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CHAIR JUERGEN MAIER ON HIS AMBITIONS
FOR THE ENERGY SECTOR



Welcome to the second issue of our *Infrastructure Intelligence* magazine

In this issue, we put one of the country’s most critical topics in the spotlight – energy. Ensuring a secure, affordable and low-carbon energy supply is vital for both the economy and the environment. We all want the lights to stay on – and our bills to come down.

But bigger picture ambitions for net zero and a need for a more self-sufficient UK energy supply mean that work to create a secure and resilient energy system is a priority for government, industry and us all. Recent policy and investment decisions have reflected this ambition.

Government recently signed off on a multi-billion pound investment decision for Sizewell C, a key part of plans for a “golden age” of nuclear to boost the UK’s energy security. We’ve seen a major onshore wind plan launched by government to reverse a near decade of sector stagnation in England.

Plus, new state-owned company, Great British Energy, aims to power the country with clean, secure, home-grown energy and ensure the UK becomes a global leader in clean energy.

So, we have spoken to some of industry’s key players to take a closer look at the projects that are shaping the energy sector across the country. From wind power to the next generation of nuclear energy, the drive to develop and invest in green, clean, renewable energy is accelerating at pace.

It’s also important to remember the wider context. Investment in new energy is not just about power – it is about creating economic renewal, new jobs and a demand for training and skills that will equip our next generation of green energy engineers.

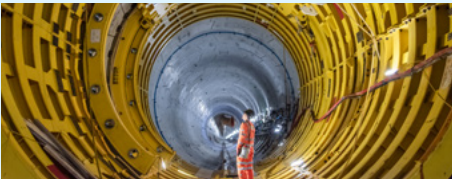
Winning the battle on climate change, improving energy security and developing a more resilient and sustainable economy has never been more important. Energy’s time is now.



Karen McLauchlan
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Infrastructure Intelligence

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GOVERNMENT
MUST HOLD FAST
TO ITS ENERGY
MISSION



BY MARIE-CLAUDE HEMMING,
POLICY DIRECTOR AT THE ASSOCIATION
FOR CONSULTANCY AND ENGINEERING
(ACE) AND THE ENVIRONMENTAL
INDUSTRIES COMMISSION (EIC)



The UK government is making progress on the delivery of its manifesto pledge to make Britain a clean energy superpower.

Announcements in June's Spending Review included £14.2bn for Sizewell C; £2.5bn to enable Small Modular Reactors; £9.4bn for carbon capture, usage and storage; £8.3bn for home-grown clean power and £2.6bn to decarbonise transport.

Ofgem has also just approved initial funding to power what it describes as the biggest expansion of the electricity grid since the 1960s, with greater reliance on electricity from renewable sources.

The much awaited 10-year Infrastructure Strategy was also published, which will be delivered by the National Infrastructure and Service Transformation Authority (NISTA).

The strategy reflects the government's Clean Power 2030 mission and seeks to incentivise the private sector in delivering the investment needed to enable 95% clean energy by 2030.

The Infrastructure Strategy is now complemented by the Modern Industrial Strategy, which identifies eight priority sectors for growth, including clean energy and professional and business services. Specific sector plans have been published for the latter two areas.

The Industrial Strategy also pledges to reduce electricity costs for manufacturers in the priority and foundation industries and to offer further support for those that are energy intensive.

In light of this clear direction of travel, UK businesses have been actively seeking to invest in the skills needed to deliver the green energy revolution.

To drive market confidence, ACE Group members need pipeline clarity, which should come from the government's infrastructure pipeline – due to be announced in the coming weeks.

However, investment comes at a cost, and we must be cognisant of concerns from UK bill payers.

“In light of this clear direction of travel, UK businesses have been actively seeking to invest in the skills needed to deliver the green energy revolution.”



Bill Esterson MP, chair of the Energy and Net Zero Cross Party Select Committee in Parliament, has spoken about the challenges faced.

His committee has been made aware of the need to promote the wider benefits of transitioning to low-carbon technologies as opposed to the technologies themselves.

ACE Group continues to champion the drive to clean energy and protect nature. We believe in a “One Crisis” approach, aligning plans for nature with government targets for net zero.

We call on government to continue to work in partnership with industry and other representative bodies to mitigate the challenges faced.

In our view, the right design, complemented by consistent long-term plans and a clear pipeline, will reduce consumer costs as we learn by doing and grow capability. This is just the beginning of the energy revolution.

We must all join together and tell with passion the story of the long-term benefits of upfront investment in our energy networks. Clean energy must become what people do, just as seat belts became in the 1980s.

Together, we can deliver the world-class infrastructure the UK deserves so that all of us can thrive. II

“We call on government to continue to work in partnership with industry and other representative bodies to mitigate the challenges faced.”

'JOBS, GROWTH AND BILLS'

– GREAT BRITISH ENERGY'S POWERFUL PRIORITIES



GREAT BRITISH ENERGY CHAIR
JUERGEN MAIER TELLS *INFRASTRUCTURE INTELLIGENCE* WHY HE'S BOTH OPTIMISTIC AND AMBITIOUS ABOUT THE FUTURE OF ENERGY

Energy has never been more critical to the UK's future. Developing home-grown supply, driving economic growth, supporting thousands of jobs and targeting transformation to meet climate goals means it's understandably among the government's key priorities.

Great British Energy (GBE), the publicly owned energy company which came into being in May this year, aims to drive clean energy deployment, boost energy independence, create jobs and ensure UK taxpayers, billpayers and communities reap the benefits of clean, secure, home-grown energy.

GBE chair, Juergen Maier, said: "I think since Russia's invasion of Ukraine and the weaponisation of energy, it's fair to say we are living in a very volatile, uncertain, complex and ambiguous time.

"In times like these we need a strong state actor to bring stability and

assuredness to investment, backed up by long-term strategies in the national interest.

"We have Clean Power 2030 as our goal, and while the net zero agenda has come in for criticism lately, I think the time has come to show to the British public the immense benefits that state-owned energy can bring.

"For GBE, this hinges on three key priorities – jobs, growth and bills. GBE has a clearly defined place in the market. We have the chance to drive public ownership of energy assets, generating returns for either onward investment or through returns to communities. In the short term, those returns might not be pounds and pence, but instead jobs and growth in nascent technology supply chains."

GBE and Great British Energy –

"I think the time has come to show to the British public the immense benefits that state-owned energy can bring."



Nuclear will together invest more than £8.3bn over the parliament in home-grown clean power. GBE will invest £6bn of that to develop energy generation projects, local power and supply chain development, generating a return to the taxpayer.

"GBE will invest in projects that expect a return on investments, delivering profits that will benefit the public," said Maier.

"Our aim is to build GBE up to the size and scale of the world's leading publicly owned energy companies. This won't happen overnight, but our ambition is clear.

"We will play an active role in the market, shaping UK supply chains with more than £300m of new investment, working in partnership with the private sector and The Crown Estate, taking that total investment to more than £1bn.

"We have been engaging with the market and have a pipeline of more than 100 projects. With a fully operational board and executive leadership team in place, along with our newly appointed CEO – our plan is to set out our long-term strategy over the summer, working in partnership with industry and local communities."

But where is there potential for growth? Maier added: "The energy transition has been going on for many years now and we've made incredible, world-leading progress in many areas. We need to take that formula and do more, which means more investment in clean power projects.

"I'm pleased to say that the market is bringing tens of GWs to us, and we want to deploy the money we have into some of these. Our job is to find the tipping points in emerging renewable industries and, using catalytic investments, commercialise them.

"We know that the previous offshore wind boom in this country was a runaway success story for capacity. However, we missed out on a lot of proprietary manufacturing and development. Supply chains were offshored and many parts imported. Looking to the future, we see the immense potential of floating offshore wind, and this time we want to find the domestic scale and industry that was missed last time."

Maier says since the launch of the government's Industrial Strategy in June, many of the clean energy projects supporting it will flow through GBE.

"Later in the year we will release our strategy which will detail the technologies and sectors to which we can add the most value with our targeted investments. We want this process to be open, rather than have fixed dates, and we want to open discussion with a large range of projects.

“However, the point is that we will not do this alone. Recently we joined forces with a number of other public finance institutions, investment bodies and industry to create a finance ecosystem to support offshore wind supply chains. The funding and financing ecosystem will give developers, investors and supply chain businesses the confidence to invest, as well as giving greater clarity on how to secure funding for projects.”

Maier says its upcoming strategy will outline the areas where GBE can make an impact.

“Our goal is to create thousands of good jobs and to build supply chains in every corner of the UK through the projects that we support, as well as at our head office in Scotland.

“GBE’s investments will support companies across the energy industry, providing opportunities for high-quality, well-paid work rebuilding the UK’s industrial heartlands.”

He added: “GBE is the catalyst for a lot of the green growth identified by the government. The Clean Power 2030 target is extremely helpful for a number of reasons.

“It’s helped focus a lot of departments within government, a lot of businesses, and it’s brought the topic right to the top of the news agenda. It’s also sent the clearest signal to industry that this is the direction of travel for the UK, in the Industrial Strategy and Spending Review.

“But look also at the effect it’s had on various arm’s length bodies and organisations – The Crown Estate, National Wealth Fund, National Infrastructure and Service Transformation Authority and Great British Energy – Nuclear. We’re all now locked into pooling resources and knowledge and are doing all the heavy lifting to accelerate our progress towards that 2030 target.”

As for the future, how does Maier see the UK’s power industry in 2030?

“My message is always one of huge optimism. I’m an industrialist and a great believer in helping industry face down the challenges, solving the problems and really taking off the handbrake and letting British industry to do what it does best: innovate.

“GBE is the catalyst for a lot of the green growth identified by the government. The Clean Power 2030 target is extremely helpful for a number of reasons.”

“We, as GBE, have a job to do in finding the scale in growing areas such as floating offshore wind and long-duration energy storage, rebuilding confidence and driving forward modular, exportable solutions around the country and the globe.

“But make no mistake, innovation is what this country does best, and we will achieve it as technologies like floating offshore wind; carbon capture, usage and storage (CCUS); and hydrogen achieve commercial scale and start to offer decent returns.

“We’re already working closely with The Crown Estate, National Wealth Fund, NESO and Great British Energy – Nuclear, but it’s about demonstrating to the British public and to business that this time it’s different – we’ve got a state-owned energy company ready to create value for the UK.

“This is a sentiment shared by Great British Energy. It’s time now to start investing, and to start demonstrating real job growth, real supply chain development and real local benefits.

“Only then can we create a lasting British institution in GBE and real value.” **II**



Image: iStock



GREAT BRITISH ENERGY – PROGRESS REPORT

- It’s been just over a year since government came to power, with GBE a key manifesto pledge – 63% of British public deemed it good idea.
- GBE received Royal Assent on 15 May 2025, establishing the publicly owned and operationally independent energy company.
- Confirmation of £8.3bn capitalisation for GBE and Great British Energy – Nuclear.
- The board has been appointed along with start-up chair and, most recently, permanent CEO – Dan McGrail, former chief executive of RenewableUK and CEO of Siemens Engines.
- First projects have been announced, including £180m to install solar panels onto hundreds of school and hospital roofs, £10m for mayoral strategic authorities to invest in renewable energy projects and £300m to support domestic offshore wind supply chains.
- Headquarters established in Aberdeen – a world-leading energy hub which has been crucial to energy security for decades.
- Further sites planned for Glasgow and Edinburgh to maximise access to expertise across Scotland.
- GBE will set out its long-term strategy over the summer.

Image: iStock (Aberdeen)

A NEW DAWN FOR NUCLEAR POWER

AS GOVERNMENT PLEDGES A “GOLDEN AGE OF NUCLEAR” TO BOOST POWER, JOBS AND INVESTMENT, *INFRASTRUCTURE INTELLIGENCE* SPEAKS TO EDF ABOUT INVESTING FOR GROWTH AND ENERGY SECURITY

A nuclear renaissance is under way. Advancements in technology, increased political support and an ever growing demand for power means atomic energy has been placed at the heart of the government's growth agenda.

The determination is clear. But it has been a long time coming. The last nuclear power station built in the UK was Sizewell B, commissioned 30 years ago. Built between 1987 and 1995, it started supplying power to the grid on Valentine's Day 1995 and has since employed thousands, delivering £15bn in economic value and supporting clean power for decades.

So, what comes next? As part of the Spending Review, the government announced ambitions for a “golden age of nuclear” – confirming a £14.2bn investment to build the Sizewell C nuclear plant as well as backing for one of Europe's first Small Modular Reactor programmes.

It represents the biggest nuclear building programme in a generation.

Energy company EDF is currently powering ahead with construction at Hinkley Point C, where it is building two new nuclear reactors, the first in a new generation of nuclear power stations providing zero-carbon electricity for around six million homes.

The scale of the project is vast. Expected to start producing electricity around the end of the decade, it will employ an operational team of around 900 for at least 60 years of generation.

There are currently more than 12,000 people working on the site in West Somerset, with 1,500 apprentices trained so far on the project. At peak construction next year, the workforce will rise to 15,000.

But while there is much to celebrate, a project on such a scale has also brought challenges.

“To restart the nuclear industry in Britain after a long gap has been difficult,” said an EDF spokesperson.

“It has been more than 30 years since the construction of Britain's last nuclear power station at Sizewell B, a gap that has led to a reduction in both the availability of people and businesses with the skills and capacity to deliver one of the country's most complex infrastructure projects.

“We've had to train a workforce, find suppliers, help them to build nuclear and adapt the EPR design to meet British regulations. We've also faced a global pandemic, inflation and Brexit. We have worked to overcome these challenges through our own investments and initiatives while also working with local partners and government.

“All major infrastructure projects continue to face significant skills shortages, particularly in high-demand trades such as steel-fixing and welding.”

Since 2012, Hinkley Point C has invested £24m into education, skills and employment.

This includes the creation of three Centres of Excellence for welding, mechanical engineering and electrical engineering, a Construction Skills and Innovation Centre and indirect support for the National College for Nuclear. Operated together with long-term skills delivery partner Bridgwater and Taunton College, new training facilities and career pathways are supporting the project, while at the same time playing a part in overcoming the national challenge.

Before Hinkley Point C, Britain hadn't built a nuclear power station in more than 30 years. EDF says this had led to a reduction in nuclear capability and a perception that the nuclear supply chain was too complex for smaller local and regional businesses to access.

"With the supply chain engagement programme starting well before construction began, Hinkley Point C has been helping British businesses into the supply chain for over a decade and is exceeding the original targets set," EDF added.

"With 64% of the value of the project going to British businesses, over £5bn has already been spent with suppliers across the South-west region – well above the target of £1.5bn."

Data shows that the local area around Hinkley Point C has experienced strong employment increases in the Industrial Strategy's growth-driving sectors. Employment in advanced manufacturing is more than one-third higher than in England as a whole, while employment in clean energy industries is almost three times higher.

In addition to creating high-skilled, well-paid jobs across the country, the project is creating new industrial capacity to support the development of British infrastructure, including Sizewell C in Suffolk and the Small Modular Reactor programme.

EDP added "The local benefits are closely intertwined with the country's broader goals of enhancing productivity and social mobility, revitalising declining sectors and communities, and addressing a national skills gap in construction, science, technology, engineering and mathematics."

Hinkley Point C, which achieved its final investment decision in September 2016, will be capable of generating 10% of the UK's electricity from its twin EPR reactors.

"With 64% of the value of the project going to British businesses, over £5bn has already been spent with suppliers across the South-west region – well above the target of £1.5bn."

Construction of Unit 1's buildings is almost complete, as the installation of equipment accelerates inside. Meanwhile, the second unit, which was stopped during the pandemic, is catching up, with its 245-tonne dome having been lifted into place recently on 17 July. This will allow it to move into its fit-out phase.

As work progresses, so does the team's experience. It means work can be completed more quickly and efficiently – and used on future projects.

"Progress has been helped by a transformation in the way the power station is being built, with prefabrication in civil construction now approaching 60%, effectively making Hinkley Point C a 'Large Modular Reactor'," added EDF.

HINKLEY POINT C – THE NUMBERS



900

staff will run the plant once open



15,000

people will help build the plant at peak construction



60

years of power generation will come from the plant



1,500

apprentices have already been trained



£5bn

has been spent with South-west suppliers so far



£13.3bn

GVA has been added to the economy already



26,000

direct and indirect jobs being supported across the country

"More factories on and off site mean larger giant pieces are being lifted into place, with big productivity gains, like the recent 170-tonne staircase 'megalift' or using crane Big Carl to lift in completed rooms in one piece."

The experience gained by the team means Unit 2 is faster to build than Unit 1. The innovation and experience being developed at Hinkley Point C will benefit the twin project at Sizewell C from the start."

EDF says the immense scale of Hinkley Point C means it can be a "force for good and a catalyst for change" with investment in people, skills and industrial capacity which is driving growth across Britain, increasing

productivity and giving thousands of people new skills and jobs.

At the national level, the construction of Hinkley Point C is an important catalyst for growth, with the project currently contributing an estimated £13.3bn in Gross Value Added to the economy.

A project of Hinkley Point C's size also creates a huge increase in employment, with more than 26,000 direct and indirect jobs supported across the country.

EDF has welcomed the government's stance on nuclear along with steps to remove planning blockers to get projects moving ahead at pace and the creation of Great British Energy.

"A project of Hinkley Point C's size also creates a huge increase in employment, with more than 26,000 direct and indirect jobs supported across the country."



“Nuclear is essential to a secure, low-carbon energy system and is the ideal partner to renewables. There is a great opportunity to build new infrastructure across England and Wales, to replace aging stations and to take advantage of available skills, existing grid connections and supportive communities,” it said.

“The opportunity will only be fully realised with the necessary reforms to planning and regulation, alongside continuing to build on the critical work at Hinkley Point C and Sizewell C to further develop skills and supply chains.

“Hinkley Point C has welcomed government proposals to reform the way developers mitigate their environmental impact. The proposals

for a strategic nature restoration fund could find solutions that work for both the environment and local communities, without putting vital new infrastructure at risk. As well as developing a strategic approach to compensation, the new proposals must ensure that the assessment of potential environmental damage is determined in a proportionate and reasonable way.”

With Great British Energy’s mandate to drive clean energy innovation and infrastructure, EDF believes there are “significant opportunities” that can be explored to further accelerate the UK’s journey towards net zero emissions and the government’s ambition to decarbonise the grid by 2030.

Alex Chisholm, EDF’s UK chair, says it is vital the country capitalises on

its natural and human resources to maximise home-grown power. Renewables underpinned by nuclear combined with acceleration of grid reform and skills development will enable the UK to secure its supply for the future.

“Our island’s energy resources protected Britain’s security, grew its economy and projected influence for centuries,” he said. “Our future will be brighter when we become an energy island again.” ¹¹



GREENING OUR NATION’S ENERGY

EDF is already one of the UK and Ireland’s leading renewable energy companies, developing, building, operating and maintaining wind, solar and battery storage projects.

Working closely with its R&D division, it is developing future innovations, including hydrogen technology. It is also investing in decarbonising the UK’s transport sector and developing vital power infrastructure for charging electric vehicles.

Its goal is to develop an operational portfolio of 10 GW by 2035.

Renewables already provide more than half of electricity in the UK, and the government is keen to accelerate this even further as part of its Clean Power Action Plan.

According to data from the Department for Energy and Net Zero, production from renewable technologies in 2024 increased 7% to a record 144.7 TWh, and a record share of 50.8% of electricity generation, passing half of generation for the first time ever in the annual data.

Generation from fossil fuels dropped to levels last seen in the 1950s, down 16%.

EDF Renewables has two operational offshore wind farms in England – Teesside and Blyth. It is building the 450 MW Neart na Gaoithe (NnG) Offshore Wind Farm in the Firth of Forth in Scotland. It is also developing the Codling Wind Park in Ireland which could provide up to 1 GW of low carbon electricity.

It also has 36 operational onshore wind farms and has a pipeline of utility scale solar projects in development and construction across the UK and Ireland.

Other projects include Tees Green Hydrogen, which is being developed in partnership with Hynamics, EDF Group’s hydrogen specialists.

It will use green electricity from nearby Teesside Offshore Wind Farm along with a new solar farm, which EDF Renewables UK intends to construct near Redcar, to power its hydrogen electrolyser. The project will supply local business customers with hydrogen to support decarbonisation efforts and a significant reduction in industrial pollution.

EDF also has three operational solar projects located in Anglesey, Lincolnshire and Cambridgeshire.

SIZEWELL C: A VOTE OF CONFIDENCE FOR NUCLEAR

The government has given the green light to build the Sizewell C nuclear power plant after signing off on a multi-billion pound final investment decision (FID). It is the first British-owned nuclear power station to be announced in more than three decades.

On 22 July 2025, energy secretary Ed Miliband signed the FID for the plant, which is estimated to cost around £38bn and will deliver clean power for the equivalent of six million homes once operational.

The government will take an initial 44.9% stake to become the single biggest equity shareholder in the project. Other shareholders include La Caisse with 20%, Centrica with 15% and Amber Infrastructure with an initial 7.6%. This comes alongside energy giant EDF taking a 12.5% in the project, as well as a proposed £5bn debt guarantee from France's export credit agency, Bpifrance Assurance Export, to back the company's commercial bank loans.

EDF holds a minority stake in the project and will supply the design and essential equipment – such as the reactor pressure vessel and turbines. The company also has thousands of people in Somerset, Bristol, Gloucester, France and elsewhere working on the project.

Located on the Suffolk coast, the Sizewell C project started construction in early 2024 after receiving approvals from the relevant authorities, and there are already around 1,000 people on site.

More than 10,000 direct jobs will be created, with the project supporting thousands more across the UK.

It will provide more than 1,500 training and apprenticeship opportunities, creating the next generation of British engineers, scientists and construction workers. Plus, it will create additional revenue for more than 3,500 British companies in nearly every constituency across the UK and £2bn of average annual savings across the electricity system when the project is up and running.

Government commitment for Sizewell C was first announced by chancellor Rachel Reeves as part of the Spending Review when government said it was investing



in "the biggest roll-out of nuclear power in a generation". Sizewell C has announced the formation of an alliance with three leading construction companies who will deliver the main civil works at the new power station in Suffolk.

A Programme Alliance Agreement has been signed between Sizewell C, Balfour Beatty, Laing O'Rourke and Bouygues Travaux Publics, who together form the Civil Works Alliance (CWA).

The CWA brings the companies together with Sizewell C into a single delivery organisation. The skills and experience of the current build at Hinkley will help shape this next plant.

The three companies are currently working at Hinkley Point C and have played a key role in relaunching nuclear construction in the UK.

Simone Rossi, CEO of EDF in the UK, said alongside Hinkley Point C, Sizewell C will help "drive economic growth, strengthen energy security and lower bills over the long term".

He added: "The confirmation of the private investment is very positive and reflects the growing attraction of the role of nuclear power in the energy transition. It could also pave the way for the financing of future large nuclear projects in the UK."

SMALL BUT MIGHTY



AS THE UK BACKS SMALL MODULAR REACTOR DEVELOPMENT, ALAN SINCLAIR, UK HEAD OF ENERGY AND NATURAL RESOURCES AT TURNER & TOWNSEND, EXPLAINS HOW THESE NEW NUCLEAR SITES ARE A CRUCIAL PIECE OF THE COUNTRY'S ENERGY SECURITY JIGSAW

Kier Starmer has already vowed to "rip up rules" to make a new generation of nuclear power a reality.

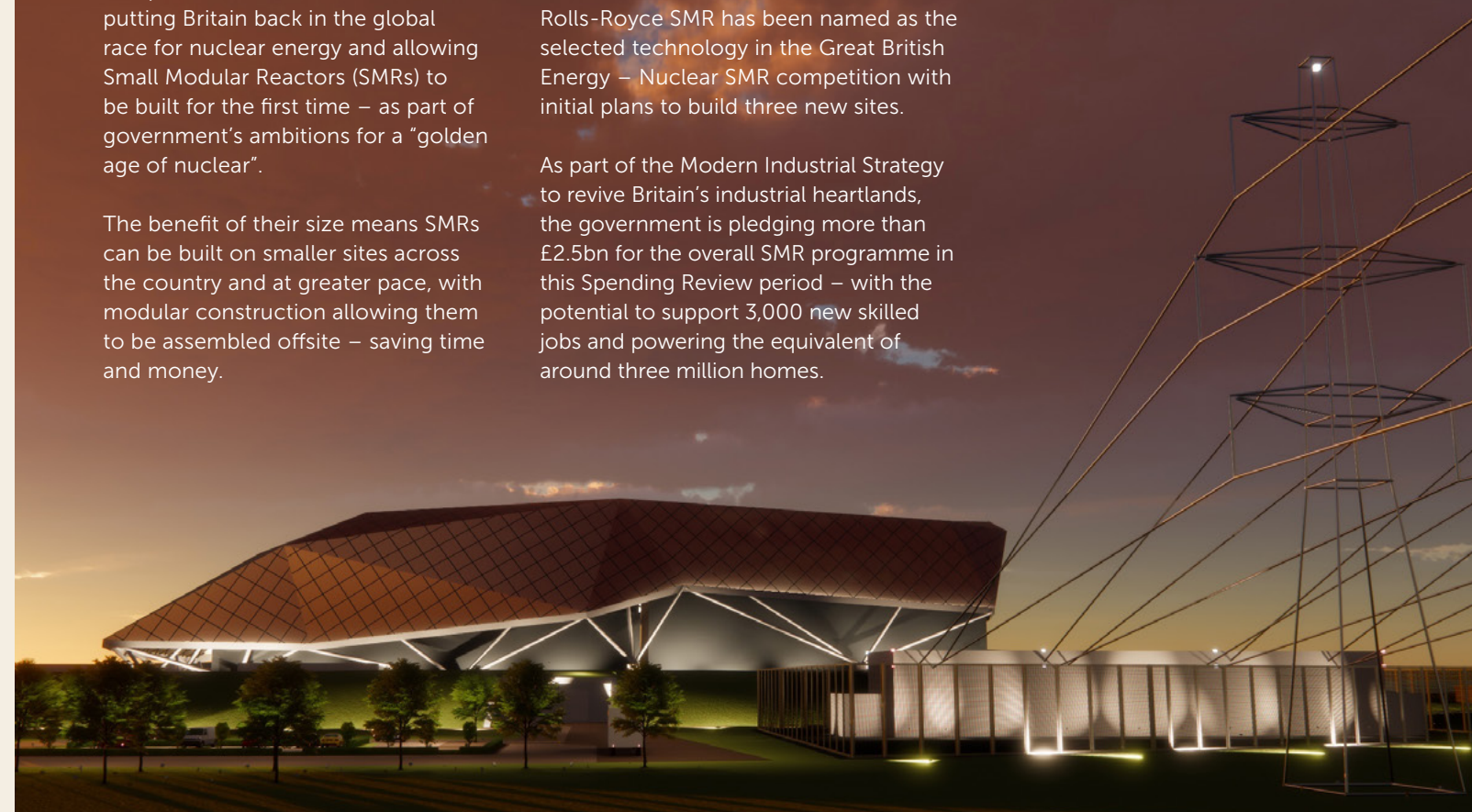
The prime minister said he was putting Britain back in the global race for nuclear energy and allowing Small Modular Reactors (SMRs) to be built for the first time – as part of government's ambitions for a "golden age of nuclear".

The benefit of their size means SMRs can be built on smaller sites across the country and at greater pace, with modular construction allowing them to be assembled offsite – saving time and money.

Yet they still provide the same longevity of power as their larger relations, with each site offering six decades of clean power for around a million homes.

Rolls-Royce SMR has been named as the selected technology in the Great British Energy – Nuclear SMR competition with initial plans to build three new sites.

As part of the Modern Industrial Strategy to revive Britain's industrial heartlands, the government is pledging more than £2.5bn for the overall SMR programme in this Spending Review period – with the potential to support 3,000 new skilled jobs and powering the equivalent of around three million homes.



Headshot image: Turner & Townsend

Background image: Rolls-Royce SMR (A visualisation of a Rolls-Royce SMR)

A consortium led by global professional services company Turner & Townsend, in partnership with multi-disciplinary firm WSP and global nuclear experts NUVIA UK, has also been appointed to provide advisory services for the SMR programme.

Alan Sinclair, UK head of energy and natural resources at Turner & Townsend, says there is much to gain from the technology. "SMRs are a compelling part of the energy puzzle that is going to help us get there in terms of our clean energy targets. They're not a silver bullet, but importantly what they offer is flexibility. SMRs can be more flexible in terms of site locations because they're smaller, they have lower upfront capital investment cost and you've got greater speed of deployment.

"That also makes them more attractive in terms of public and private investment. Plus, we are likely to see demand for SMRs in areas, such as data centres, that will require huge amounts of power."

Turner & Townsend, WSP and NUVIA UK will together provide a range of programme advisory services, including strategic planning, organisational design, governance and assurance, commercial and project controls, and business case development, to set the programme up for success. The consortium's objectives will be

centred on putting the processes, systems and controls in place to help ensure the programme delivers against an ambitious timeline and regulatory requirements, mitigating risk and maximising value for taxpayers.

The team will also contribute to the set-up of a new development company, support major permissions processes and advise on the entire lifecycle of delivery from construction to decommissioning.

"SMRs are a compelling part of the energy puzzle that is going to help us get there in terms of our clean energy targets."

"It's an ambitious timeline so the consortium has been brought in to look at how we put control mechanisms in place and mitigate risk.

"We're also bringing best practice to the project, because it's going to be a huge investment cycle and not one just purely for this government. It's going to go on for generations to come."

Sinclair hopes to see construction phases between 2026 and 2028 and power generation from mid-2030s.

"It's a fantastic opportunity for the UK. We have a deep heritage in nuclear – plants that have been built and decommissioned, with a safety record that is great. This isn't just a UK-government-led initiative; governments across the globe are really getting behind SMRs, and the UK is slightly ahead of the game. "We need to be asking how we train and upscale, and then look to export that knowledge.

"Nuclear is also a massive contributor in terms of our energy mix in the UK. The aim is to have 24 GW of nuclear capacity by 2050. Currently we're at 6 GW. So that just shows you the kind of ambition there is."

The selection of Rolls-Royce SMR's technology follows a rigorous two-year procurement process. Subject to final approvals and contract signature, it will enter a strategic technology development partnership with Great British Energy – Nuclear.

Rolls-Royce SMR chief executive, Chris Cholerton, said: "As well as delivering affordable, clean energy to support our nation's energy independence, deploying three of our units will drive domestic growth by creating thousands of highly skilled, well-paid jobs and supply chain opportunities. We are the only SMR company with multiple commitments to build projects in Europe, testament to our differentiated design and compelling offer."

Sinclair said the UK must now seize the moment on SMR technology. "This is a great opportunity to really be at the helm of nuclear innovation. It's also a great opportunity for young people coming into our sector: there's a real buzz about being involved. It's something new and the chance to work on projects that are shaping the decarbonisation agenda.

"Plus, I think there are also opportunities for development beyond the size of SMRs with Advanced Modular Reactor, the next-generation nuclear reactor design. "So, for me, it really is a 'golden age', and it's time to capitalise on that." II

WHAT ARE SMALL MODULAR REACTORS – AND WHY DOES THE UK WANT TO BUILD THEM?

Small – physically a fraction of the size of a conventional nuclear power reactor.

Modular – making it possible for systems and components to be factory assembled and transported as a unit to a location for installation.

Reactors – harnessing nuclear fission to generate heat to produce energy.

Flexibility – with a smaller footprint, SMRs can be sited on locations not suitable for larger nuclear power plants.

Time and money – their size and construction method of being built offsite then shipped and installed at their location make SMRs less expensive to get up and running and save time on construction.

Power – each Rolls-Royce SMR will generate 470 MW of low-carbon energy, equivalent to more than 150 onshore wind turbines.

Energy security – the Rolls-Royce SMR will create enough low carbon energy to power a million homes for 60 years.

Economic boost – A fleet of Rolls-Royce SMRs could result in a contribution of up to £54bn to the UK economy between 2025 and 2105.

Proven technology – SMRs are not new and have been used to power ships and submarines.

When? – it's hoped SMR technology will be providing power by the mid-2030s.

THE GREAT GRID UPGRADE:

AMBITIOUS INVESTMENT
FOR FUTURE-READY
INFRASTRUCTURE

NATIONAL GRID TALKS TO INFRASTRUCTURE INTELLIGENCE ABOUT THE BIGGEST INVESTMENT IN GENERATIONS TO CONNECT 21ST-CENTURY ENERGY WITH THE COMMUNITIES THAT NEED IT

The last major upgrade of our energy grid took place in the 1950s and 1960s.

Post-war fifties Britain, and its growing appetite for power, meant higher-voltage transmission lines were installed to meet a rapidly rising demand for electricity.

In the summer of 1953, a circuit-breaker was closed to energise Britain's 275 kV supergrid for the first time. But in the decades since, the way we use and generate power has changed dramatically.

"The electricity transmission system, made up of pylons, overhead lines and underground cables, was mostly built in the 1960s," said a spokesperson for National Grid, which owns and maintains the high-voltage electricity transmission network in England and Wales.

"It wasn't designed to carry electricity from where it's increasingly generated today – like out in the North Sea from offshore wind turbines. Significant new infrastructure is needed to connect this energy from where it's generated to where it's needed."

The Great Grid Upgrade is the largest overhaul of the electricity grid in generations. Infrastructure projects across England and Wales are helping to connect more clean, affordable energy to homes and businesses.

The upgrade currently comprises 17 major infrastructure projects that will both scale up the grid and update existing networks.

And with electricity demand in Britain expected to increase by 50% by 2035 and at least double by 2050, infrastructure projects will future-proof the grid for years to come. They will also help to meet the rising demand for electricity by connecting more home-grown, affordable energy to homes, businesses and public services.

Six of the projects are under construction, three development consent planning applications are expected to be submitted in 2025 and the remaining projects are in the later stages of public consultation.

By the end of the decade, National Grid, including the Great Grid Upgrade projects, will support more than 55,000 additional UK jobs and contribute £14.5bn a year to the UK's economy.

Additionally, communities should benefit from hosting new electricity infrastructure. In line with government guidance, National Grid expects millions of pounds to be available to benefit local communities and the wider area.

The government has put energy at the heart of its plans for growth, along with moves to speed up the country's planning process – something National Grid has welcomed.

"The Planning and Infrastructure Bill is a crucial piece of legislation that will help reform the way we plan, consent, connect and deliver nationally significant infrastructure projects in

"By the end of the decade, National Grid, including the Great Grid Upgrade projects, will support more than 55,000 additional UK jobs and contribute £14.5bn a year to the UK's economy."



the UK, across a range of sectors, such as the electricity networks, which are the foundation for supporting the UK's growth and clean power ambitions," it said.

"It's always our priority to deliver our infrastructure projects as early as possible, and having policy which provides both certainty and clarity is an important enabler of this." So how will our power demands look in the years to come?

"It's always our priority to deliver our infrastructure projects as early as possible, and having policy which provides both certainty and clarity is an important enabler of this."

"Electricity demand in Britain is expected to increase by 50% by 2035," added National Grid. "We're focused on building the infrastructure we need to connect to cleaner energy as quickly as possible, but also to meet growth in demand and energy security, so that we can unlock the benefits for all. Recent reforms on connections and planning policy will help the sector to achieve this target." [ii](#)



THE GREAT GRID UPGRADE COMPRISES 17 MAJOR INFRASTRUCTURE PROJECTS. HERE'S A PROGRESS REPORT ON SOME OF THE SCHEMES

Eastern Green Link 1 – a £2.5bn joint venture between SP Energy Networks and National Grid Electricity Transmission, it will transport green electricity for two million homes along 190km of predominantly undersea cable linking Torness in East Lothian and Hawthorn Pit in County Durham. The project started construction in March 2025 and is expected to be operational by 2029.

Eastern Green Link 2 – a 505km electricity superhighway which will enable the transfer of power from Scotland to England (and vice versa) via a subsea cable. It will connect Peterhead in Aberdeenshire and Drax in North Yorkshire. Once energised in 2029 it will carry enough electricity to power two million homes.

Bramford to Twinstead – National Grid is upgrading the electricity transmission network between Bramford substation in Suffolk and Twinstead Tee in Essex through the construction of a new overhead line and underground cable. The project is due to be operational in 2030.

Yorkshire Green – construction is under way on the project, which will upgrade existing infrastructure in North Yorkshire and build a new 10km electricity overhead line along with a short section of underground cables. The project has sites at Overton near York and Monk Fryston near Leeds. A supergrid transformer was delivered to the Overton site on 6 July. Weighing in at 200 tonnes, it will help to change the voltage of electricity so it can be supplied safely to homes and businesses.

Grain to Tilbury (picture above) – proposed replacement of the existing 1960s Thames Cable Tunnel beneath the Thames between Tilbury and Gravesend. The existing tunnel was built in 1969. It received planning consent from Thurrock Council in Essex and Gravesham Borough Council in Kent earlier this year.

Weston Marsh to East Leicestershire – stage 1 consultation is underway on early proposals for the development to reinforce the high-voltage transmission network between Lincolnshire and the East Midlands.

Grimsby to Walpole – stage 2 consultation is under way on a proposed 140km overhead line between North-east Lincolnshire and North Norfolk, needed to reinforce the network and to connect new sources of electricity planned in the area, including offshore wind, solar, gas-fired generation, interconnectors, battery storage and subsea links from Scotland.

Eastern Green Links 3&4 – stage 2 consultation closed in June for these two offshore high-voltage electricity links between Scotland and England – with a timeline of construction starting in 2029 and being fully operational in 2033.

Eastern Green Link 5 – stage 1 consultation closed in June for this primarily offshore high-voltage electricity link between Scotland and England. It is proposed to be fully operational in 2035.

UK'S 'HUGE OPPORTUNITY' TO ACCELERATE ENERGY DELIVERY



KIRSTEN OLIVER, MANAGING DIRECTOR OF WSP'S ENERGY BUSINESS, LOOKS AHEAD TO FUTURE OF POWER DELIVERY AND PLANNING

When you ask Kirsten Oliver about work, she talks with sheer enthusiasm and passion.

What is her field? Energy.

"I've officially got the best role in the company at the moment," said the managing director of consultancy WSP's energy business.

"We've got ambitious targets as a company, but there are also ambitious targets coming from UK government and changes that are going ahead. It is such an important time for the industry – there's huge opportunity."

The UK's energy aspirations are ambitious: a transition to clean energy and net-zero emissions by 2050; becoming a clean energy superpower; increasing domestic energy production; accelerating development in green energy sources like solar, wind and nuclear; and driving forward emerging technologies such as hydrogen and carbon capture, usage and storage (CCUS).

WSP is working across the piece in transmission and distribution, renewables covering onshore and offshore wind, and energy transition looking at hydrogen and carbon capture.

It is less than a year since Oliver joined the business with a remit of doubling its work in the energy field.

The company is working on many emerging technologies which will play a role in the UK's long-term energy security.

This includes projects such as the HyNet North West project, made up of several key pieces of infrastructure to provide the North-west and North Wales with low-carbon hydrogen and also the opportunity to capture carbon emissions and permanently lock them away.

In April, energy company Eni finalised a major deal with government which will see them award around £2bn in supply chain contracts for the Liverpool Bay Carbon Capture and Storage Project

– a major leap forward for the HyNet project.

"Seeing carbon capture projects moving ahead on Teesside and the Humber and seeing the North-west being invested in really ticks a lot of the boxes for urban regeneration. It's great news."

But equally important is investment in the country's current infrastructure. National Grid's Great Grid Upgrade is the largest overhaul of the electricity grid in generations – a project WSP is working on with a number of other partners.

Made up of 17 major infrastructure projects, the upgrade will both scale up the grid and update existing networks.

"This project is enormous and it is the absolute backbone to all of the energy transition targets of the UK.

"For decades we have been in an environment of maintaining rather than really investing in capital projects.

When you look at this investment in infrastructure within the electricity transmission system, it is a complete culture shift."

But where is energy headed next – and what are the challenges?

"We have already seen impressive progress in renewables. Our offshore wind and solar interconnectors are real global success stories.

"But we have probably reached a point now where the planning permitting and the grid connections are the limiting steps and we're starting to see government come out with changes on that.

"There's huge opportunity to accelerate delivery, but we really do need clear policy signals, faster consenting and an integrated

approach to infrastructure planning. "That's absolutely key for the grid and for hydrogen and carbon capture and storage. It needs to be an integrated opportunity rather than piecemeal projects."

Plus, Oliver says, it is a drive that must be "people led".

"It is not just an opportunity for developing projects. It's about aligning skills, jobs, communities and placemaking, so it is a transition that delivers locally as well as nationally. There are challenges, but actually these are opportunities."

The government has already given a strong commitment to energy in the Spending Review and the recently announced Modern Industrial Strategy and Infrastructure Strategy.

"I'm really encouraged by the recent Industrial Strategy and Spending Review – especially the £1.2bn for upskilling and the £30bn nuclear commitment," said Oliver. "What matters now is turning those pledges into reality, with strong governance, smarter digital tools and a clear, people-led roadmap."

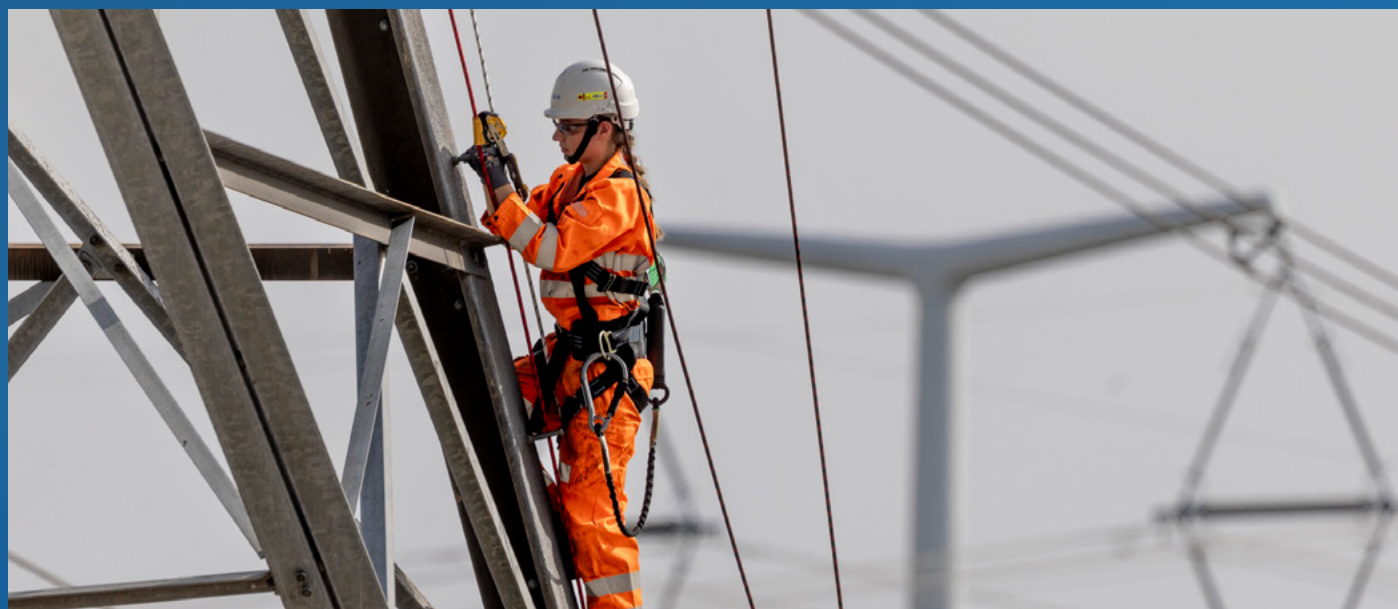
"We need a long-term plan, which has got to be clear and balanced. We've only got so much money to spend, and investing in the right place and delivering at the right pace is absolutely key.

"An industry road map gives us confidence to scale up and improve confidence with investors.

"We must also look at the infrastructure plan as a whole system view and not just funding individual assets.

"This project is enormous and it is the absolute backbone to all of the energy transition targets of the UK."





"It is about unlocking those networks, whether it's a molecules network, hydrogen, carbon capture, electricity transmission and distribution or renewable energy sources.

"But the grid remains the biggest bottleneck. We know we are not going to have investors investing in power generation unless they have a way of connection into that grid.

"So, getting reforms to planning over the line is fundamental, but we need to make sure we bring everyone along on the journey with us – including environmental and local government."

Dozens of clean energy projects will jump to the front of the queue for grid connections through new measures in the Planning and Infrastructure Bill, which is making its way through Parliament.

The flawed 'first come, first served' process, which prevents viable infrastructure from being able to connect ahead of speculative projects clogging up the queue, will be replaced by a 'first ready, first connected' system that prioritises the home-grown clean power projects for quicker connections to build an

energy system that can bring down bills.

"It could be a game changer," added Oliver. "Prioritising transmission infrastructure is essential. But we need to have strong environmental safeguards and community engagement. So, we must balance that urgency with responsibility."

She added: "We've got to link generation, storage demand and nature-based solutions. That is essential to achieve the ambitions, and we are starting to see that now.

"We need to juggle a lot of balls all at the same time, which is hard – but also exciting. And I think, if we get everybody on the same page, we will drive that forward and see projects at a scale and pace we've never seen before.

"There is definitely a sense of urgency that we are seeing from government and from the supply chain. There is a want now to get on with it, and that is a really exciting prospect.

"I am a person that thrives on change. So, I'm absolutely in the right place at the right time." II

"We've got to link generation, storage demand and nature-based solutions. That is essential to achieve the ambitions, and we are starting to see that now."

THE RACE TO DELIVER ON CLEAN POWER AND PRICES



BEATRICE FILKIN, DIRECTOR OF MAJOR PROJECTS AT OFGEM, TALKS TO KAREN MCLAUCHLAN ABOUT THE REGULATOR'S KEY ROLE TO PROTECT ENERGY PRICES AND CONNECT CLEAN POWER INFRASTRUCTURE

Energy remains one of the country's most pressing issues.

As we emerge from an energy crisis, the country's energy regulator says bills remain high, with many customers struggling to pay for the energy they need.

Ofgem – the Office of Gas and Electricity Markets – is the government regulator for the electricity and downstream natural gas markets in Great Britain. Beatrice Filkin, director of major projects, said Ofgem is working hard to protect consumers from future price shocks, deliver clean power and boost economic growth.

"To achieve the government's clean power targets, move away from volatile international gas markets outside our control and protect consumers from the extreme fluctuations those markets can cause, we need to build a lot of new transmission infrastructure, and we need to build it fast," she explained.

Ofgem's Offshore Transmission Owners (OFTO) regime is key to this – connecting Britain's offshore windfarms to the onshore grid via cables and converter stations.

Recent work includes the launch of the 12th OFTO auction to own and operate the electricity links which plug one of the world's largest windfarms, the Sofia Wind Farm located in the North Sea's Dogger Bank area, into Great Britain's power grid.

Headshot image: Ofgem

Background image: RWE (bubble curtain technology being deployed at the Sofia Offshore Wind Farm)



Ofgem expects to launch tender round 13 later this year, bringing three more assets to market.

“Building more onshore high-voltage electricity superhighways which transport energy around the country to where it’s needed is also essential,” added Filkin.

“This will not only help meet demand but also drive down the constraint costs encountered when there isn’t enough grid capacity to accommodate the clean energy being generated.”

Ofgem’s Accelerated Strategic Transmission Investment – ASTI – framework will also get the onshore transmission upgrades required built as rapidly as possible.

Filkin explained: “It cuts through red tape and speeds up approval times of major strategic transmission projects, such as Eastern Green Link 1 and 2, by up to two years. These projects help to connect supply with demand, allowing us to make best use of our home-grown renewable resources by transporting green energy from where it is produced to where it is needed.

“Of course, we also need to consider what we do when home-grown renewables are either generating more energy than we can use or when we need to call on other sources of supply to meet demand, for example when the wind isn’t blowing or the sun isn’t shining so much.”

This means Ofgem is also increasing its interconnection capacity, allowing it to capitalise on the growing amount of home-grown wind power by providing additional channels for exporting in times of surplus and importing during times of more limited domestic supply.

With Greenlink interconnector coming online earlier this year, there are now 10 interconnector links to other countries. A new link to Germany is in construction and three more interconnector projects have recently been approved.

Ofgem is also bringing forward Britain’s first two Offshore Hybrid Assets (OHAs), which can directly feed energy generated by offshore wind farms into both UK and European grids through interconnection.

“OHAs are a stepping stone towards a more strategic meshed electricity system in the North Sea, which can help reduce build and operation costs as well as reduce impact on the environment and communities,” explained Filkin.

Recently, Ofgem also launched a new regulatory regime to provide further backup through Long Duration Electricity Storage (LDES) facilities. This new regime will unlock billions of pounds worth of investment to build new storage technology which will promote growth and drive investment.

“Building more onshore high-voltage electricity superhighways which transport energy around the country to where it’s needed is also essential.”

In addition, Ofgem is working closely with government to develop a regulatory framework for new nuclear projects, including Sizewell C.

“There’s certainly no shortage of exciting, innovative and potentially hugely impactful major projects going on across GB at the moment as our energy system continues to develop.”

But the sector undoubtedly still faces many challenges.

The shift to a clean power system demands innovative regulation and mitigations in place to deal with global manufacturing supply chain issues. “Manufacturing capacity is a critical issue facing the energy sector at the moment,” said Filkin.

In July, Ofgem published its draft determinations for RIIO-3, which gave the provisional green light to an initial £24bn investment programme to enhance energy security while enabling the transmission of more clean energy from renewable sources. This is part of an expected £80bn expansion of the electricity transmission grids, enabling 80 major infrastructure projects to be completed by 2030, expanding the British grid at the fastest rate since the 1960s.

RIIO-3 will operate alongside Ofgem’s recently announced Advanced Procurement Mechanism, which will provide billions of pounds in allowances for transmission owners to

place orders for essential equipment – such as switchgear, cables and steel – years in advance of when it is needed, and often before their project design has been finalised.

“This will empower the sector to take on major projects and deal with uncertainty around manufacturing capacity by being able to plan in advance,” Filkin added.

Ofgem’s Strategic Innovation Fund is also creating a launchpad for the development of new technologies needed to drive change in the energy system and benefit consumers.

Recent government announcements have placed energy at the heart of the country’s growth ambitions, with policy aiming to help schemes come online faster.

Filkin said: “The shift to clean power means we need to connect an increasing number of renewable forms of energy, such as wind and solar, and cater for a major uptick in demand with the increasing electrification of transport and heating, as well as the growth of energy-hungry sectors such as data centres and AI.

“The reforms we’ve developed with the National Energy System Operator (NESO) abolishes the old “first come, first served” connections queue system, moving to a “first ready and needed, first connected” system.

“This ensures home-grown, renewable power and energy storage projects needed for Clean Power 2030 are prioritised and provides accelerated connection dates that will get clean power connected quicker.”

Ofgem has now laid out its blueprint for the landmark electricity distribution price control period starting in April 2028 – ED3.

“Local electricity distribution grids are central to the government’s clean power mission and the wider transition to net zero. This is where much of the strategic investment is needed to enable the decarbonisation of heat and transport, as well as wider industry.

“The emergence of regional strategic planning will also require the distribution network operators (DNOs) to develop close relationships with

local stakeholders to understand how plans for housing and economic growth will impact on their networks.

“That will come mainly through new regional energy strategic plans, which will help give more certainty on what the pathway to net zero will look like for each part of the country, as well as more independent and regionalised scrutiny of how companies investments will support this pathway.

“So, taken together with the wider RII0-3 programme, these are our most consequential sets of price controls that will see the biggest grid expansion in a generation, paving the way towards a clean energy system that supports the wider electrification of the economy.

“In terms of process, we’re currently developing our methodology for the ED3 price control and will consult on that later this year. This will in turn inform the DNOs’ spending plans for 2028 to 2033, which we expect to receive in late 2026, ahead of the price controls being finalised and coming into effect in April 2028.” II

BUILDING ENERGY RESILIENCE FOR THE FUTURE

The transition to clean energy is well under way. But the makeup of the country’s energy supply must continue to evolve – and at pace.

Ofgem’s role is to ensure the sector has the right funding in place to build and maintain the resilient infrastructure to deliver clean, reliable energy to consumers at a reasonable price.

“We’re moving to a system which relies more on home-grown wind and solar,” said Beatrice Filkin.

“However, these sources of energy are intermittent, so it’s equally important that non-intermittent low-carbon generation from nuclear, sufficient storage (both long and short duration) and low-carbon dispatchable power such as gas plants with carbon capture, as well as interconnection, are maintained and developed to be able to meet demand when home- grown renewables aren’t generating.”

And infrastructure to accelerate the pace of transition is also critical.

Last year, Ofgem gave the green light to £3.4bn of public funding for Eastern Green Link 2 (EGL2)– a 500km high-voltage direct current (HVDC) energy “superhighway” between Scotland and England. Work is progressing.

EGL2 is being delivered as a joint venture between SSEN Transmission and National Grid Electricity Transmission (NGET).

At 505km it is the longest electricity transmission project to be constructed in the UK – and will have capacity to power two million homes.

“EGL2 is Britain’s biggest ever electricity transmission project, and it was the first ever project to be fully approved under our ASTI process, which sped up the approval process by two years,” added Filkin.

“Developing the infrastructure required to get clean, home-grown energy to heavily populated areas is critical for reaching clean power by 2030 – and EGL2 will be a great example of that.”

POWERING PROGRESS AT EGL2



EASTERN GREEN LINK 2 IS A 2 GW ELECTRICAL CABLE LINK BEING JOINTLY DEVELOPED BY SCOTTISH AND SOUTHERN ELECTRICITY NETWORKS TRANSMISSION (SSENT) AND NATIONAL GRID ELECTRICITY TRANSMISSION (NGET). FIONÁN DOONAN, EGL2 PROJECT DIRECTOR AT SSENT GIVES AND UPDATE

The Eastern Green Link 2 (EGL2) project has made significant strides in 2025, laying the groundwork for one of the UK’s most important low-carbon infrastructure projects.

From the North-east coast at Peterhead to the developing converter station at Wren Hall (North Yorkshire), construction is progressing rapidly as we work to deliver clean energy to the grid and reduce constraints on the electricity network.

Construction began in earnest in October 2024 and, aided by a mild winter, has advanced at pace.



At Peterhead, our civils contractor, BAM Nuttall, started the main platform build in November 2024, reaching a key milestone with its completion in May 2025. This platform forms the foundation for the next major phases of construction.

Welfare facilities on the Peterhead site have also been delivered and are now fully operational and ready to support the hundreds of workers expected during peak activity in 2026 and 2027. Construction of the service building is well under way too. Piling has started on site to support the transformer buildings.

Early 2025 saw the completion of drainage ponds, vital for managing surface water and easing pressure on existing outfalls. The construction of earth mounds is nearly finished, with plans in motion to introduce native landscaping using locally sourced trees and plants.

On the electrical front, diversion of the existing 132 kV overhead line is progressing well, scheduled for completion later this summer. Meanwhile, in the 400 kV substation, works began in June 2025 and will continue over the next three years.

“Beyond the physical build, EGL2 continues to drive broader positive impact.”



This new infrastructure will allow connection to the local AC Grid and enable the flow of clean electricity from the AC Grid to the new HVDC converter station and onward south towards Drax.

At Wren Hall, at the southern end of the project, momentum is also building. The site mobilised in September 2024. Earthworks are under way to construct a four-metre-high platform, which also includes preparations for a Biodiversity Net Gain area to the south of the converter site. Piling began in spring 2025, with wider works, including substation bay installation, cable diversions and localised strengthening of the overhead line network.

Beyond the physical build, EGL2 continues to drive broader positive impact. By way of an example, the project’s goal to leave a lasting legacy includes accelerating its sustainability efforts by adopting hydrogenated vegetable oil (HVO) fuel for material handling trucks in Yorkshire and for powering generators at both sites.

The Community Development Fund, launched in spring, highlights our long-term commitment to delivering



community benefit alongside national energy infrastructure.

Looking ahead, piling works at Peterhead are to continue into the second half of 2025, paving the way for steelwork erection in early 2026. At Wren Hall the platform will be finished towards the end of summer 2025, allowing foundations for the buildings to be laid.

EGL2 is more than just a construction project – it’s a key enabler of the UK’s clean energy future. Once complete, it will help reduce constraint charges, increase grid capacity and support a more efficient, low-carbon electricity network. II



ENERGY'S EVOLUTION IN ACTION

KEY PROJECTS AND POLICY ANNOUNCEMENTS ARE RESHAPING THE UK'S ENERGY SECTOR. HERE ARE SOME OF THE STORIES THAT HAVE BEEN MAKING *INFRASTRUCTURE INTELLIGENCE* HEADLINES

Suffolk: UK government has backed development of the Sizewell C nuclear power plant with a Final Investment Decision. Balfour Beatty, Laing O'Rourke and Bouygues Travaux Publics, who are already working on the Hinkley Point C plant, have formed an alliance to deliver the plant's main civil works.



Image: OnPath Energy

South Lanarkshire: Renewables developer OnPath Energy has started work on the £155m Mill Rig Wind Farm, which will generate enough energy to power approximately 45,000 homes annually once fully operational in 2026.



Image: EDF

Somerset: Work is progressing at Hinkley Point C, where EDF is building two new nuclear reactors that will provide zero-carbon electricity for around six million homes.

Cheshire: Costain has been selected by Storengy UK to design the Keuper Gas Storage Project (KGSP), an underground hydrogen storage facility

in Northwich. The company has also been chosen to design a ground-breaking advanced fuels production facility for Urenco, global suppliers of uranium enrichment services and fuel cycle products for power generation.



Image: Ørsted

Yorkshire Coast: Ørsted announced it was discontinuing the Hornsea 4 offshore wind project in its current form. But progress at Hornsea 3 continued, with the first of two offshore converter station topsides setting off for the UK from Thailand in April.



Image: ScottishPower

Southern North Sea (off Norfolk and Suffolk coasts): The offshore construction programme for ScottishPower's biggest-ever renewables project started in April. The first foundation for the green energy company's £4bn East Anglia THREE offshore windfarm was installed. Recently Masdar, a global clean energy leader, and Iberdrola, one of the world's largest energy companies,



announced a €5.2bn co-investment in the wind farm, each holding 50% and joint governance.

Scotland: In April, energy company SSEN Distribution announced five contract partners to help deliver a £450m programme of investment in the north of Scotland's electricity distribution network. Work will deliver improvements across nine sub-regions of the north of Scotland network licence area by the turn of the decade.



Image: iStock (Rampion Wind Farm)

Sussex coast: Plans to expand the Rampion 2 Offshore Wind Farm off the Sussex coast were granted a Development Consent Order (DCO) by energy secretary Ed Miliband in April. An extension to the existing Rampion Offshore Wind Farm, it is being led by global renewables company RWE.

Irish Sea: The Mona Offshore Wind Project has been granted a DCO by government. It is being developed by a joint venture of bp and Energie Baden-Württemberg AG (EnBW).

Somerset: National Grid started work on a connection for the UK's biggest EV battery factory. The scheme is vital for the creation of the £4bn factory at the Gravity Smart Campus near Bridgwater that will create 4,000 green tech jobs. The facility is run by Tata Group's global battery business Agratas.

Humberside & Aberdeenshire: A £9.4bn boost for UK carbon capture and storage over the Spending Review period is announced, including backing for the Viking CCS project on Humberside and Acorn project in Aberdeenshire.



Image: Kier

Somerset: A Kier and Environment Agency trial of solar power with a green hydrogen backup yields positive results as viable primary power supply on a construction site where access to mains electricity is not available.

National: Government announces its Industrial Strategy and Infrastructure Strategy – with energy a key priority.

National: A new wave of hydrogen-powered projects were shortlisted in April to help cut emissions and create thousands of jobs. The 27 hydrogen projects have been selected for the next stage of the Second Hydrogen Allocation Round (HAR2) – supporting low-carbon hydrogen production in the UK.

National: Around 200 schools and 200 NHS sites are to get new rooftop solar power, thanks to a £200m investment from Great British Energy, which has its HQ in Aberdeen.



Image: Simon Walker / Deputy Prime Minister's Office

National: Government announced that dozens of clean energy projects, including wind and solar power, will jump to the front of the queue for grid connections, as the government looks to improve the planning process. The Planning and Infrastructure Bill, formally introduced to Parliament on 11 March 2025, is laying the groundwork for a new approach to prioritise new transmission infrastructure which will unlock growth. II

THE VISION IS BECOMING REALITY FOR ENERGY'S BIGGEST PROJECTS



**SAM WHITE, MANAGING DIRECTOR
– NATURAL RESOURCES AT
COSTAIN, EXPLAINS WHY IT'S A
TIME OF PROGRESS FOR THE UK'S
ENERGY SECTOR**

Clarity and certainty are set to create a pathway for progress in the UK energy sector.

The government's 10-year Infrastructure Strategy and its Modern Industrial Strategy have signposted the road ahead, with energy playing a key part.

For Costain, the construction engineering giant already working on some of the country's biggest energy schemes, taking a longer-term view is a win for industry.

"Having a 10-year Infrastructure Strategy is a really, really good place to start," said Sam White, managing director – natural resources at Costain.

"Major programmes have quite a lot of uncertainty around them, with changes in government or with the economy. So having a having a 10-year strategy creates certainty, which is going to be really important.

"It also draws in the changes we have seen to planning and consent, which will help us deliver these projects in a more reliable and faster way. It helps get the right focus on what the important projects will deliver."

Costain, which was founded in Liverpool and celebrates its 160th anniversary this year, is known for its work on major, complex infrastructure projects, including the Channel Tunnel, the Thames Barrier, the Elizabeth line, Heathrow Airport and HS2.

But its Natural Resources division, headed by White, has seen huge development in the last few years with large-scale investment in energy, a huge ramp up in water infrastructure and a focus on the country's energy resilience following the impact of the war in Ukraine.

With the UK still relying on sources of oil and gas, there is also work to be done in this area.

"For Costain, the construction engineering giant already working on some of the country's biggest energy schemes, taking a longer-term view is a win for industry."



But new projects are coming online. Recent contract wins include being selected by Storengy UK to design the Keuper Gas Storage Project (KGSP), an underground hydrogen storage facility in Northwich, Cheshire.

Costain has been selected by Net Zero Teesside Power (NZT Power) and the Northern Endurance Partnership (NEP) as one of nine specialist partners for a landmark carbon capture scheme with a combined value of around £4bn. NZT Power and NEP are joint ventures involving the global energy leader, bp.

It has recently signed a contract with government to provide consultancy

support for its decarbonisation programme to work on things like Advanced Modular Reactors (AMRs) and Small Modular Reactors (SMRs).

It has been chosen to design a ground-breaking advanced fuels production facility for Urenco, global supplier of uranium enrichment services and fuel cycle products for power generation.

Costain has also secured a multi-million-pound, 10-year framework to support the construction of the Sizewell C nuclear power station. "The government's confirmation is a huge step forward for the UK's energy security and net zero ambitions. This nationally significant infrastructure project will provide

a safe and resilient energy supply for millions of homes, creating a sustainable future for the UK.

"At the same time, this is a project that will accelerate the development of highly sought-after engineering skills for thousands of long-term jobs, driving economic prosperity for the East of England. We're looking forward to working closely with Sizewell C and its supply chain partners to play our part in its successful and efficient delivery.

"The framework is 10 years because it is a huge project and we will be there throughout. It will draw in large numbers of other companies and contractors."



In terms of nuclear power, White agrees it is an energy source that has seen a shift in public perception.

"I'm not an engineer myself, but it's an incredibly exciting time to be an engineer in the nuclear sector," he added. "It's a very clean and sustainable form of energy and I think there has been an image change.

"We've had this technology for many, many decades. But what we know going forward is there are great opportunities to produce fantastic high-quality facilities.

"We also have strong integrated strategies for how we deal with the waste in a cleaner, more sustainable way.

"While the upfront costs of nuclear are significant, we are creating a facility that gives clean energy for 60 years, which is hugely important.

"If you look across the UK's energy sector today, we are world leaders now in offshore wind. We are probably somewhat behind the curve on things like solar, but we do need a

base load from nuclear that will help us maintain a position once we do get to net zero.

"This kind of investment also does great things for the community. It will transform the lives of many people in a positive way."

White says carbon capture and storage (CCS) is another key area where projects have moved from the drawing board to reality.

Teesside's NZT Power could generate up to 860 MW of flexible, low-carbon power equivalent to the average electricity needs of around 1.3m UK homes. Up to 2m tonnes of CO₂ per year would be captured at the plant and transported and securely stored by the Northern Endurance Partnership (NEP) in subsea storage sites beneath the North Sea.

The project is set to be one of the world's first commercial-scale gas-fired power stations with carbon capture.

"It's transformational," said White. "These projects are no longer a concept; they are a programme.

"This kind of investment also does great things for the community. It will transform the lives of many people in a positive way."

"The power station being built, the pipeline for carbon capture is being built and abated. I think gas and carbon capture and storage can be a really powerful part of our decarbonisation strategy.

"And a programme on this scale really does allow us to start to set ourselves out as being a leader in this area. From a carbon capture perspective, I think we will see further projects in this area.

"We all feel the burden of wanting to get this project right because if we can, it sets a really strong standard for other clean energy and energy transition projects."

He added: "When we started designing this pipeline two years ago, I always hoped it would be something that would turn into a constructive project.

But I was always cautious about whether it would get the backing to go ahead.

"But it is absolutely real now. We have a large building team on Teesside and we have seen a lot of local people, or people that want to return to the area, involved in this really exciting project."

But while there is much moving forward in the energy sector, challenges remain.

The skills gap is a key issue for industry to solve.

"When you look at the skills agenda across the whole energy system, that's probably one of the most important things we're going to need to invest in," said White.

"With the creation of Great British Energy and Great British Energy – Nuclear, this will help us get the right strategy around skills, because it is critical. There are huge skills shortages, so early career interventions for young people are so important."

So, jumping forward 10 years, how might the energy sector look in 2035?

"We need to keep focus on appropriate investment ambitions, maintain our global commitment to net zero and make big investments over the next five years," added White.

"Ten years from now, I would love to see a position where we have broken the back of the big connectivity grid upgrades, which are going to be essential. And to have really delivered on major projects such as Sizewell C would be fantastic, along with a flurry of carbon capture projects.

"I think if we've got an economy that looks like that in 10 years' time, we'll be the envy of the world." ■

"We need to keep focus on appropriate investment ambitions, maintain our global commitment to net zero and make big investments over the next five years."

WIND POWER'S GROWTH IS BLOWING UK TOWARDS ITS GREEN GOALS



ANA MUSAT, EXECUTIVE DIRECTOR, POLICY AND ENGAGEMENT AT RENEWABLEUK, LOOKS BACK ON A DECADE OF GROWTH IN WIND POWER – AND WHERE THE SECTOR IS GOING NEXT

Wind power has come a long way in the last 10 years.

Now providing nearly one-third of the country's electricity, capacity has doubled over the decade, with more than 55,000 people employed in the sector.

"We've made remarkable progress in the last 10 years in terms of deployment and cutting costs," said Ana Musat, executive director, policy and engagement at RenewableUK, the trade association for the renewable energy sector.

"Capacity has grown from 13.4 GW in 2015 to more than 30 GW today – that's really impressive. Renewables overtook gas generation for the first time in 2024, plus supply companies and communities are feeling the positive impact."

More than 2,000 supply chain companies are currently working in the wind industry. Data mapped by

RenewableUK shows firms are located right across the UK, in around 70 constituency areas.

With 55,000 people already working in the sector today, Musat says that figure could rise to as high as 95,000 by the end of the decade. Plus, £550m has been invested in community benefits.

While offshore wind has seen the biggest developments – in both size and investment scale – Musat says growth is now on the cards for onshore wind throughout the country. Following the government's decision to scrap the nine-year de facto ban on onshore development in England last year, it has just published its major onshore wind plan to reverse almost a decade of stagnation in the sector in this part of the UK.

The government's Planning and Infrastructure Bill is also aiming to speed up delivery of major infrastructure.

"Reversing the ban is helpful, but the government also recognises you can't get an industry back on track with one step."



Plus, Ofgem has confirmed reforms to the UK's electricity grid connection process, aimed at reducing delays for new energy projects. It means so-called "zombie" projects – those that have secured a place in the queue for grid connection but lack the essential elements for successful development, such as land rights or planning consents – will no longer hold up the queue.

"There's a lot of potential for ramping up deployment across the country for onshore wind," added Musat. "We currently have around 15 GW of onshore wind, with a lot of that in Scotland."

"The ban in England for almost 10 years obviously impacted deployment. We know there were lots of communities keen to install onshore wind, especially during the energy crisis."

"Reversing the ban is helpful, but the government also recognises you can't

get an industry back on track with one step. So having the Onshore Wind Taskforce Strategy shows work is under way to look effectively at what we need to ensure this industry continues to grow."

She said changes to planning were also key – a move which has proved successful in other countries, such as Germany.

"We need this infrastructure, and we need to deploy it quickly, but it's not just about renewable energy projects. We also need grid infrastructure to go with them. We've seen this in countries like Germany where they've really streamlined their planning. They've made it very clear that certain projects and new grid are in the national interest, so they are prioritised and fast-tracked."

"There should be a democratic process – but we don't want endless delays. We also need to bolster capability, have more planners ready to review this

influx of applications. We must look at the whole process."

She said the government's recently launched Modern Industrial Strategy and Infrastructure Strategy – along with the infrastructure pipeline – will help bring confidence to the market.

"A long-term, 10-year view is something we have wanted for a really long time. Everyone who builds infrastructure wants to get an understanding of where things are going. These are capital intensive projects that take time to be built. Having clarity of how we're going to develop our manufacturing supply chain is so important."

The government and Great British Energy, the UK's publicly owned clean power company, joined forces with industry and The Crown Estate in June to invest £1bn in offshore wind supply chains.



Musat said such a move was “incredibly important” to plan the country’s energy system better, but in the short term uncertainty still remains.

With 2030 fast approaching, eyes will be on the next two Contracts for Difference (CfD) allocations – Allocation Round 7 (AR7), which is scheduled to open in summer 2025 and will be followed by AR8.

The CfD scheme works by developers bidding for contracts to help deliver renewable energy projects, with the scheme providing a guaranteed price for the clean electricity they generate. This gives industry greater certainty to invest, knowing that when electricity prices fluctuate, they will always get a set price for their projects.

AR6, announced in September 2024, gave support to a record 131 green infrastructure projects

“Allocation rounds are going to be really important for the Clean Power

2030 mission because a lot of the capacity we need to build should be procured through these two auctions. So, while it’s great to see a long-term plan, we need to make sure the auctions that we’re going to have this year and next year perform really well.”

First implemented by the UK, CfD has been adopted in other countries.

“It’s enabled us to cut costs significantly,” explained Musat. “We’ve doubled wind capacity in the last 10 years and CfD has been instrumental to that.”

“Storage has a critical role to play, as do other technologies such as green hydrogen.”

As for the future, she said: “My wish list for 10 years from now is we’ll continue installing capacity at pace.

“We need to keep developing our supply chain capabilities. But by focussing on high-value items such as turbine towers, blades and cables, there’s the potential to boost the economy by £25bn by 2035.

“We need to start thinking about the energy system in a different way – not just replacing gas generation with renewable generation. Storage has a critical role to play, as do other technologies such as green hydrogen.

“We must be able to store capacity to use when the wind doesn’t blow or the sun doesn’t shine, have good grid solutions and an unlocked planning system.” **II**

WIND POWER’S GROWTH – IN NUMBERS

Capacity:

Has doubled from 13.4 GW in 2015 to more than 30 GW in 2025.

Importance:

Wind provided 30% of the country’s electricity in 2024.

Racing ahead:

Last year wind overtook gas generation for the first time.

Supply chain:

Has expanded to almost 2,000 companies, located across more than 70 parliamentary constituencies across the UK.

Workforce:

Employs more than 55,000 people – 40,000 in offshore wind and around 15,000 in onshore.

Community benefit:

£550m of community benefit funds, a figure expected to rise to £150m annually if government ambitions to 2030 are met.

Growth:

Between 74,000 and 95,000 people will be needed to support the accelerated deployment of offshore wind by the end of the decade, while the number of jobs in onshore wind will rise to more than 19,000.

COLLABORATION IS KEY FOR ENERGY'S LONG-TERM SUCCESS



NEIL SANSBURY, MANAGING DIRECTOR UK AND IRELAND AT RAMBOLL, CONSIDERS THE CHALLENGES FOR CONSULTANCIES WORKING TO ACCELERATE THE GREEN ENERGY TRANSITION – AND SAYS PROGRESS MUST BE A JOINT EFFORT BETWEEN GOVERNMENT AND INDUSTRY

While government is steering the UK's energy sector towards growth, it will need to work hand in hand with industry if results are to be delivered.

Consultancy Ramboll is working on projects across the energy spectrum, accelerating the green energy transition, supporting clients scaling up renewable energy as well as delivering on industrial decarbonisation through carbon capture, usage and storage (CCUS), hydrogen and electrification solutions. It is also developing net zero roadmaps for heavy industry and large-scale energy users and working with clients on strengthening grid infrastructure and integration.

The energy drive also includes working with those in the sector on ESG compliance – energy, social and governance – and biodiversity net gain.

Neil Sansbury, Ramboll's managing director of UK and Ireland, said: "The government's increased backing for nuclear and CCUS is welcome, and the emphasis on infrastructure in the Spending Review aligns encouragingly with industry calls for certainty and long-term planning.

"But there is still work to be done. That includes tackling the ongoing delays in permitting and planning – especially for CCUS and offshore wind, improving the readiness of the grid to ensure it is able to absorb and distribute new forms of generation.

"Collaboration between industry and government will be needed to tackle supply chain capacity and workforce gaps, to assist with delivering innovation at scale – for instance in modular nuclear and hydrogen integration – as well as to provide technical expertise, environmental due diligence and cost control.

"It will also be important for industry to collaborate early with government when designing viable, place-based solutions."

Sansbury says the UK remains one of the world's most active and mature markets for wind power, but has faced headwinds recently – rising costs for developers, uncertainty around future auction mechanisms, grid connection congestion, supply chain bottlenecks and delays in project consenting. He says sustainable energy company

Ørsted's decision not to push ahead with the Hornsea 4 Offshore Wind Farm was a reflection of this.

"The positive news is that the upcoming Allocation Round 7 (AR7) promises to be a record-breaking allocation of Contracts for Difference for renewable energy projects," he added.

"If government is to get anywhere close to its 2030 targets, these promises have to be realised. What the entire industry urgently needs is clarity around the AR7 rules, such as whether unconsented projects will be allowed to bid."

Ramboll is currently engaged on a large number of major UK wind projects, mainly offshore, including West of Orkney Wind Farm, which has just received consent from the Scottish Government and is the first ScotWind site to receive full consent.

Sansbury added: "The UK is the largest market for wind services in Ramboll, and this will remain the case for many years to come. Our ambition is to continue to grow our huge service portfolio across all areas of the UK wind market. In particular, if onshore

wind makes a return in England, this would be a particular area for potential growth."

The creation of public-owned Great British Energy (GBE) is also positive for industry, he said.

"GBE will be in position to act as a strategic anchor for clean energy investment, helping de-risk early-stage technologies and catalyse public-private partnerships. If governed well, it could provide continuity across political cycles and play a key role in delivering net zero infrastructure at scale.

"But the key will be that it is run efficiently and effectively. Success will hinge on an outcomes-driven approach that is not overly centralised, as well as on coordination with local authorities, private sector partners and the National Infrastructure and Service Transformation Authority (NISTA)."

He added: "The government's Industrial Strategy takes important steps to build resilience and drive growth across the UK economy. Crucially, that includes strengthening supply chains, accelerating clean energy upgrades to the power grid and investment in aligning skills across key sectors.

"Supporting the development of these sectors, not least clean energy, advanced manufacturing, life sciences and defence, will position the UK as a global leader in clean energy investment and advanced manufacturing.

"The planned investments in new industrial clusters, including the life sciences super cluster in the North-west and the defence industrial base, are a positive first step, but will require integrated infrastructure, skills and connectivity to succeed.

"For that reason, it was pleasing to see £4.3bn committed to advanced manufacturing and £600m for sector-specific clusters. The UK has the potential to be a global leader in wind, CCS and hydrogen and it is encouraging that these industries are receiving the support needed to help reach their full potential. These investments can unlock long-term growth if backed by smart delivery and cross-sector collaboration.

"Against a backdrop of rising global tensions, taking steps to strengthen the resilience of supply chains and improve our energy security is nothing short of an urgent national priority, which was clearly recognised by the government."

Clean Power 2030 – the government's aim to see at least 95% of total electricity generation coming from clean sources by the next decade – is fast approaching. Is it an achievable target?

"While it is always difficult, if not impossible, to definitively rule out meeting a future target, from where we are standing today, it is very hard to see how we could meet the 2030 targets," said Sansbury. "But even if we only

come close, that in itself will still be a notable achievement."

He says there are many challenges that Ramboll and the wider industry are grappling with.

"Among the most significant are grid bottlenecks and ageing infrastructure," he said. This is creating challenges with integrating new capacity due to outdated grid systems and slow upgrades.

"The lack of policy certainty is another obstacle to be negotiated, with the inconsistent political signals on both net zero and infrastructure investment risking delaying projects. We are also reckoning with the limited availability of key components, with the supply chain still developing. This challenge has been exacerbated by skills shortages.

"Ultimately, it is easier said than done to balance energy security with sustainability. The sector is having to manage tight delivery timelines and energy cost pressures while trying to meet decarbonisation goals, which is not a straightforward undertaking." ■



NEW PLAN TO KICKSTART ONSHORE WIND REVOLUTION

THE GOVERNMENT HAS LAUNCHED A MAJOR ONSHORE WIND PLAN TO REVERSE ALMOST A DECADE OF STAGNATION IN THE SECTOR

After reversing a de facto nine-year ban in England, the strategy now sets out more than 40 radical actions to develop onshore wind building.

This includes:

- Unlocking up to 10 GW of onshore wind by resolving issues with how onshore wind turbines and aerospace civil and defence infrastructure co-exist.
- Repowering of old turbines across the country, to maintain the current fleet.
- Equipping planners and developers with the tools needed for the first English projects since the de facto ban was lifted last year.
- Exploring plans to expand the clean industry bonus for onshore wind, encouraging developers to invest in supply chains in the UK's industrial heartlands, or in cleaner supply chains.

Delivering this strategy could more than double the current onshore wind workforce, supporting up to 45,000 skilled jobs across the country by 2030, as the government pursues its clean power ambition of 27-29 GW of onshore wind by 2030.

Energy minister, Michael Shanks, said: "Rolling out more

onshore wind is a no-brainer – it's one of our cheapest technologies, quick to build, supports thousands of skilled jobs and can provide clean energy directly to the communities hosting it."

Matthieu Hue, co-chair of the Onshore Wind Taskforce and CEO of EDF Power Solutions UK and Ireland, added: "This strategy is focussing on overcoming barriers and challenges we face across the industry in the deployment of onshore wind while capturing the major socio-economic benefits it can bring to the environment and to local economies.

"Together we are forging a path forward for onshore wind in Great Britain, and we are committed to ensuring a successful implementation through a new Onshore Wind Council, which will oversee the execution of the strategy. This is a critical part of making Britain a clean energy superpower and delivering energy security."

James Robottom, head of onshore wind delivery at RenewableUK, said overturning the unpopular onshore wind ban was "just the start".

"The hard work to make the most of this great opportunity to grow our economy and strengthen the UK's energy security is now in full swing.

"This strategy sets an ambitious target to almost double the UK's onshore wind capacity by the end of the decade as a key part of the government's Clean Power 2030 mission.

"The measures outlined will increase confidence among investors and developers, so that we can attract billions in private investment and create thousands of highly skilled jobs and new supply chains all over the country." II



THE MISSING PIECES OF THE ENERGY PUZZLE



WHILE THERE IS MUCH TO WELCOME FOR THE COUNTRY'S ENERGY SECTOR, CHALLENGES REMAIN. HELENA RIVERS, AECOM'S NET ZERO LEAD FOR EUROPE AND INDIA, CONSIDERS THE HURDLES AHEAD – AND THE AREAS WHERE BIG GAINS COULD STILL BE MADE

Investment, new strategies and ambitions of economic growth. There's been no shortage in positive announcements from government for the energy sector in recent months.

Putting power supply at the forefront of policy is creating a climate for growth. But behind the big headlines, there is still much work to be done.

Government has recently announced plans to restart the onshore wind industry in England, reversing an almost 10-year ban on development and setting ambitious energy generation targets.

Helena Rivers, who leads AECOM's net zero team in Europe and India, takes a more cautious stance.

"It's optimistic things are moving in the right direction, but the industry has been stopped for a long time and it's hard to restart at the level and pace of ambition being talked about.

"You also have to consider the scale of wind power – turbine blades are now so big, how will they fit down country roads to developments? We now have to consider logistics, community reaction and where developments will be sited."

For the UK to come close to its Clean Power 2030 (CP30) targets, the country will need a significant uplift in wind power applications.

In May the offshore wind sector received news that Ørsted was discontinuing the Hornsea 4 offshore

wind project in its current form, citing "several adverse developments" relating to continued increase of supply chain costs, higher interest rates and an increase in the risk to construct and operate a project of such scale.

Hornsea 4, off the Yorkshire Coast, secured backing from the government's Contract for Difference (CfD) award in allocation round 6 (AR6) in September last year. CfD awards are due to be made this year and next.

"Infrastructure likes predictability; we like to see what's coming," said Rivers. "We all know that is what stimulates the market, so we look forward to the government providing details of the next CfD.

“With that in mind, the government’s recent decision to abandon plans to adopt zonal pricing should help support continued investment in renewables, providing much-needed clarity for energy suppliers and investors in the UK.”

While Rivers says making energy one of the government’s key missions is “enormously helpful”, projects such as nuclear development will take time to come online.

“With newly announced nuclear new build, we won’t get any low carbon generation for a decade. So, it’s not helpful with CP30. But it is a really important part of that future mix.”

But she says there are still areas where big energy gains could be had – including heat.

“More than 40% of our energy in the UK goes to generating heat, whether that’s space heating or industrial heat. And yet we always talk about power. We could save a whole heap of our energy requirements by respecting heat and recapturing waste heat.”

Plus, she said, policy is lacking input from geothermal development.

“For a resilient, secure, switch-it-on-when-ever-you-like, no toxic waste generation solution, you couldn’t really ask for something better than geothermal.

“Given the geology of our country, there’s probably only a couple of places where that would work for power generation. But in areas of high heat requirement, we could be using less deep geothermal solutions. For me that is a massive missed opportunity at the moment.”

Another key challenge for the UK’s energy supply is the rapid development of data centres.

With an enormous energy appetite, these sites need huge volumes of power to keep their servers operating continuously, for cooling systems and to support infrastructure.

“We can’t yet map the demand from data centres, but we do know it is going to be nationally significant,” explained Rivers. “So, it’s an enormous additional challenge for CP30.”

AECOM launched its own Energy Transition Team at the end of last year with a focus on providing decarbonisation solutions, supporting the electrification of buildings and transportation through advanced generation, transmission and storage solutions.

“For a resilient, secure, switch-it-on-when-ever-you-like, no toxic waste generation solution, you couldn’t really ask for something better than geothermal.”

Rivers says the team is now tackling projects from a “much broader picture” to find cost- and energy-efficient solutions.

“We have to look at projects through a much more holistic lens. We need to be looking at reducing energy demand as part of the requirements specification – then look at what energy is needed and how it can most efficiently be delivered. We can’t just build and electrify everything; the additional costs in grid upgrade make it unaffordable.”

Developing local energy networks, considering environmental elements alongside energy generation and looking at projects from a wider perspective

will prove critical in the years ahead. But many of the buildings that will exist in 2050 have already been built – so how do we solve this energy question?

“Retrofit is something a lot of people struggle to deliver because there are so many stakeholders to manage to make it happen,” explained Rivers. “So, the Public Sector Decarbonisation Scheme (PSDS) was a fantastic enabler in making that happen.

“That’s now come to an end, so we need to work out what is going to fill the void.

“But as we see the growth in heat networks across our towns and cities, for a lot of those buildings to connect there needs to be some building readiness work so that they can operate with the lower temperatures of an energy-efficient heat network.

“But, importantly, this work is much more affordable when it’s delivered at scale; getting a community to buy in to it is key. We need consistency in messaging to make that happen.”

Rivers added: “Policy, and therefore funding and incentives, is often shaped from a top-down perspective where you’re looking at the big numbers.

“But there’s a growing recognition of the need to also look at individual communities.

“What are the solutions that would work? You can’t take a cookie cutter approach and replicate it; none of our communities are quite the same.

“While major projects like the Great Grid Upgrade absolutely need to happen, it is also worth investing in community-level solutions.

“Those smaller-scale models can make a big difference, and we need to encourage and nurture those.” II



A NEW GOLDEN AGE FOR ENERGY PROJECTS?

BY SHEENA SOOD, SENIOR PARTNER AT BEALE & COMPANY SOLICITORS LLP

There has certainly been a flurry of UK government activity over the last few months, including the publication of UK Infrastructure: A 10 Year Strategy and The UK’s Modern Industrial Strategy 2025, seeking to boost economic and energy security and the net zero transition.

The government has announced the multi-billion-pound Sizewell C project as part of a new “golden age of nuclear” – around six million homes will be powered with clean, home-grown energy from Sizewell C.

Around £330m worth of contracts have already been let, with around 70% of contracts predicted to go to British suppliers in construction and engineering.

Together with the government’s plans for one of Europe’s first Small Modular Reactor programmes and significant investment in R&D for fusion energy, this is being hailed as the biggest nuclear building programme in a generation.

Ofgem has approved an initial £24bn to operate and maintain critical gas networks and upgrade Britain’s electricity supergrid.

Plus, the energy secretary has recently approved what is said to be the largest Irish Sea offshore wind farm, which has the potential to power the equivalent of more than a million homes.

To quote from the 10 Year Strategy, the UK is on a mission to become a “clean energy superpower”.

Procurement and contracting for nuclear power projects are a costly, technically challenging and complex process, but it is so important to get these projects set up correctly from both a legal and a governance perspective. We must learn the lessons from the past to deliver major infrastructure on time and on budget.

Unlike more traditional procurement, nuclear projects will normally comprise major disaggregated work packages often enshrined in bespoke energy and infrastructure contracts designed to meet the complexity, specialisation, hefty and often changing regulatory requirements and unique political stakes.

Compartmentalisation operates to improve quality and cost control, effective project oversight and

accountability, while crucially allowing owner management of key risks and interfaces between critical systems.

From a legal perspective, disaggregated nuclear procurement demands meticulous contract drafting and coordination. Robust provisions and obligations are needed to deal with interface risk, programme and delay claims, pinpointing liability for defects, smart dispute avoidance, management and integration across contracts.

Transparent procurement and clear contract strategies and drafting can operate to identify risk early and reduce it, while enabling collaboration, cooperation and flexibility.

Nuclear power projects are regaining global momentum. The focus is rightly on the engineers and scientists who will bring these projects to life, but legal advisors will also have a critical role to play in ensuring that project models remain efficient, commercially viable and regulatorily compliant.

We offer tailored advice on contract structuring, interface risks and dispute resolution strategies for nuclear and other complex energy infrastructure projects. II



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