



Energy Security Strategy - summary

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Introduction

The Government has [published](#) its new Energy Security Strategy, setting out plans to produce more clean and affordable energy in the UK and boost our long-term energy independence. The plans could see 95 percent of our electricity being low carbon by 2030.

Nuclear energy is at the heart of the strategy with an ambition for up to 24GW to come from nuclear by 2050, representing up to one quarter of our projected electricity demand. A new government body, Great British Nuclear, will be established to accelerate the pipeline, which is expected to see a significant role for Small Modular Reactors. New ambitions have also been unveiled for offshore wind, with plans to secure 50GW of capacity by 2030, enough to power every home in the UK, underpinned by planning reforms to cut approval times.

There will be an enduring role for oil and gas in the short-term as a key transitional fuel on the road to net zero to ensure our energy security and weather the current energy price crisis. A new licensing round for oil and gas is planned in the autumn and a new taskforce will provide bespoke support to new developments. The strategy also announces some support to increase domestic heat pump manufacturing and bolster solar and hydrogen capacity.

However, there is a limited role for onshore wind following considerable opposition from within the Cabinet and backbench Conservative MPs. The Government will consult on developing partnerships with a limited number of supportive communities who wish to host new onshore wind infrastructure in return for guaranteed lower energy bills. There is also limited focus on energy demand and efficiency, which has drawn some [criticism](#) from stakeholders.

The Prime Minister [has said](#) that the new plans will reduce our dependence on power sources exposed to volatile international prices we cannot control, so that we can enjoy greater energy self-sufficiency with cheaper bills. However, shadow secretary of state for climate change and net zero, Ed Miliband, [has responded](#) that the strategy "will do nothing for the millions of families facing an energy bills crisis," adding that it "won't cut bills, won't deliver energy independence, and won't tackle the climate crisis."



Detailed summary

Key announcements by sector

The strategy focuses primarily on energy supply and includes new production ambitions across sectors including nuclear, offshore wind and hydrogen. These will be supported by the launch of new government bodies and taskforces, while funding has been committed to support domestic manufacturing of technologies such as heat pumps.

Nuclear

- Significant acceleration of nuclear, with ambition for up to 24GW to come from nuclear by 2050, representing up to around 25 percent of our projected electricity demand.
- The Government aims to take one project to a final investment decision (FID) in this Parliament and two projects to FID in the next Parliament.
- Subject to technology readiness from industry, Small Modular Reactors will form a key part of the nuclear project pipeline.
- The Government will work to progress several projects as soon as possible this decade, including Wylfa in Anglesey, delivering up to eight reactors, equivalent to one reactor a year instead of one a decade.
- The UK has 8 designated nuclear sites: Hinkley, Sizewell, Heysham, Hartlepool, Bradwell, Wylfa, Oldbury and Moorside. To facilitate the deployment plans the Government will also develop an overall siting strategy for the long term.
- A new government body, Great British Nuclear, will be established immediately to bring forward new projects, backed by substantial funding, and the £120m Future Nuclear Enabling Fund will launch this month.
 - The Government expects to initiate the selection process in 2023 for further UK projects, with the intention that government will enter negotiations with the most credible projects to enable a potential government award of support as soon as possible, including (but not limited to) Wylfa.

Offshore wind

- New ambition of up to 50GW of offshore wind by 2030, enough to power every home in the UK, of which the Government would like to see up to 5GW from floating offshore wind in deeper seas.
- Underpinned by new planning reforms to cut the approval times for new offshore wind farms from four years to one year and to radically reduce the time for new projects to reach construction stages.
- Ambition for the UK to become the Saudi Arabia of wind power, with the ambition that by 2030 over half our renewable generation capacity will be wind.
- The Government will consult on changes to the 2024 CfD auction, Allocation Round 6, that incentivise renewables to locate and operate in a way that minimises system costs
- Plans to more than halve the current processing time by reducing consent time from up to four years down to one year by:
 - strengthening the Renewable National Policy Statements to reflect the importance of energy security and net zero
 - making environmental considerations at a more strategic level allowing us to speed up the process while improving the marine environment

- introducing strategic compensation environmental measures including for projects already in the system to offset environmental effects and reduce delays
- reviewing the way in which the Habitats Regulations Assessments are carried out for all projects making applications from late 2023
- implementing a new Offshore Wind Environmental Improvement Package including an industry-funded Marine Recovery Fund
- establishing a fast track consenting route for priority cases where quality standards are met, by amending Planning Act 2008 so that the relevant Secretary of State can set shorter examination timescales

Onshore wind

- The Government will consult on developing partnerships with a limited number of supportive communities who wish to host new onshore wind infrastructure in return for guaranteed lower energy bills.
- It will also look at arrangements to support the repowering of existing onshore wind sites when they require updating or replacement. With advances in technology this process can enhance capacity and provide new opportunities.

Oil and gas

- A licensing round for new North Sea oil and gas projects is planned to launch in the autumn, with a new taskforce providing bespoke support to new developments.
- Government recognises the importance of these fuels to the transition and our energy security, and that producing gas in the UK has a lower carbon footprint than imports.

Hydrogen and CCUS

- Government aims to double our ambition for low carbon hydrogen production to up to 10GW capacity by 2030, with at least half coming from green hydrogen and utilising excess offshore wind power to bring down costs.
- This could be used for cleaner power, transport and potentially heat.
- The Government aims run annual allocation rounds for electrolytic hydrogen, moving to price competitive allocation by 2025 as soon as legislation and market conditions allow, so that up to 1GW of electrolytic hydrogen is in construction or operational by 2025.
- The Government aims to design, by 2025, new business models for hydrogen transport and storage infrastructure, which will be essential to grow the hydrogen economy
- To level the playing field the Government will setup a hydrogen certification scheme by 2025, to demonstrate high-grade British hydrogen for export and ensure any imported hydrogen meets the same high standards that UK companies expect.
- Confirms that delivery roadmaps for CCUS and hydrogen will be published this month to provide clear signals to industry to invest.

Heat pumps

- The Government will run a Heat Pump Investment Accelerator Competition in 2022 worth up to £30m to make British heat pumps, reducing gas demand.



Solar

- The Government will look to increase the UK's current 14GW of solar capacity, which could grow up to five times by 2035, consulting on rules for solar projects, particularly on domestic and commercial rooftops.
- For rooftop solar, the Government will radically simplify planning processes with a consultation on relevant permitted development rights and will consider the best way to make use of public sector rooftops.
- The Government is looking at facilitating low-cost finance from retail lenders to drive rooftop deployment and energy efficiency measures. It will also design performance standards to make installation of renewables, including solar PV, the presumption in new homes and buildings.

Networks, storage and flexibility

Accelerating our domestic supply of clean and affordable electricity also requires accelerating the connecting network infrastructure to support it. This decade the Government will prioritise anticipating need because planning ahead minimises cost and public disruption; and hyper-flexibility in matching supply and demand so that minimal energy is wasted. A more efficient, locally-responsive system could bring down costs by up to £10bn a year by 2050 by:

- establishing the Future System Operator as soon as practicable to drive our overall transition and oversee the UK energy system
- publishing a strategic framework this year with Ofgem for how networks will deliver net zero
- appointing an Electricity Networks Commissioner to advise government on policies and regulatory changes to accelerate progress on network infrastructure
- setting out a blueprint for the whole system by the end of 2022 in the Holistic Network Design (HND) and Centralised Strategic Network Plan (CSNP).
- updating the National Policy Statements to recognise these blueprints in the planning system, increasing certainty for the planning inspectorate, developers and other stakeholders, and speeding up delivery
- ensuring Ofgem expedites its approvals process to build networks in anticipation of major new sources of generation and demand. Government will set out the importance of strategic network investment in its forthcoming Statement for Ofgem
- dramatically reduce timelines for delivering strategic onshore transmission network infrastructure by around three years. Overall, the Government aims to halve the end-to-end process by the mid-2020s



Role of oil and gas in the energy transition

Currently around half of our demand for gas is met through domestic supplies. In meeting net zero by 2050 we may still use a quarter of the gas that we use now. The Government proposes to fully utilise our North Sea reserve, stating that the North Sea will still be a foundation of our energy security but we will have reduced our gas consumption by over 40 percent by 2030.

The Government will send clear signals on the role of gas in the transition, including:

- the North Sea Transition Authority plans to launch another licensing round in the autumn, taking into account the forthcoming climate compatibility checkpoint and the need for energy security. This will mean more domestic gas on the grid sooner
- establishing Gas and Oil New Project Regulatory Accelerators to provide dedicated, named project support to facilitate the rapid development of projects – which could take years off the development of the most complex new opportunities
- reducing the emissions of our offshore oil and gas further, by driving rapid industry investment in electrifying offshore production, to ensure our gas remains the low-carbon choice
- remaining open-minded about onshore reserves. The Government has commissioned an impartial technical review on shale gas by the British Geological Society to consider any further scientific updates on seismicity and the possible role for shale gas.

Update on existing commitments

Energy efficiency and heat pumps

The Government has announced expanded support for heat pump manufacturing. It will run a Heat Pump Investment Accelerator Competition in 2022 worth up to £30m to make British heat pumps, which reduce demand for gas.

The Government is looking to facilitate low-cost finance from retail lenders to drive investment in energy efficiency measures. It will double innovation funding for the development and piloting of new green finance products for consumers from £10m to £20m and introduce a scheme under which lenders will work to improve the energy performance of properties.

The Government will also work with the UK Infrastructure Bank as it considers investment opportunities including those that would improve the energy efficiency of our buildings. It is also bringing in new minimum standards and labelling requirements for a range of energy-using products and will formally consult on draft regulations at the end of 2022, early 2023.

The strategy also lists existing commitments made to improve energy efficiency, including:

- publishing the landmark Heat and Buildings Strategy with £3.9bn of support
- Almost £1.8bn targeted at low-income households through the Home Upgrade Grant and the Social Housing Decarbonisation Fund.
- expanding the Energy Company Obligation to £1bn per year from 2022 to 2026, helping 133,000 low-income households annually to improve their energy efficiency.
- setting a 2035 date by which we intend to phase out the sale of new and replacement gas boilers

- introducing a package of measures to increase deployment of heat pumps to 600,000 installations per year by 2028, and expanding heat networks through the Green Heat Networks Fund and designating heat network zones
- zero-rating VAT for the next five years on the installation of energy saving materials, including insulation and low carbon heating, saving between £1,000 to £2,000 on the cost of an air source heat pump
- launching the £450 million Boiler Upgrade Scheme this month. Thanks to government support, heat pumps are now priced much more competitively compared to gas boilers.

Immediate support for energy bills

The Strategy reiterates support announced earlier this year to provide immediate relief to British families and businesses facing record energy bills, including:

- £9.1bn package of support including a £150 non-repayable Council Tax rebate for the majority of households in England from April.
- £200 reduction in energy bills from October for all households in Great Britain through the Energy Bills Support Scheme, to be recovered through energy bills and will spread the cost of the energy price shock over 5 years from 2023.
- The Warm Home Discount will increase to £150 in October and extend its coverage to assist 3 million people.
- The government is investing a further £500m in a Household Support Fund for local authorities to use in supporting the most vulnerable with food and utility bills.

Delivery on the 10 Point Plan

The new Energy Security Strategy builds on existing commitments set out in the Prime Minister's [10 Point Plan](#) for a Green Industrial Revolution. It aims for 95 percent of British electricity to be low carbon by 95 percent and to have a fully decarbonised electricity system by 2035, subject to security of supply. The Government says that it has already generated 68,000 green jobs and £22bn in private investment from the 10 Point Plan.

Delivery highlights so far include:

- **Offshore wind:** Over £1.6bn invested, 3,600 jobs secured and up to 11GW generated in advancing offshore wind, with up to £320m in government support for fixed bottom and floating wind ports and infrastructure.
- **Nuclear:** Committed to provide up to £1.7bn of direct government funding to enable one nuclear project to FID this Parliament. Investing £100m into Sizewell C to help develop this project.– Investing £21m to develop Small Modular Reactors with Rolls Royce. Announced a £120m Future Nuclear Enabling Fund to progress new nuclear.
- **Hydrogen:** Preparing to allocate up to £100m of revenue support to initial electrolytic projects. Launching £240m to Net Zero Hydrogen Fund later in April.
- **Electric vehicles:** £4bn of investment has flowed into the UK zero emission vehicle sector. Building 2 new gigafactories, in Sunderland and Blyth. 30,425 public charge-points in the UK with 100 new rapid chargers added to the UK network every month during 2021



Reaction and comment

Politics

Prime Minister, Boris Johnson, said: "We're setting out bold plans to scale up and accelerate affordable, clean and secure energy made in Britain, for Britain – from new nuclear to offshore wind – in the decade ahead. This will reduce our dependence on power sources exposed to volatile international prices we cannot control, so we can enjoy greater energy self-sufficiency with cheaper bills."

Business and Energy Secretary, Kwasi Kwarteng, said: "We have seen record high gas prices around the world. We need to protect ourselves from price spikes in the future by accelerating our move towards cleaner, cheaper, home-grown energy. The simple truth is that the more cheap, clean power we generate within our borders, the less exposed we will be to eye watering fossil fuel prices set by global markets we can't control. Scaling up cheap renewables and new nuclear, while maximising North Sea production, is the best and only way to ensure our energy independence over the coming years."

Ed Miliband MP, Labour's Shadow Secretary of State of Climate Change and Net Zero, , said: "The Government's energy relaunch is in disarray. Boris Johnson has completely caved to his own backbenchers and now, ludicrously, his own energy strategy has failed on the sprint we needed on onshore wind and solar- the cheapest, cleanest forms of homegrown power. This relaunch will do nothing for the millions of families now facing an energy bills crisis. No reversal of the ban on onshore wind and not a penny more on energy efficiency . These decisions will force households to pay hundreds of pounds more for their energy bills and keep the UK dependent on imported gas for longer. After 12 years in government, families are paying the price of Conservative failure. This relaunch won't cut bills, won't deliver energy independence, and won't tackle the climate crisis. Labour would deliver a green energy sprint. This government just cannot deliver."

Commenting on the announcement, Welsh Conservative leader Andrew RT Davies MS said: "This plan to boost Britain's energy security is a welcome move. Not only will this protect households from market volatility but will also help combat climate change. I'm pleased to see that Wylfa nuclear power station in Anglesey will play a part in this project, demonstrating the Conservative Government's commitment to Wales, bringing investment and jobs to Anglesey. Drakeford's Labour Government must take responsibility and use devolved levers to combat both climate change and the rising cost of living crisis here in Wales. Labour ministers need to support energy projects in Wales by drastically reducing planning time for renewable energy projects and providing business rates relief for small scale hydro projects."

Commenting, Scottish Greens energy and climate spokesperson Mark Ruskell MSP said: "Boris Johnson 's energy strategy is not fit for purpose. It flies in the face of climate science and does nothing to support the millions of households who are facing sky high energy bills right now. With Greens in government here in Scotland we are taking action to tackle the cost of living crisis by introducing free bus travel for young people, doubling the Scottish Child Payment, while committing to make a million homes warmer and more energy efficient. This strategy presented another opportunity for the Westminster government to help those struggling most, but it seems it's an opportunity missed."

"Earlier this week the UN warned that we're facing a now or never moment to tackle the climate emergency. Incredibly, Boris Johnson's answer is to approve a new licensing round for North Sea oil and gas. The cooperation agreement which brought Greens into government in Scotland commits to doubling onshore wind here, but the Prime Minister is running scared of a few backbenchers by effectively keeping a ban in place in England. A commitment to new nuclear power will take decades to deliver costly energy, produce a toxic waste legacy, and apparently still deliver less energy than the Scottish Government's ScotWind offshore programme. It simply doesn't make sense. Scotland has 25% of all Europe's offshore renewables potential. With independence we could lead Europe in the just transition to our renewables future. Instead, with the climate denying Tories in the driving seat it seems we're going full speed ahead toward climate breakdown."

Energy and industry

Rain Newton-Smith, CBI Chief Economist, said: "This Strategy sets an ambitious bar for a more resilient, low carbon energy system for the future. Bold words must now be matched by bold actions from the Government. The proof will be in the Strategy's delivery, in partnership between business and Government. Business believes greater energy independence must go hand-in-hand with delivering a net-zero, higher growth economy. Increasing our domestic generating capacity is an essential part of dealing with the current energy crisis. Big bets on nuclear will provide clean and stable power for consumers and businesses. This scale of ambition should be replicated for other renewable technologies like onshore wind. Commitment to planning reforms and rapid approvals is what will really make the difference now."

"While it's welcome this Strategy addresses some long-standing challenges, companies are continuing to really struggle with increased wholesale energy costs right now. The Government's next step should be to provide immediate cashflow support for firms through the Recovery Loan Scheme – and move to cut bills for Energy Intensive Industries to maintain competitiveness. Kickstarting an ambitious national programme for household energy efficiency upgrades should follow this Strategy too – making people's bills more affordable and cutting carbon across the country."

EDF's UK CEO Simone Rossi said: "Britain is right to take control of its energy future, with a step change in ambition for electricity from wind, nuclear and solar, and greater energy efficiency. Building more new nuclear will reduce Britain's dependence on overseas gas and keep energy prices stable, creating thousands of jobs while we're doing it. At Hinkley Point C we're already building British nuclear, with 3600 British businesses and 22,000 people making it happen, including over 800 apprentices. The fastest way to get more nuclear in Britain is get on with the next two units at Sizewell C. It's a copy of Hinkley Point C, the design is approved and ready to go, and British manufacturers are experts in how to build it. Building more of the same design is the best way to bring down costs and develop a strong UK supply chain."

Stephen Phipson, CEO of Make UK, the manufacturers' organisation said: "The energy security strategy is the bold, ambitious plan that we need to thwart our dependency on volatile oil and gas prices while firmly marching towards net zero. Exploiting domestic resources is a short-term necessary evil, but undoubtedly the acceleration of the introduction of clean energy is the right way to go. However, these projects cannot be delivered quickly and at a time of spiralling energy

costs and a myriad of other financial burdens on business, industry desperately needs urgent action on the part of Government to reduce energy prices in the short term.

"Make UK has already called for a reduction in the carbon price via the cost control mechanism within the UK ETS, the removal of the additional Carbon Price Support tax that only UK customers pay and that Government consider removing the Climate Change Levy – all of which would drive down energy costs now. While the energy Intensive Industries energy compensation scheme is welcome, it still falls short of helping the bulk of the sector. Additionally, smaller companies are desperate to implement low carbon measures but have their hands tied by the current costs. The manufacturing industry has a key role to play in this transition and is ready to go. But it will need support to unlock its full potential and clear all the barriers to allow it to invest in switching to clean energy sources."

Energy UK 's chief executive, Emma Pinchbeck said: "Industry has committed to delivering a net zero power system in the 2030s as the best way to provide secure and cheap power to the UK. We support the Government's commitments in the Energy Security Strategy to accelerate the deployment of domestic clean power sources, build a modern energy system, and reduce demand for volatile international gas. We look forward to seeing the full details."

UKGBC 's Director of Communications, Policy & Places, Simon McWhirter, said: "Today was a chance to insulate the nation's homes, protect us against future price hikes and tackle the painful effects of rising energy costs to households across the UK. This should have been the moment to show leadership and set out a comprehensive strategy to reduce energy demand . But despite the building industry standing ready to rise to the challenge, the Government has woefully missed its opportunity. In the week the world's climate scientists name energy efficiency as one of the most significant lower-cost solutions to address the climate crisis, the Prime Minister hasn't even got a plan to stop heat leaking out of the windows, walls and roofs of the UK's 29 million homes."

Brian Berry, Chief Executive at the FMB said: "The Energy Security Strategy completely misses the mark in tackling energy consumption in our homes. After the disappointment of the Heat and Buildings Strategy this was an opportunity for Government to implement a National Retrofit Strategy, focussing on improving the energy efficiency of the UK's draughty and leaky homes. While the strategy does deliver 0% VAT on energy efficiency improvements to properties, a welcome move that the FMB has long been campaigning for, this only helps those with the money to pay in the first place. A broader, insulation led, retrofit strategy would have been an immediate solution to reduce energy consumption, boost the economy and importantly, help save homeowners money on their bills during a cost-of-living crises."

Martin Dean, Managing Director of UK Regional Bus at Go-Ahead Group, said: "Alongside heating homes, Hydrogen power also has a role to play in transport, particularly for larger vehicles like trains and those buses operating in tougher conditions than current battery technology can support. Hydrogen buses – like the fleets Metrobus will shortly operate for the Fastway service in Crawley and for Surrey County Council – can kickstart the green transition while giving customers the fast, frequent and comfortable services customers want. In future, out of town depots could act as hydrogen fuelling hubs for other fleets during the day while buses serve customers. Using our energy efficiently is good for the economy, for the climate and for our resilience to external shocks. Together, making active travel and public transport the natural first choice for many more journeys would complement government's energy security strategy and is critical to its decarbonisation plan."

Laura Bishop, Chair of the Ground Source Heat Pump Association said: "The Government's energy security strategy published today represents a missed opportunity. Instead of focusing on immediate measures to reduce dependence on expensive imported gas, including accelerating the rollout of heat pumps, the strategy focuses on the government's favoured electricity generating technologies, including those with long lead in times. This will do nothing to address the immediate cost of living and energy crises facing UK consumers."

"We welcome the announcement of a new grant completion for UK heat pump manufacturing and a government information website for heat pumps, but again, this will do little in the short-term to boost heat pump demand, or put the UK on course to delivering the Prime Minister's target of 600,000 heat pumps per year by 2028. The GSHPA has been calling for an acceleration of the welcome measures contained in last year's Heat and Buildings Strategy, but today's announcements provide no additional funding for consumers wanting to switch to heat pumps, nor give any clear indication of when the legacy environmental costs on electricity bills will be removed. We needed to see far greater urgency in today's announcements, with a clear focus on reducing energy demand in the short-term. We didn't get it."

Alex Veitch, Director of Policy and Public Affairs at the BCC, said: "The Government's Energy Strategy is a welcome step in the right direction which will help meet our Net Zero targets and reduce firms and households' exposure to volatile global energy markets in the long term. The first step in any energy security strategy must be to reduce demand yet this plan fails to bring forward support for energy efficiency measures. The transition to the cheaper, cleaner energy sources of tomorrow is vital, however prices are soaring today, and businesses need support now. This strategy is a missed opportunity to provide that which is why we are urging Government to introduce a temporary SME Price Cap, expansion of the energy bills rebate scheme to include SMEs, and a six-month extension to the Recovery Loan Scheme."

Unions

Sharon Graham, Unite general secretary said: "It has taken a war and a global crisis to get this government to act on the long-standing and vitally important issue of meeting the energy needs of the country and the planet. This is something we have been pushing for years. Now we have promises of investment and new jobs. But the devil will be in the detail. Government investment must be tied to UK job guarantees and not be syphoned off to boost offshore profits. There can be no further delays on delivering the new jobs and they must be union jobs, covered by collective bargaining, good pay, terms and conditions. And let's not pretend that this strategy is enough to fix the pain inflicted upon workers and households right now by the UK's punishing energy costs. Energy producers are making more cash than they know what to do with. A targeted windfall tax could get cash directly into the pockets of the people in this country who are facing the terrifying dilemma of heat or eat."

Sue Ferns, Senior Deputy General Secretary of Prospect union, said: "This energy strategy is big on ambition and if matched with a concrete plan of action and funding from government will go a long way to providing the long-term energy security the UK needs. We are yet to see that concrete plan however and it must not be allowed to slip. Direct investment in new nuclear will be hugely welcome - we now need direct government support for Sizewell C, Wylfa and any other projects that can be set in motion. We have talked about this for too long and must commit fully with the cash and legislation to back it up. Sadly we heard very little about the

nuclear supply chain, which is just as important as a nuclear build programme in powering a secure, net zero future for British energy. The Government must act now to retain key skills and expertise at the UK's only nuclear fuel manufacturer, Springfields Fuels. We cannot be in a position of relying on foreign imports for UK reactors. Increased investment in renewables is also very welcome, providing that there is a requirement for greater UK content that creates and sustains high quality jobs, including in the supply chain."

TUC General Secretary Frances O'Grady said: "Today's announcement fails to rise to the challenge of the climate emergency. And it does little to reassure the millions of workers facing big falls in their living standards due to soaring energy costs. A mass home insulation programme would slash bills and create over 200,000 jobs. But it is entirely missing from the strategy. The strategy promises no new help to preserve jobs in energy-intensive industries, threatened by soaring energy costs. And it fails to invest in zero-carbon steel, electric vehicles, and clean manufacturing. Ministers should be far bolder. Now is the time for a strategy that defends and creates hundreds of thousands of jobs, delivers affordable energy to homes and workplaces and stops climate change."

Jim Mowatt, chair of Trade Unionists for Safe Nuclear Energy (TUSNE) said: "TUSNE welcomes the ambition shown within the energy security strategy. Nuclear is the lowest carbon form of electricity, providing firm power to complement variable renewables. Sourcing 25% of our electricity from nuclear will go a long way to ensuring the UK's long term energy security and net zero ambition, and the strategy meets TUSNE's goal of a strong nuclear component within a balanced energy mix. However, the strategy needs to be met by a concrete plan of actions. The government should commit the right level of funding to build a fleet of nuclear reactors and make its strategy a reality."

"The government must also act to protect and develop the British nuclear supply chain. Particularly, retention of skills and expertise at the UK's only nuclear fuel manufacturer, Springfields Fuels, must be a key priority. Trade Union members stand ready to support the new nuclear renaissance, but the resulting jobs must be high quality union ones that support the UK industry and do not syphon money off to boost offshore profits. The time for talking is over, now is the time for doing. As TUSNE has always said, no new nuclear means no net zero, and TUSNE will be working to ensure Government has the will to turn the strategy into reality."

Research and campaign

Tamara Sandoul, Policy and Campaigns Manager, Chartered Institute of Environmental Health said: "It is positive to see the Government unveil a plan to reduce our reliance on fossil fuels and improve the UK's energy security. This is an ambitious plan, particularly when it comes to clean energy generation, which is urgently needed to achieve the long-term ambition of achieving net zero. However, energy security that is based on fossil fuels can only be short term if the government heeds the warnings in the latest IPCC report published earlier this week."

"In addition, the energy strategy is unlikely to do much in the short term to alleviate the hardship for many people struggling with high energy bills, and is undermined by the lack of funding allocated for energy efficiency in homes. This will be devastating for many poorer households when Winter comes. It is a missed opportunity not to use the next 6 months to accelerate the

installation of insulation measures in homes to prepare for the Winter months. The Treasury has many questions to answer about why these steps are not being funded.

"The UK urgently needs is a long-term investment strategy into energy efficiency measures for homes. This should include grants, zero interest loans, and other incentives for households, across all tenures to reduce their energy demand as well as assist with the transition to renewables where this can be achieved. Previous short-term schemes like Green Homes Grant failed to deliver because industry were not prepared and schemes were not well designed. However, the principles were good and should now, more than ever given the climate emergency and the latest IPCC report, be revisited as a matter of urgency."

Andy Mayer, energy analyst at free market think tank the Institute of Economic Affairs, said: "The central message of the Energy Security Strategy is that the government still prefers targets and picking winners to trusting markets. The consequence will be higher bills, greater fuel poverty, and further offshoring of energy-intensive industries. The UK currently has a gas supply crisis. Central to any solution must be a commitment to rapidly increase domestic supply from the North Sea and onshore fracking. Small moves have been made to reduce some regulatory barriers, and the scientific review into fracking is welcome. But at the same time additional regulations will be imposed elsewhere, including burdening industry with carbon capture projects entirely unsuitable for the UK. This interference will not only cause delay but will deny the Treasury one of the best sources of tax to pay for the low carbon transition."

Luke Murphy, IPPR associate director for energy and climate, said: "This energy strategy appears to be a recipe for failure. The choices the government appears to have made will see consumers pay more, leave the UK less secure, and expose us all to a greater risk from climate change, than if different choices had been made. This plan should have been a route map for the UK to make significant progress towards a more affordable, secure, and clean energy future, but from what we've seen so far, it falls short on every test."

"Onshore wind to boost clean energy supply and energy efficiency measures to reduce energy demand should have been at the heart of this strategy, but energy efficiency hasn't been mentioned and the proposals for onshore wind appear pitiful. The government has instead placed a bet big on nuclear, which has a role, but remains too expensive and will take years to make a difference. The decision to ramp up exploration of oil and gas and reassess fracking beggars belief. Phasing out fossil fuels is not only essential for tackling the climate crisis and protecting future generations, but it is also in the interests of our energy and economic security."

Robert Colvile, Director of the Centre for Policy Studies, said: 'As the view for household energy bills gets bleaker by the day, the government is right to plan ahead to bolster domestic supply and boost UK energy security. The role of hydrogen and nuclear in this is key, as we have argued, and the Government's recognition of this is extremely welcome. Despite this, it is disappointing to see that the Government's ambitions have not carried over to other alternative energy sources, such as onshore wind and fracking. Nor have they taken the opportunity to promote demand-side energy efficiency, including via insulation - which in turn will help reduce the most significant costs and support the push for Net Zero. The decision to nationalise core National Grid responsibilities is also highly alarming. While this strategy will expand power supply, it will take several years for its full effects to be felt. In the meantime, consumers and businesses should brace themselves for painfully high energy costs to continue.'"