

# Innovating for domestic decarbonisation and flexibility with our Living Lab

**Energy Systems Catapult**

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# About Energy Systems Catapult

Mission: Unleashing innovation and open new markets to capture the clean growth opportunity



## Accelerating

the UK to a net zero energy system across homes, sites, places, networks



## Turboboosting

clean tech innovators to thrive in the future energy system



## Designing

the future energy system that drives clean growth



## We help **home** energy innovations grow fast

...delivering peerless real-world testing, and driving the skills and investment needed to realise the zero carbon homes of the future

# Our Living Lab

Simple interaction  
with consumers

Easy to modify to  
include new  
technologies

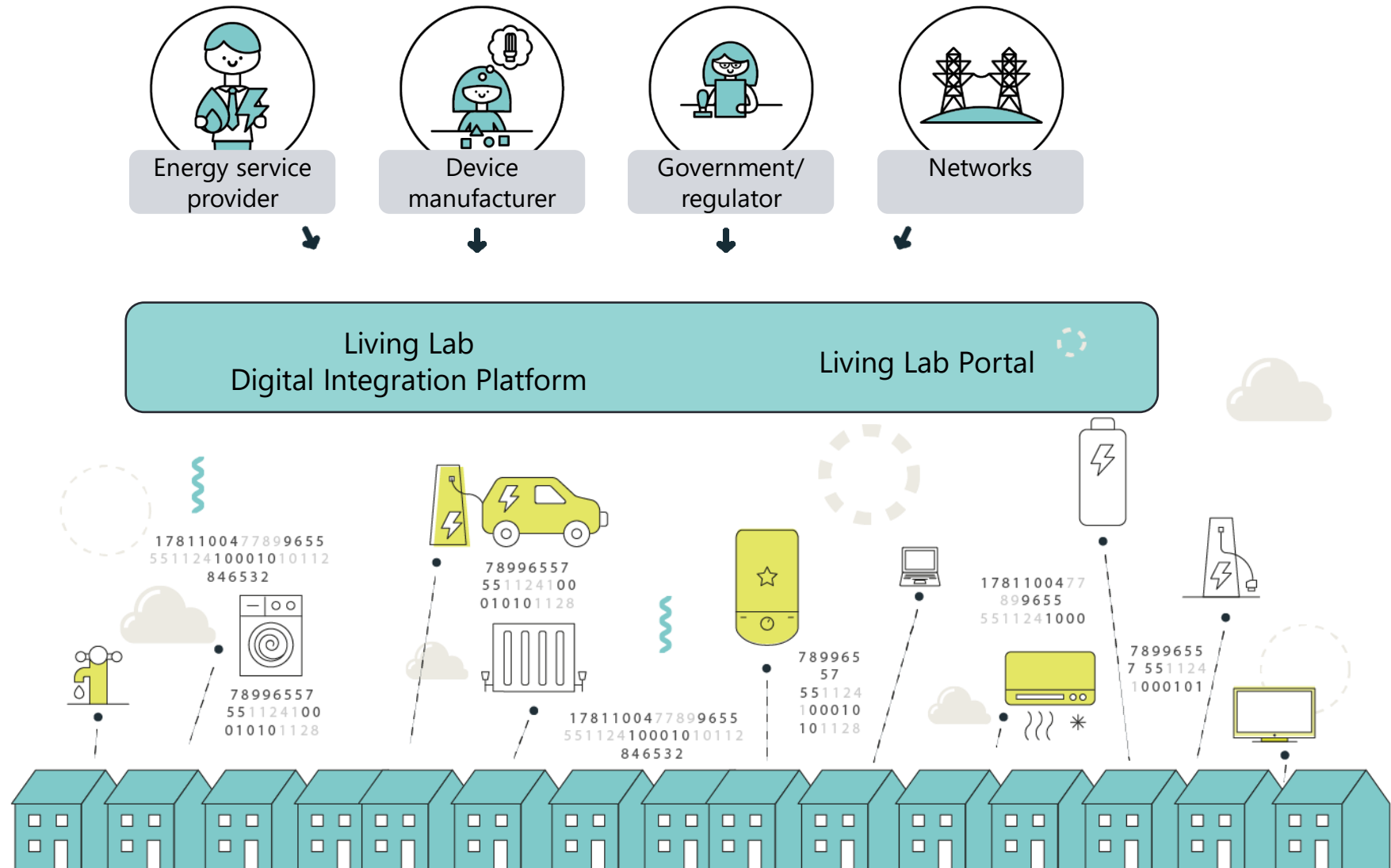
Supports multiple  
trials

1,900+ homes have  
signed up to take  
part

Variety of  
consumers, homes  
and technologies

Scalable to '00s of  
homes

Combines consumer  
insight and digital  
analysis













# Homes and Technology in our Living Lab

## LIVING LAB HOMES

NET ZERO ENERGY  
INNOVATION.



	# Homes in Lab
 <b>Total Homes</b>	1,964
 Heat Pumps	216
 Solar PV	370
 Battery Storage	158
 EV and charger	460
 EV Energy Linked	148
 Has Smartmeter(s)	1,003
 Smartmeter(s) linked	542
 Tado Control Linked	277
 Tado Monitor Linked	40

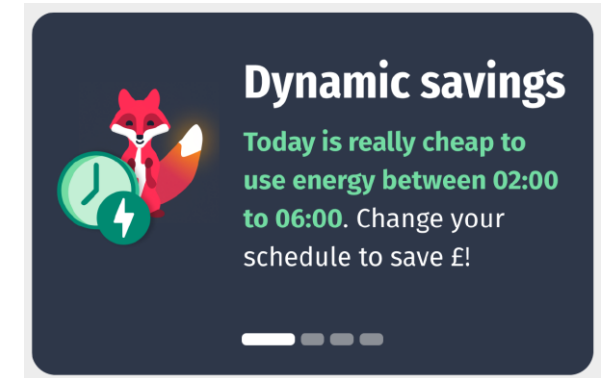
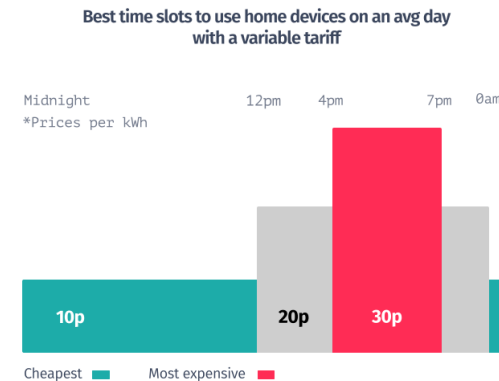
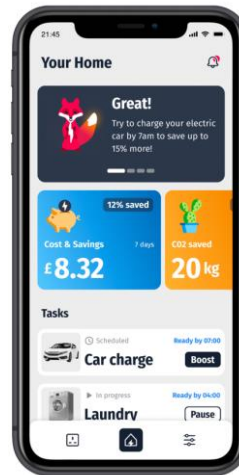
# Case Study: AmpX Smart Home Platform



Advising an Edinburgh based SME on potential for its **in-home digital energy platform** to facilitate demand side response, reduce carbon and reduce energy bills. Using the **Living Lab** to gather consumer feedback and test the interface between the platform and a variety of in-home dumb and smart devices including EVs, smart meters, appliances and heating controls.

## Trial:

- Install monitoring equipment in 60 homes to study energy demand.
- Test impact of their technology on energy consumption, customer lifestyles, bills, and DSR.
- Solve technical challenges with integrating AmpX platform with home appliances and EV chargers.
- Providing feedback on the Alice consumer App.



AmpX can sell flexibility to the grid

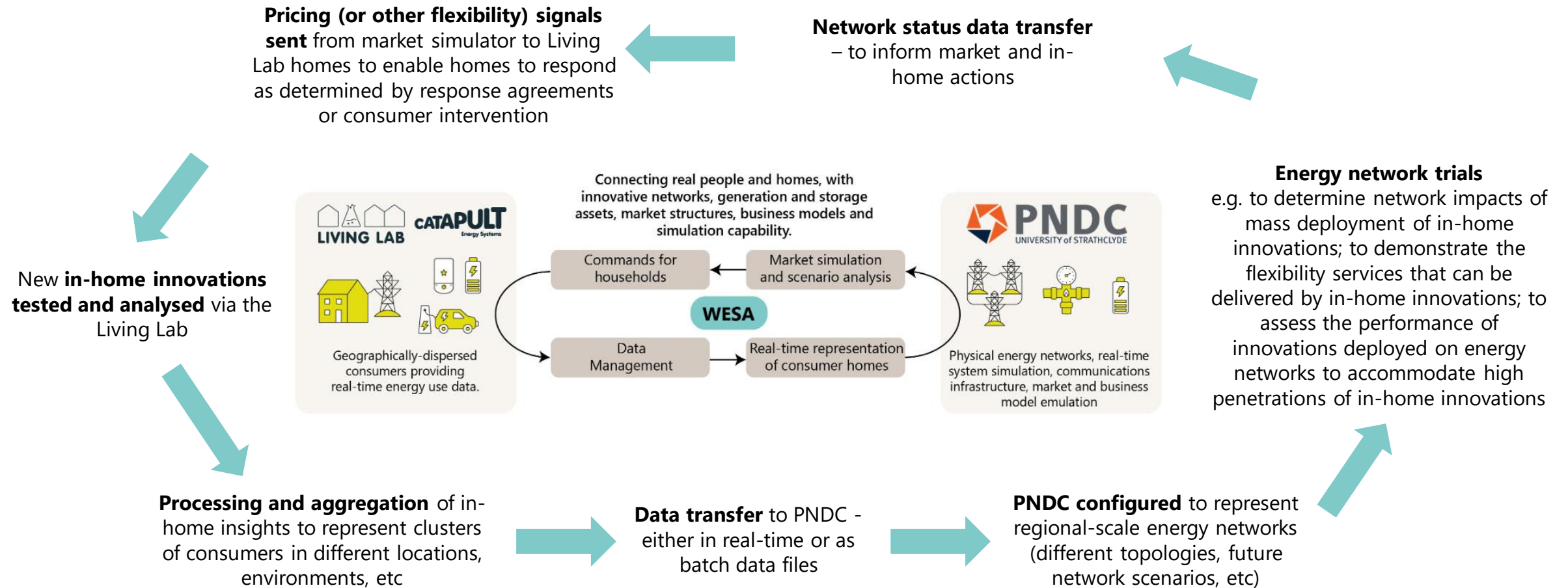
Smart, consumer-centric decarbonisation

Technical solutions to EV integration

Insight into consumer behaviour and feedback

Demonstrable savings

# Whole Energy Systems Accelerator



# Key takeaways

- Our Living Lab delivers a wide range of domestic energy trials tailored to meet different innovation goals.
- We are excited to use our Living Lab to understand and address challenges related to skills, finance, vulnerable consumers and domestic flexibility.
- Consumers are at the heart of our Living Lab.
- Our WESA capability unlocks new potential in understanding the challenges and opportunities with scaling up low carbon technology in our homes.



# Thank you

## Q&A

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