

Industry insight:
From Kilowatt-hours to Warm Hours

Why the way the UK buys heating energy needs a facelift

Buying kilowatt hours just doesn't work for consumers

Let's face it, most consumers don't understand what they're buying when they pay their monthly heating bill. They don't know what kilowatt-hours (kWh) are and, unlike other sectors, businesses who sell energy offer no intuitive way for consumers to manage and control how much they spend on their heating.

For example, in several recent consumer trials we found most customers were not able to understand:

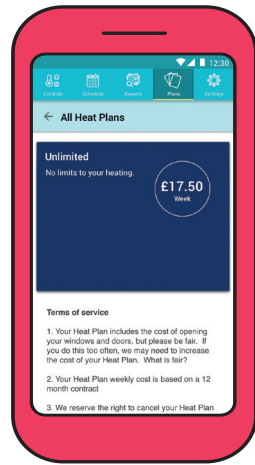
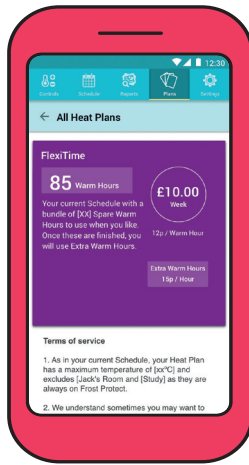
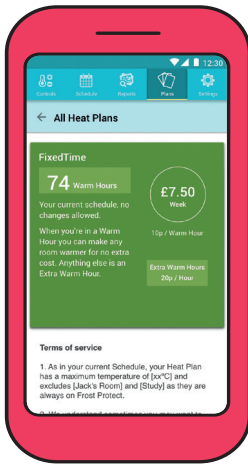
- how much it actually costs to heat their home for an hour, day or week
- how many hours they keep their home warm each week
- how much more they spend to keep their home warm when the weather is colder, or
- what they can do to make their home feel warm and comfortable without breaking the bank.

In other industries customers know what options they have, how much each one costs and which they prefer. That means they can choose whether to spend ten minutes on the phone or send a text, to buy a pint of milk or a bottle of champagne, to jump in a taxi or wait for a bus. With energy, customers get a bill they struggle to understand and have no easy way to control how much they spend. Is there a better way?

We thought that energy suppliers might have fewer complaints and more loyal customers if they could just explain the cost of heating. To find out, we tried offering consumers the chance to buy 'Heat Plans' where they could pay a fixed price to keep their home warm for a number of 'Warm Hours' instead of kWh.

How does buying Warm Hours on a Heat Plan compare to kWh?

Consumer benefits	kWh	Heat Plan
Pay a fixed price to have your home as warm as you like when you want	✗	✓
Pay the same amount whatever the weather	✗	✓
Choose how much to spend getting the level of comfort you want	✗	✓



In our trial, we created a Living Lab of 100 homes where people could set the temperature in each room and we could discover how warm they heated each room at different times of day. We used their data to offer them the choice of three bespoke 'Heat Plans' based on the cost of heating their home.

Our FixedTime plan offered consumers the Warm Hours in their schedule for a fixed price. It was our cheapest plan because consumers could not change their schedule. They could pay a fixed price if they wanted to use an Extra Warm Hour at any other time. FlexiTime was our mid-priced plan. It contained a bundle of spare Warm Hours and consumers were free to use them when they liked. Our most expensive plan was Unlimited where consumers paid a fixed price for an unlimited number of Warm Hours.

How did consumers react to Heat Plans?

We learnt so much more from trying out Heat Plans than we ever could have done from just discussing them, making real progress in designing appealing Heat Plans and interpreting consumers' choices to discover what they value.

Consumers preferred the idea of buying Warm Hours to kWhs as they found the former much easier to understand. Those who bought Heat Plans had very different reasons. For instance, some picked FlexiTime because they wanted to pay more for the freedom to use heat when they wanted. Those who did not buy Heat Plans often had very simple reasons, highlighting many ways to make them better offers in the future.

Consumers enjoyed different things about Heat Plans. Some liked feeling more in control of how much money they spent because they knew how much each Warm Hour cost. Others enjoyed knowing that they could get comfortable without having to think too much about their heating. Many were ready to accept a cost increase for their Heat Plan because they valued the improved service.

Next steps

We're using our Living Lab to help pioneering businesses learn how to design high quality, low carbon energy products and services that consumers love. Get in touch to find out how you can get involved.

To find out more, visit: www.es.catapult.org.uk



**Energy Systems Catapult supports innovators
in unleashing opportunities from the transition
to a clean, intelligent energy system.**

For further information please contact:

Richard Halsey

Innovation Business Leader

Energy Systems Catapult

+44 (0)7773 472854

+44 (0)121 203 3700

richard.halsey@es.catapult.org.uk

7th Floor, Cannon House, The Priory Queensway,
Birmingham, B4 6BS