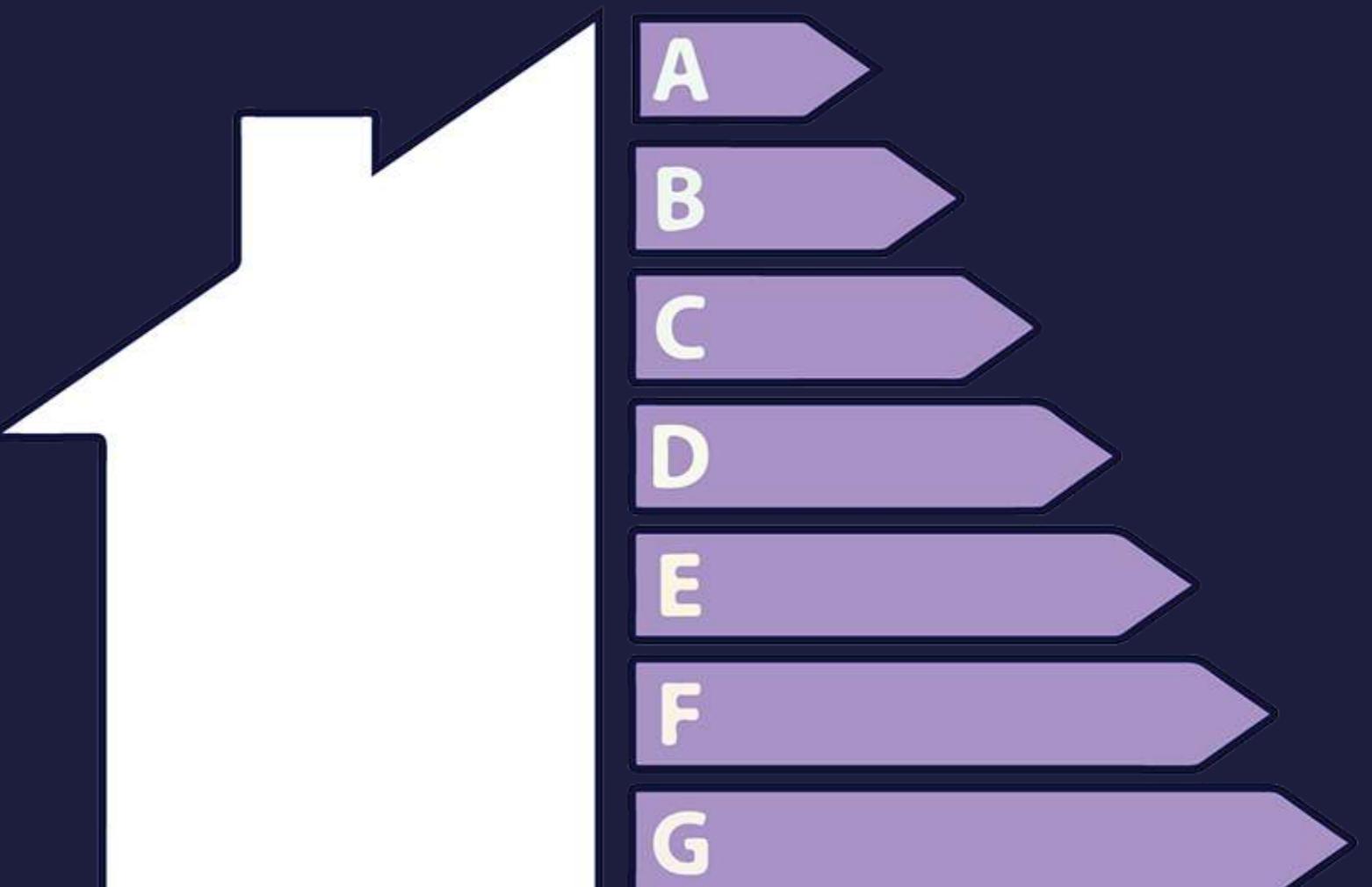
In retrofit projects, Mixergy is proven to offer an average gain **of 4 points** in an EPC rating (when combining with solar PV, and that's on top of the PV gain).

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 CO<sub>2</sub> 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**.

### 3x Lower Carbon Emissions

By blending solar and oil, the tank emitted just **113 kg of CO<sub>2</sub>**, 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 CO<sub>2</sub> cut

## WEMBLEY STADIUM



25% Energy Saving  
£328,475/year saved  
296 tons of CO<sub>2</sub> cut

## CALA



50% free hot water  
256 CO<sub>2</sub> 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 than I consume





CONNECT ON  
LINKEDIN



**Peter McBride, Sales Director**  
[Peter.McBride@Mixergy.co.uk](mailto:Peter.McBride@Mixergy.co.uk)  
**077443 100 169**



**mixergy®**