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NEWS RELEASE

GAS BOILERS REPLACED, BATTERIES ON OUR WALLS, AND SMART HOMES THAT BUY ENERGY AT THE BEST PRICE

Shell Energy and Energy Systems Catapult outline how British homes will reach Net Zero

- Installations of low carbon heating systems in Britain's 30 million homes must be ramped up – from 26,000 a year to 1.2m a year by 2030
- Policy certainty is needed and incentives such as the removal of VAT from low-carbon options which could potentially save UK households up to £10bn¹, to encourage homeowners to take action.
- Today, less than 10% of homeowners plan to switch to low carbon heating system

Embargoed until 9th June 2021: A new [net zero report](#) from Energy Systems Catapult (ESC), commissioned by Shell Energy, shows the challenges and potential solutions required to reduce emissions from our homes, to help meet the UK Government's 2050 emissions target. Emissions from homes account for up to 40% of UK total emissions – with each home emitting 6 tonnes of carbon each year on average - so a transition for households is key.

The report highlights four main areas that need to be addressed to reach net-zero emissions in our homes:

- **30 million homes will need to have low carbon heating installed in the next 30 years** – the current installation rate is 26,000 a year. Modelling suggests 1.2 million a year will need to be installed by the end of the decade – more than a 40-fold increase.
- **Electric vehicle (EV) uptake must continue to rise.** It is critical that home charging points are powered by renewable electricity, alongside vastly increased numbers of public charging points. Around 2 million new cars are currently sold annually of which 110,000 were electric in 2020. If new car sales post 2030 are at similar rates to today, it would mean a 20-fold increase in EV sales following the ban on sales of new petrol or diesel cars.
- **Smarter homes will be important to help the grid to cope with both greater electricity demand and changes in when we use it.** The amount we use from hour to hour could vary by up to eight times as much as it does now as more of our energy use is electrified. For example, we could see huge surges when we get home from work and all turn on our electric-powered heating and plug in our EV.

Smarter appliances, household batteries on our walls that can buy power and store when it's plentiful, and self-generation such as solar could all play a part in helping to save £12bn a year in the cost of getting to Net Zero (according to BEIS²).

- **A continued growth in renewable power generation** to ensure that increased electricity demand is met with carbon neutral supply.

¹ Based on 17m-21m homes retrofitting to a heat pump (ESC modelling suggests 17m, CCC suggests 21m may be possible) at a typical cost of £10,000 (Source CCC) and removal of VAT at 5%. 17.4m / 21m x £500= £8.7bn - £10bn

² BEIS (2020) Modelling 2050: Electricity system analysis, page 12.



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Ed Kamm, CEO, Shell Energy Retail said: *“For Britain to get to net zero emissions by 2050, we must help homeowners choose lower carbon ways to heat their home or power their car whilst supporting the growth of renewable power. Decarbonising home energy is critical to achieving this.*

“Shell has set a target to be a net zero emissions energy business by 2050 – including reducing emissions from the products used by our customers to net zero. By 2025 we expect to be supplying 15m homes and business with renewable power globally, and offering more carbon neutral products and services that help people make low-carbon choices for their home.”

The household energy transition will need active participation from householders. Shell Energy research examining attitudes of 3,000 people across Britain³ shows work needs to be done, as customers want low carbon heating without compromising on cost, comfort or convenience.

87% of British consumers say that a low carbon heating system would need to be ‘as or more’ effective at heating their home than traditional gas systems. Currently fewer than 1 in 10 homeowners (9%) plan to switch to low carbon heating when they replace their current boiler. In addition, 58% say they would need to break even, or even benefit financially, in the long run to make the switch. Only 14% of homeowners say they will switch in order to lower emissions alone.

Shell Energy, alongside others in the sector, supports reforming ‘green taxes’ in the Government’s heat strategy expected later this year. This should ensure that the cleanest choice is always the cheapest, for example removing VAT on energy products such as home batteries and heat pumps and moving policy costs from the household electricity bill into general taxation.

Removing VAT on heat pumps could lead to a saving of £10bn for households moving to this low-carbon option.⁴ VAT on household batteries is at 20%, so its removal could substantially reduce the cost of creating smarter homes.

Shell Energy’s Ed Kamm said: *“We need a simple target for heating in the UK, similar to the petrol and diesel car sales ban by 2030. Tackling emissions from heating needs long term policy thinking that allows different technology options to thrive. This would provide the long term policy and funding framework needed so that the industry can create appealing, effective, low carbon heating solutions that our consumers want and can afford.”*

Shell Energy already offers renewable electricity as standard and carbon neutral home energy. It is supporting customers to shift to electric vehicles with dedicated EV tariffs, award winning home charge posts, and the roll out thousands of rapid on-the-go charging at Shell forecourts and other locations. Its solar storage tariff helps customers with home batteries and solar panels better manage their generation between winter and summer.

“There is far more that needs to be done and we will continue to work with customers, partners and the Government to make it attractive and easy for customers to choose low carbon alternatives,” said Ed Kamm.

³ Statistics from Shell Energy from research conducted by Opinium amongst 3,001 British adults between 19-25 February 2021. Content for release taken from report conducted by Energy Systems Catapult, commissioned by Shell Energy. Report conducted between October 2020-March 2021.

⁴<https://www.theccc.org.uk/publication/development-of-trajectories-for-residential-heat-decarbonisation-to-inform-the-sixth-carbon-budget-element-energy/>



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The executive summary and full report can be viewed here: shellenergy.co.uk/energy/path-to-net-zero

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NOTES TO EDITORS:

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Shell Energy Retail Ltd, trading under the Shell Energy brand, supplies 100% renewable electricity, as well as gas, smart home technology and broadband to households across Britain. The Shell Energy brand is also shared by Shell's energy marketing and trading business. This separate entity provides more and cleaner energy solutions across a global portfolio of gas, power, environmental products and energy efficiency offers to meet current and future energy needs of Shell's large-scale customers: energy producers, asset owners, traders, wholesalers, and large industrial customers.

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