Department for
Business, Energy
& Industrial Strategy

Lord Callanan, Ground Source Heat Pump Association Annual Conference Speech

Good afternoon everyone. Firstly, I would like to thank Laura at the Ground Source Heat Pump Association for inviting me to speak to you all today.

This has been a momentous week for the heat pump industry, with the publication of our Heat and Buildings Strategy. With just over one week to go until we host the UN COP26 climate summit in Glasgow, the bold actions set out in our Heat and Buildings Strategy, and the overarching Net Zero Strategy, have raised the bar on action to tackle climate change, showing our climate leadership, as well as the enormous opportunities that delivering a greener future can bring.

This builds on our record of global leadership in tackling climate change and supporting clean growth. In 2019, we became the first major economy to pass laws to reduce greenhouse gas emissions to net zero by 2050, and in April 2021, we enshrined the world's most ambitious climate change target into UK law.

Meeting our net-zero target will require us to intensify our efforts, changing the way heating is supplied to over 28 million homes, businesses and industrial users. This, as I am sure you are all aware, will be one of the most difficult decarbonisation challenges we face as a country.

I do not underestimate the scale of this challenge, but here in the UK, we have already shown that environmental action can go hand-in-hand with economic success, having grown our economy by more than three quarters while cutting emissions by over 40 per cent since 1990. We have made great strides towards

net zero, decarbonising faster than any other G7 country, but there is still a substantial journey ahead.

As I hope you will agree, the Heat and Buildings Strategy provides a clear path for how this Government will deliver our commitments to decarbonise heating across the economy. The Strategy is ambitious, but necessarily so, given the scale of challenge that climate change presents to all of us and the need to take urgent action. It builds on the commitments set out in the Clean Growth Strategy and the Prime Minister's Ten Point Plan for a Green Industrial Revolution to decarbonise the energy used in buildings. This means improving the energy performance of our buildings and deploying low-carbon heating across the UK, in a way that remains affordable and fair for all households.

The soundbites are often overused, but acting now presents a genuine and significant opportunity to build back better and build back greener. Speeding up the deployment of energy efficiency measures and low-carbon heating can provide a major economic stimulus, creating new highly-skilled jobs, products, markets, and supply chains in the UK, fit for a Net Zero future. We expect the actions outlined in the Strategy to deliver £6 billion in gross value added to the UK economy and support over 175,000 green jobs by 2030.

In the Strategy, we set out our plans to phase out the installation of fossil fuel heating, so that when consumers replace their heating appliances, they are able to switch to affordable, low-carbon heating. Much like we have seen with the move to electric vehicles, the move to low-carbon heating will be a gradual transition from where we are today, to become a mainstream consumer option in the future. The Future Homes Standard and Future Buildings Standard, when

implemented in 2025, will ensure that all new homes and businesses are built zero carbon-ready without the need for costly retrofitting. For existing buildings, we will start phasing out fossil fuel heating in larger non-domestic buildings off the gas grid from 2024 and then domestic and smaller non-domestic buildings off the gas grid from 2026. For buildings on the gas grid, we aim to phase out fossil fuel heating systems from 2035, as existing systems reach the end of their life.

Consumers are firmly at the heart of the Strategy. Making green changes such as boosting the energy efficiency of our homes will help to cut the cost of bills for consumers across the UK. Switching to cleaner sources of energy will also reduce our reliance on fossil fuels. The recent price spikes in gas seen across the world have been a stark reminder that rapidly reducing our reliance on volatile imported fossil fuels is in the best interests of bill payers.

To support consumers in making the transition away from fossil fuel heating, we are providing homeowners with grants of up to £6,000 to reduce the cost of installing heat pumps, through our new £450 million Boiler Upgrade Scheme. These grants – which will be simple and easy to access – will be available from April next year and will mean that those looking to make the switch to a heat pump, ahead of the introduction of regulations, are able to do so.

Alongside this substantial public investment and the regulatory steps off-grid and in new-builds that I mentioned, from 2024 we also plan to introduce a new market-based mechanism to further strengthen the incentives for heating appliance manufacturers to invest in building the market for heat pumps. This will place industry at the centre of efforts to develop the heat pump market and give businesses – both those that specialise in heat pumps, and those that sell a

mix of fossil fuel and low-carbon products – the certainty and confidence to accelerate investments and seize opportunities from growing consumer demand.

In addition, we have announced funding of £60 million for heat pump innovation to help make them cheaper and easier to install, and to support coordination efforts to deploy heat pumps at scale. This will build on the £15 million of innovation funding we have already provided for the ongoing Electrification of Heat Demonstration Project, which has just completed installing nearly 750 air source, ground source and hybrid heat pumps in a representative range of homes across the UK to demonstrate the feasibility of the technology. The Demonstration Project has successfully shown, not only strong consumer demand, but also that the majority of homes are suitable for a heat pump.

While not always necessary to accommodate a heat pump, we have taken further action to improve the energy efficiency of homes and businesses, helping to reduce energy bills while making buildings healthier and more comfortable. We are setting standards to upgrade privately rented homes to EPC Band C by 2028 and privately rented non-domestic buildings by 2030 in England and Wales. We're also consulting on phasing in higher minimum performance standards to ensure all homes meet EPC Band C by 2035, where cost-effective, practical and affordable to do so.

For low-income households, we are providing additional funding of £950 million to the Home Upgrade Grant and £800 million for the Social Housing Decarbonisation Fund. And for public buildings, we are providing £1.4 billion of funding through the Public Sector Decarbonisation Scheme. We will also continue to grow and decarbonise the UK Heat Network market through the

Green Heat Network Fund, sector regulation and new heat network zones by 2025. In many cases, the high efficiency of ground source heat pumps, and wider system benefits they have, offer an attractive solution.

Together, we believe that these measures will allow us to grow the market to 600,000 heat pump installations a year by 2028. This number is the minimum required for us to stay on track to deliver our climate commitments, even in a world where the gas grid is decarbonised using hydrogen or biogas.

But this will only be possible if we work together to drive growth in the market and bring down the cost of heat pumps. Our goal is to significantly reduce the costs of heat pumps over the next decade. This will be no easy feat, but we are delighted that so many across the sector have already pledged to significantly reduce costs.

For ground source heat pumps, where the cost of ground infrastructure is more capitally intensive, we expect to see major reductions in costs of installation and drilling infrastructure as the market matures. We also welcome the work done by manufacturers, developing shared ground loop systems, which offer the benefit of being able to share the cost of the ground array and better manage the impacts of increased demand on the electricity networks.

I firmly believe that UK businesses are well placed to take advantage of the growing market for heat pumps. This will not only benefit our economy, but also reduce costs. In our Strategy we outline our aim for heat pumps made in the UK to grow to over 300,000 units a year by 2028. We welcome the investments already made in the UK by a number of manufacturers here today and we expect to see more investment in the UK supply chain in the forthcoming years.

Alongside reducing the upfront costs of heat pumps, we are also taking action to ensure that low-carbon technologies are no more expensive to run than fossil fuel boilers. One of my priorities will be to remove the price distortions which currently weigh heavily on electricity bills and disincentivise the switch to heat pumps. We must make sure we get this right – as we also have a duty to protect consumers from increasing energy bills – but I firmly believe action is needed to encourage the switch to cleaner, greener heating.

Ensuring we have the skilled workforce to deliver this transformation is also an essential piece of the puzzle. There are many experts in heat pump installation here today, which is a positive sign, but we know we will need many more. To deliver our 2028 target of installing 600,000 heat pumps per year we will need to significantly increase the number of trained heat pump installers from about 3,000 to over 30,000.

Our Heat and Buildings Strategy will, I hope, give heating engineers across the UK confidence that demand for heat pumps will continue to grow, and that heat pump skills will give them new opportunities to further their careers in this sector. This confidence in the growing role for heat pumps will ensure engineers have confidence that training for heat pumps is a solid investment in the future. We are working together with the industry to make sure that high quality training is available, accessible and affordable, both for new entrants to the sector and existing heating installers who do not have heat pump experience. This opportunity to grow the workforce is also an excellent way to promote diversity in the sector, and consider how we attract high quality talent from a range of backgrounds.

As part of the Skills Training Competition, the Government has already awarded £6.9 million to support training for tradespeople delivering green home energy improvements. This included upskilling training for existing heating engineers to learn to install heat pumps, including ground source heat pumps.

We were also pleased to see the launch of the new industry-led upskilling course for existing heating engineers. The course was launched over the summer, and we are delighted to see so many manufacturers and installers already getting behind it.

We are also supporting employers developing a new Low Carbon Heating apprenticeship standard, which will provide more in-depth heat pump skills and knowledge than previous apprenticeships (including in ground source heat pumps), and I am sure will attract many young people into this rapidly growing sector.

In a decade from now, I hope to see a thriving heat pump sector where heat pumps are the obvious, affordable choice for consumers. I expect the upfront costs of heat pumps to be comparable to fossil fuel heating. And I expect the running costs of heat pumps to be on parity with gas boilers. I expect UK businesses – whether that's those designing, installing or manufacturing heat pumps – to be leading the charge. And I am sure that ground source heat pumps will play a key role in that transition.