CORNWALL INSIGHT

CREATING CLARITY

Energy Spectrum: Capturing key developments across the GB energy sector

ISSUE 804 – 11 April 2022

Open goal: the UK government's new Energy Security Strategy

Record wholesale energy price spikes – how markets have reacted to developments in the war

Government to create FSO to oversee UK energy system

ISSUE 804

Contents

4

Energy Perspective

Open goal: the UK government's new Energy Security Strategy

7

Policy

Industry responds to the Energy Security Strategy

ESC publishes insight paper for local energy markets and fairness

Government responds to WHD consultation

Government publishes response to consultation on ECO4 scheme

Parliamentary update: week 14

14

Regulation

Government to create FSO to oversee UK energy system

Ofgem to become strategic body for code governance

18

Industry Structure

Bayford & Co reports 223% increase in turnover following acquisition of E

21

Energy Market Watch

Record wholesale energy price spikes – how markets have reacted to developments in the war

23

Markets

ISSUE 804

Week in review

Veronica Truman
Editor
01603 542125
v.truman@cornwall-insight.com

We will be running a short webinar tomorrow morning (12 April) at 9am for *Energy Spectrum* subscribers, to briefly go through some of the main stories in this issue. We will also look forward to what will be in the next issue.

Please register for our webinar *HERE*

Monday 04/04 – The UK Government issues responses to its consultations on the Warm Homes Discount and Energy Company Obligation schemes.

Tuesday 05/04 – The Environment Audit Committee states the need for a UK carbon border approach.

Wednesday 06/04 – The UK Government announces it will launch a Future System Operator to take on all existing Electricity System Operator roles and the longer-term elements of the Gas System Operator.

Thursday 07/04 – The UK Government publishes its Energy Security Strategy setting out how it will accelerate the deployment of low carbon sources of generation in GB.

Friday 08/04 – The government launches a £375mn package of support for innovative technologies that will power British homes and businesses.

Perspective

Open goal: the UK government's new Energy Security Strategy

Gareth Miller
CEO
01603 542101
g.miller@cornwall-insight.com

The UK Government published a highly-anticipated Energy Security Strategy on 7 April setting out how it will accelerate the deployment of indigenous and low carbon sources of energy production to supply independence. In this week's *Energy Perspective*, we give an initial take on the Strategy, noting how things have changed since the Energy White Paper of late 2020.

The Strategy builds on the White Paper, which itself ties in to the UK government's Net Zero Strategy and Ten Point Plan for a Green Industrial Revolution to drive further investment into the energy industry in order to achieve the country's net zero ambitions. It follows a trend of rising global energy prices and supply shocks, which have been exacerbated by rising demand following the pandemic and the Russian invasion of Ukraine. The new Strategy therefore highlights the need for the country to diversify its sources of homegrown energy to reduce its reliance on fossil fuels whose prices are subject to international markets beyond our control.

Speaking on the strategy, the PM commented: "We're setting out bold plans to scale up and accelerate affordable, clean and secure energy made in Britain, for Britain – from new nuclear to offshore wind – in the decade ahead. "This will reduce our dependence on power sources exposed to volatile international prices we cannot control, so we can enjoy greater energy self-sufficiency with cheaper bills." Business and Energy Secretary, Kwasi Kwarteng, added: "We have seen record high gas prices around the world. We need to protect ourselves from price spikes in the future by accelerating our move towards cleaner, cheaper, home-grown energy. The simple truth is that the more cheap, clean power we generate within our borders, the less exposed we will be to eye watering fossil fuel prices set by global markets we can't control. Scaling up cheap renewables and new nuclear, while maximising North Sea production, is the best and only way to ensure our energy independence over the coming years."

VAR review

The emphasis on indigenous production for security of supply is new in the Energy Security Strategy, but builds on capacity targets made in the Energy White Paper 2020 (Figure 1), expanding on ambitions for offshore wind, hydrogen and nuclear. These technologies are clear winners. However, while the government says it will consult in areas such as onshore wind and solar to see how it can support the rollout of these technologies, missing capacity targets and the absence of energy efficiency are striking.

For the energy industry, the Strategy includes several announcements of note that will shape activity and investment whatever headline capacity figures the government decides to set (Figure 2). Some build on the direction of travel in the White Paper (which we will consider in future *Energy Perspectives*) but as an abiding impression, the Energy Security Strategy is a very political document that raises as many questions as it answers. There are clear favourites and as much can be read into what is in the strategy as what is not. 15 months on from the Powering Our Net Zero Future White Paper, the strategy's pushes for offshore wind, nuclear power and both green and blue hydrogen show a much stronger commitment to making the UK more energy self-sufficient, while continuing the paper's path to net zero.

But the strategy struggles to address what many will see as the two immediate challenges: reducing energy dependence on fossil fuel imports and helping consumers deal with sky-rocketing energy bills. Furthermore, it is unclear what the balance for consumers will really be once all costs, investments and returns from initiatives begun today are properly assessed. In an environment of higher costs in the next few years, that near-term cost uncertainty is concerning.

Long ball

The government's shift in focus towards more ambitious nuclear plans was well trailed. Many in the energy industry have long called for a greater commitment to nuclear power. However, the scale and speed assumed for negotiating terms, raising finance – taking three projects to final investment decision in this Parliament and the next – are very ambitious, and it is notable that they remain qualified by reference to value for money.

Similar caveats are slotted in around hydrogen too.

The acceleration plans for build out of nuclear are also very ambitious. Given history (ancient here and more recently around the world), there is scepticism that projects will not be delivered to time and budget. The new financing mechanism, the Regulated Asset Base model (RAB) will see construction risks shared with consumers. This important change should be analysed and transparently debated so consumers get a better sense of the possible range of bill impacts. Much confidence will be delivered if Hinkley Point C is able to get on the bars by 2027.

Figure 1: A comparison of energy policy targets, 15 months on

Measure	Energy White Paper December 2020	Energy Security Strategy April 2022
Offshore Wind	40GW of offshore wind capacity by 2030, including 1GW of floating wind.	50GW of offshore wind capacity by 2030, including up to 5GW of floating wind. The government will implement new planning reforms to cut the approval times for new offshore wind farms from 4 years to 1 year and deliver an overall streamlined process to reduce the time it takes for new projects to reach construction stages.
Onshore Wind	No specific capacity targets.	No specific capacity targets. The government will consult on developing partnerships with a limited number of supportive communities who wish to host new onshore wind infrastructure in return for guaranteed lower energy bills.
Nuclear	Aims to bring at least one largescale nuclear project to the point of Final Investment Decision (FID) by the end of this Parliament.	24GW of nuclear capacity by 2050. Aims to bring at least one largescale nuclear project to the point of FID by the end of the current Parliament, and 2 projects to FID in the next. The government hopes to progress delivery of up to eight reactors during the next series of projects. The government will aim to support this through the immediate establishment of Great British Nuclear, a body with a remit to bring new nuclear projects to fruition, and the launch of £120mn Future Nuclear Enabling Fund later this month.
Hydrogen	5GW of low carbon hydrogen capacity by 2030.	Up to 10GW of low carbon hydrogen production capacity by 2030. Targets to run annual allocation rounds for electrolytic hydrogen, moving to price competitive allocation by 2025 as soon as legislation and market conditions allow.
Solar	No specific solar deployment plans.	The government will aim to increase the UK's current 14GW of solar capacity, which it states could grow up to 5 times by 2035. To enable this, it will consult on the rules for solar projects, with a particular focus on domestic and commercial rooftops.
Oil & Gas	Commitment to develop the UK Continental Shelf to be a net zero basin by 2050.	The strategy contains provisions for a licensing round for new North Sea oil and gas projects to be launched in autumn, with a new taskforce to provide support to these developments. Establishing Gas and Oil New Project Regulatory Accelerators to provide dedicated, named project support to facilitate the rapid development of projects.

Source: Information compiled from BEIS

Over the bar

The roles for onshore wind and solar seem to be pared back from earlier indications. Onshore wind gets very little look in, although the intention to look at arrangements for repowering sites is overdue and should help lift both capacity and efficiency if got right. The detail however is lacking and it is important that we do not step backwards.

The strategy increases already ambitious offshore wind targets, taking the UK from the White Paper's 40GW to 50GW by 2030. Given the increase in power consumption expected over the next few years and our need to stabilise the country from future external energy supply shocks, the emphasis on large scale indigenous low carbon power is understandable. Offshore wind is a UK success story and has a lot more to offer. But this ambition will involve a significant ramp up in the supply-chain, consenting and approval processes compared to what has been delivered before, at a time when reports are increasingly suggesting the cost reduction curve for the technology may be coming to an end. In addition, network investment and planning, market reform and expansion of energy storage will all be required. All of that enabling infrastructure and catalysts will take mobilisation. In this and other areas, there are sound reasons to believe that there could be additional costs and complexities attached to today's plan in the near term that are yet to be fully exposed and cannot be adequately unpacked.

Missing a sitter

The strategy is also marred by stark omissions. The security of our energy system is more than purely supply

and its disappointing attempts to reduce energy consumption do not feature in any meaningful way. The emphasis of any measures on energy efficiency on standards rather than incentives is a missed opportunity. These measures are no more costly than other plans that have been announced and are, in many cases, better value for money. We would urge a rethink of the exclusion of demand side energy policy.

Despite being one of the most discussed areas of the energy crisis, the strategy does little to address the current energy cost concerns of domestic and business consumers. Our forecasts suggest bills are rising and there are no guarantees prices will fall anytime soon. While the strategy may have a positive impact on energy prices years down the line, this will be of little consolation to the many businesses facing real pressure due to ever-increasing energy prices, or the households having to make the difficult and unenviable choice between eating and heating. There are suggestions that the Treasury may be waiting to nearer the time of the next Default Tariff Cap reset in August to make further moves, but this provides little reassurance now. Ultimately, this strategy could be construed as one that delivers qualified long-term (and production-led) solutions to near-term and unequivocal problems. While moves towards low carbon energy sources and a focus on net zero should be paramount, that was the case before war in Ukraine. Many of the levers the strategy looks to pull are the same as previous policy documents, just with different ambitions and timetables, and – like previous policy documents – almost all having an effect well into the 2030s. So the lack of action on energy efficiency is an unforced error.

Figure 2: Energy Security Strategy announcements on industry structure

Sector Theme	Measure
Energy Efficiency	The government aims to set clear energy performance standards, varying by building type, to be phased in over the long-term. More details will be announced in May, according to the strategy. The government will also review practical planning barriers that households can face when installing energy efficiency measures such as improved glazing, including in conservation areas and listed buildings, by the end of the year.
Energy Efficiency	The government states it will look at 'rebalancing' the costs placed on energy bills away from electricity to incentivise electrification across the economy and accelerate consumers and industry's shift away from volatile global commodity markets over the decade. It will publish proposals on how to do so in 2022, considering overall system impacts and limiting the impact on bills, particularly for low-income consumers
Market structure	The government aims to publish a strategic framework this year with Ofgem for how networks will deliver net zero. It will also appoint an Electricity Networks Commissioner to advise on policies and regulatory changes to accelerate progress on network infrastructure.
Market structure	The government will set out a blueprint for the whole system by the end of 2022 in the Holistic Network Design (HND) and Centralised Strategic Network Plan (CSNP). The HND will identify strategic infrastructure needed to deliver offshore wind by 2030.
Market structure	The government will undertake a comprehensive Review of Electricity Market Arrangements (REMA) in GB, with high-level options for reform set out this summer. It will also link REMA with the ongoing retail review to ensure consumers fully benefit.
Production	The government will strengthen the Renewable National Policy Statements on energy security and net zero.
Production	The government aims to provide clear investable signals through annual CfD auctions, with the next round to take place a year earlier in March 2023. It will also consult on changes to the 2024 CfD auction, Allocation Round 6, aimed at incentivising renewables to locate and operate in a way that minimises overall system costs.
Production	Arrangements will be explored for repowering of existing onshore wind sites when they require updating or replacement.
Production	The government will work with the regulators to understand the potential for any streamlining or removing of duplication from the consenting and licensing of new nuclear power stations, including possibly new harmonisation on international regulation.
Production	The government hopes to work closely with the US on gas. In particular, it wants to provide a key EU entry point for non-Russian supplies of gas

Source: Information compiled from BEIS

Many had expected something new that would bring forward less energy dependence on imported fossil fuels and address the cost arising in the market for bill payers today. By announcing a strategy that does not really deliver against these outcomes, which indulges in future gazing and shuts out some fairly obvious levers that could make a positive impact, the danger is that in the coming cost of living and possible energy supply squeeze people, will lose confidence in the adequacy of the market and the government to deliver secure and low carbon energy in an affordable way. We thought before the strategy that, come winter, more may have to be done by government on this agenda. We still think that's the case.

Policy

Industry responds to the Energy Security Strategy

James Shaw, *i.shaw@cornwall-insight.com*

A number of organisations and associations have responded to the publication of the Energy Security Strategy on *7 April*.

Chair of the National Infrastructure Commission Sir John Armitt *commented*: “The government should be credited with its scale of ambition to expand offshore wind and solar generation. The challenge is to take these stretching targets and turn them into delivery of cheaper electricity into people’s homes as quickly as possible.”

Armitt added: “Alongside shifting supply away from fossil fuels, some of the quickest wins can be found in improving energy efficiency by better insulating our homes and public buildings to cut overall demand. The potential benefits are now bigger than ever, and we again call on government to set out a costed, long-term plan for meeting its own targets and help households make the right choices for their pocket and the planet.”

Responding to the announcement, Energy UK’s chief executive, Emma Pinchbeck *said*: “Our industry is committed to delivering a net zero power system during the next decade and the ambitions and targets set out in the strategy will help us deliver that. The quickest and cheapest route to ensuring UK energy security is also the green one through accelerating the deployment of domestic clean power sources and reducing our reliance on volatile international gas. One of the most important parts of the strategy will be how we increase the pace of deployment and remove the barriers and delays that currently exist.”

Ana Musat, Head of Policy at Aldersgate Group, *said*: “Accelerating the decarbonisation of the UK's power sector, electrifying more sectors of the economy and driving greater energy efficiency all have an essential role to play in improving the UK's energy security. With this in mind, we welcome the ambition in today’s British Energy Security Strategy to provide 95% of electricity from low carbon sources by 2030, the boosted targets for technologies such as offshore wind and solar power and the increased ambition in low carbon and green hydrogen. The stronger focus on delivery – including on transmission connections for offshore wind projects – is very welcome. However, the government’s ambitions in low-cost onshore wind could be much bolder and it is disappointing to see so little focus on new regulatory measures and incentives to drive more investment in energy efficiency. Reducing energy demand is an essential part of lowering energy bills for households and businesses and making our economy more resilient to price shocks.”

Commenting on the publication, Rain Newton-Smith, CBI Chief Economist, *said*: "This strategy sets an ambitious bar for a more resilient, low carbon energy system for the future. Bold words must now be matched by bold actions from the government. The proof will be in the strategy’s delivery, in partnership between business and government. Business believes greater energy independence must go hand-in-hand with delivering a net zero, higher growth economy.”

Dr Nina Skorupska CBE, Chief Executive of Renewable Energy and Clean Technology (REA) *said*: “Of course, we welcome commitments on solar, hydrogen and offshore wind, but the government’s plans will lock the UK into more expensive, longer to build, non-renewable power sources. It ignores a huge swathe of other renewable technologies and the approach to onshore wind is totally inadequate. The government also needed to turbocharge support for technologies which could tackle the cost-of-living crisis, and not just focus solely on developments which won’t come to fruition for another 5, 10, 15 years. For example, a £200mn increase in the ECO home energy efficiency scheme would have helped thousands of households save around £600 a year on their energy bills.”

“While there are positives to be taken from the strategy, a common theme in the industry response is that the government continues to avoid immediate energy efficiency measures that could help support households against the cost-of-living crisis.

Policy

ESC publishes insight paper for local energy markets and fairness

Kate Morley-Hurst, k.morley-hurst@cornwall-insight.com

On 31 March, Energy Systems Catapult (ESC) published *Local Energy Markets and Fairness: Insights for Smart Local Energy Systems (SLES)* noting that to keep bills down, energy resources that can deliver net zero must be treated fairly and enabled to compete against each other.

The insight paper explores fairness and equity issues relating to ongoing or potential changes for market design, regulation, and policy relevant to the development of SLES in the transition to net zero. It sets out that while fairness has been a highly topical area in energy policy for some time, the current energy market crisis will help to intensify scrutiny around how the costs of transitioning to net zero and a sustainable energy future are allocated to consumers. This should help focus more attention on changes that have the potential to unlock the value of local energy and demand-side resources, if aligned with achieving fairer outcomes. As such, the paper considers the allocation of regulated costs, wider market design and fairness issues, and consumer protection and welfare.

Numerous policy and regulatory activities are already underway that emphasise the government's increasing concern over the potential for certain market participants to avoid paying their fair share for relevant policy and network costs. With environmental/social policy costs making up just under 26% of the electricity bill and ~2.5% of the gas bill in February 2022, it is acknowledged that the disparity in electricity and gas pricing disincentivises consumers from switching to lower carbon electric technologies.

As a result, there have been calls to alter the way levies are recovered, which is expected to be considered in the government's call for evidence on fairness and affordability, due later this year. The paper also notes the increasing attention around the distributional impacts of energy policy. This includes questions around fairness and equity because of the need to introduce cost-reflective pricing to shift demand to zero carbon energy vectors and efficiently integrate weather-dependent generation and distributed energy resources (DER).

The paper highlights the current policy asymmetry that exists, with a greater focus on driving investment in supply-side rather than demand-side capacity. The costs associated with large supply-side assets are passed onto consumers via levies, which distorts wholesale electricity prices and negatively impacts price signals for demand response. ESC states this can result in a vicious circle, whereby the lack of demand response leads to increased demand for supply-side assets, resulting in higher bills and greater fuel poverty. Furthermore, the socialisation of costs via levies means that consumers with heat pumps and electric vehicles, typically affluent early adopters, avoid the costs they cause, leaving other consumers to cover them. While this could be resolved by more cost-reflective prices, this also has the potential to cause harm to low income and vulnerable customers, making it politically unacceptable.

Therefore, ESC suggests that to make cost-reflective pricing more politically acceptable, fuel poverty should be properly addressed by accurately targeting resources to those in need. It considers that this, combined with the removal of other market barriers, would make it possible to unlock value on the demand side. The paper also states that the potential for SLES is hampered by the current lack of price signals by both time and location, noting that a much more efficient locational signal would enhance competition between energy resources across the UK.

> *"This insight paper acknowledges that action is already being taken by the government that demonstrates its concern around the fairer allocation of regulatory and policy costs. But it also shows just how difficult it will be to balance the needs of investors looking to respond to market signals with those of vulnerable consumers who may have to pay more because they are unable to respond to those same signals.*

Policy

Government responds to WHD consultation

James Shaw, *j.shaw@cornwall-insight.com*

In a consultation that ran from 28 June 2021 to 22 August 2021 the government sought views on proposals to extend, expand, and reform the Warm Home Discount (WHD) scheme to 2026. On *1 April*, the government published its response, stating that it would proceed with the extension and expansion of the scheme, along with intentions to reform the scheme in England and Wales.

The WHD scheme was established to provide support to fuel poor households with the costs of heating their homes. Through the scheme, energy suppliers provide rebates off the energy bills of low-income and vulnerable households. The government states that the scheme has provided over £3bn of support since it began in 2011 with additional financial and energy-related support also made available to households through the Industry Initiatives element of the scheme.

As part of the Energy White Paper, issued in December 2020, the government committed to reform the scheme from 2022 onwards with proposals focussed on improving fuel poverty targeting. The ensuing *consultation* sought views, particularly from the energy sector and fuel poverty charities, to inform the future design of the scheme.

In its consultation response, the government states it intends to implement its main proposals including:

- An expansion of the overall spending of the scheme to £475mn (in 2020 prices) each year (from £350mn) for GB, while also increasing the value of the rebates to £150, which the government expects will mean 2.8mn households in England and Wales would receive a rebate every year.
- The government will maintain the current Core Group (renamed Core Group 1), which provides rebates to around 1mn low-income pensioners. It will also introduce a new Core Group 2 to provide rebates to around 1.9mn households on low incomes and with high energy costs. Rebates to both groups will be provided automatically with recipients to be identified through data matching between government departments and energy suppliers.
- Industry Initiatives will be made mandatory, with the government highlighting the value it states these measures can provide to households, for instance in the form of energy efficiency measures, benefit entitlement checks, and debt write-off. It will also introduce changes to specific Industry Initiatives measures to better target the support towards households in need.
- The government will reduce the supplier participation thresholds in 2022 to 2023, and further in 2023 to 2024, to see that almost all customers are with a supplier participating in the scheme. The consultation response notes that smaller suppliers will be able to participate in the scheme voluntarily, subject to an assessment by Ofgem.
- Energy suppliers will be obliged to report to Ofgem the estimated value and proportion of their Industry Initiatives spending that supports fuel poor households where someone has a disability or significant health problems, to monitor the amount and types of measures that energy suppliers provide to fuel poor disabled customers.

The consultation responses states that the government will lay regulations for the changes to be implemented in England and Wales – with these reforms to take place from the 2022/23 scheme year onwards, so that households will receive their rebates over the winter. The government also noted intentions to consult on introducing a separate scheme in Scotland.

> *This confirms what we already knew, and will no doubt increase the pressure on the government if bills continue to rise.*

Policy

Government publishes response to consultation on ECO4 scheme

Matty Hyde, m.hyde@cornwall-insight.com

The government published its response to its consultation on proposed changes to the Energy Company Obligation (ECO) scheme for the next scheme (ECO4), which ran from 20 July 2021 to 3 September 2021, on *1 April*. The response sets out the policy decisions of ECO4, which is worth £4bn and will run from April 2022 until March 2026.

BEIS states that the government will allow up to 10% of ECO3 delivery to be carried over into ECO4 – subject to certain measure exclusions – and that measures can be installed to ECO3 rules between 1 April 2022 and 30 June 2022 – subject to latest installation standards and certain measure inclusions. The government will also permit early delivery of ECO4 measures during any gap between ECO regulations. BEIS says that carry-under – referring to a proposal from the closed *consultation* to allow suppliers to offset a limited amount of under-delivery by delivering more under the ECO4 scheme for "the unlikely situation where suppliers may fail to meet their obligations due to exceptional and unforeseen circumstances" – from the current obligation period will not be permitted, stating that it is unlikely to be needed.

In addition, due to higher estimates of the number of homes that can be upgraded for £4bn due to modelling refinements, the government has increased the minimum target for EFG properties. It states the overall target will be £224.3mn in notional annual bill savings by March 2026, with the eligible pool to be at least 3.5mn homes.

ECO4 will continue to focus on low income and fuel poor or vulnerable households in energy efficiency bands D-G homes, with households in receipt of means tested benefits to be eligible. The government – as consulted – will also allow up to half of the obligation target to be met under the reformed ECO4 Flex – designed to target low-income households, but not in receipt of benefits. ECO4 Flex refers to Local Authority (LA) and Supplier Flex. The government response states that this referral route will be voluntary for the Welsh Government, Scottish Government, suppliers, and LAs. ECO4 will support low-income households living in social housing and rented accommodation in bands E-G, with private tenants to benefits where costly measures are required for home upgrade.

Additionally, the response indicates government will implement a solid wall minimum target of 90,000 solid wall measures over the 4-year scheme alongside introduction of a minimum equivalent upgrade of 150,000 private tenure band E, F and G homes. The government will – as consulted – retain a broken boiler and Electric Storage Heating (ESH) replacement cap for efficient heating at an equivalent of 5,000 homes per year. Also, two uplifts will be introduced so improvements can be rewarded and differentiated between relative and substantial improvements against standard counterparts available in the market. The government will introduce score uplifts of 35% in off-gas rural areas in Scotland and Wales – to incentivise delivery in areas that may be more difficult to reach.

Following the publication of this responses, the government intends to lay affirmative regulations in Parliament which it expects to be debated and come into force later in 2022, with the policy described in the response subject to Parliamentary approval of the regulations. BEIS will issue new guidance on innovation and the 'new fuel poverty targeting methods' approach set out under ECO4 Flex, route 4 and BEIS will no longer publish a separate ECO Flex guidance. The conditions of referrals under ECO4 will also need to meet the requirements in legislation and Ofgem will publish separate guidance for LAs, the devolved administrations and suppliers.

"When this was set up it was an upgrade of support under the scheme. Given the recent rises in energy bills these do not seem as significant as when they were first made.

Policy

Parliamentary update: week 14

Matty Hyde, m.hyde@cornwall-insight.com

Boiler Upgrade Scheme (England and Wales) Regulations 2022 was debated in the House of Lords on 4 April. The Parliamentary Under-Secretary of State, BEIS, Lord Callanan (Conservative) said: "The scheme has a budget of £450mn over three years […] Grants of £5,000 will be provided towards the installation and capital costs of air source heat pumps and biomass boilers, with grants of £6,000 for ground source heat pumps. Biomass boilers will be eligible only in rural properties not connected to the gas grid". Callanan also stated: "The application process will be led by the installer and comprise of two stages: applying for, and then redeeming, a voucher […] The scheme will provide financial support for up to 30,000 installations in year one […] We expect these regulations to come into force and grant applications to open by 23 May". *Boiler Upgrade Scheme (England and Wales) Regulations 2022* was debated in the House of Lords on 6 April.

Energy Storage Capacity was debated in the House of Lords on 5 April. Lord Oates (LD) asked what plans government has to increase energy storage capacity in the UK. Lord Callanan said: "The government are analysing whether further intervention is needed to support deployment of long-duration energy storage, including hydrogen storage". Callanan stated the government is analysing responses to a consultation from last year on a call for evidence on facilitating further deployment of long-term storage.

On 7 April, BEIS Committee Chair, Darren Jones (Bristol North West, Labour) commented on the government Energy Security Strategy. Jones said it was "yet another missed opportunity to help bill payers and a failure to announce funding for the home insulation works required". Jones also stated: "It's disappointing that the government has failed to seize the full opportunity of onshore wind and solar". *Energy Security Strategy* was debated in the House of Lords on 7 April. Baroness Hayman (Crossbench) asked government "whether they will give further details on their proposals for onshore wind and home insulation". Lord Callanan noted "a commitment to consult this year on onshore wind partnerships in supportive local areas in England" and said: "We are spending a total of £6.6bn across the lifetime of this Parliament to retrofit the nation's buildings, and the Chancellor announced the removal of VAT on energy efficiency measures".

On 6 April, the Environmental Audit Committee announced it has called for estimates of greenhouse gas (GHG) emissions to be published alongside GDP figures to indicate whether economic growth and emissions reductions can be achieved together. The committee has issued letters to the Chancellor of the Exchequer and to the National Statistician warning that more must be done for the UK to meet future carbon budgets. It states the inclusion of information on environmental sustainability and GHG emissions with the quarterly release of GDP figures will enable policymakers, commentators, and media to make more accurate judgements on the state of the economy, the environment and wider society.

On 4 April, the Environmental Audit Committee published *Greening imports: a UK carbon border approach*, stating that a UK carbon border approach is needed, which should include a carbon border adjustment mechanism (CBAM) to ensure an equivalent carbon price is applied to imports as is applied to domestic production – as part of a co-ordinated set of policies, including product standards. It recommends the government begins work on a UK carbon border approach immediately for implementation during the 2020s. Additionally, it states the government should continue pursuing multilateral solutions including starting action to link the UK and EU Emissions Trading Scheme, but that in the short-term unilateral action is essential.

A Written Statement titled *Energy Update* was made in the House of Commons by the Minister of State (Minister for Energy, Clean Growth and Climate Change), Greg Hands (Chelsea and Fulham, Conservative) on 31 March. Hands stated that the Oil and Gas Authority has now changed its name to the North Sea Transition Authority, reflecting "the changing world and its changing role". Hands also said: "I plan to return to update the House on progress in implementing the North Sea Transition Deal in due course".

The Environment and Climate Change Committee notes that a private meeting was held on 6 April, and it notes that oral evidence sessions will be held on *Mobilising action on climate change and environment: behaviour change* on 26 April and 27 April. A Research Briefing titled *Domestic energy prices* was published in the House of Commons on 5 April.

IPCC report highlights that urgent action is needed to decarbonise energy

The IPCC published a report on *4 April*, highlighting that although growth in global emissions has slowed over the past decade, the window to keep 1.5˚C in reach is closing fast. It notes that in the scenarios assessed, limiting warming to 1.5˚C requires global greenhouse gas emissions to peak before 2025 at the latest and be reduced by 43% by 2030.

It sets out that limiting global warming will require major transitions in the energy sector, including substantial reductions in fossil fuel use, widespread electrification, improved energy efficiency, and use of alternative fuels such as hydrogen. The IPPC Chair said: “We are at a crossroads. The decisions we make now can secure a liveable future. We have the tools and know-how required to limit warming”, with the IPCC Working Group III Co-Chair adding: “having the right policies, infrastructure and technology in place to enable changes to our lifestyles and behaviour can result in a 40-70% reduction in greenhouse gas emissions by 2050”.

In the government’s *response* to the report, it called on other countries to deliver on the Glasgow Climate Pact, with COP26 President Alok Sharma stating: “The warning lights are yet again flashing bright red on the climate dashboard and it is high time for governments to sit up and act before it is too late” and the UK Minister of State for Energy and Climate Change, Greg Hands adding: “There is still a window of opportunity to act to reduce the effects”. The government noted its intention to shortly publish a new International Climate Finance Strategy, laying out its delivery plan for £11.6bn of investment to help countries across the globe respond to the climate emergency.

Report: £7bn investment needed in UK charging infrastructure by 2035

The EV Energy Taskforce published its *Charging the Future: Drivers for Success 2035* report on *31 March*. This sets out the findings of its study which aimed to identify the essential elements of a functioning ecosystem that will meet the requirements of electric vehicles (EV) users over the next ten years. The report states that 2.5mn Battery Electric Vehicles (BEVs) will need to be sold per year in the UK by 2030 to meet the Sixth Carbon Budget, which is 13 times greater than the record-breaking levels seen in 2021.

It predicts electricity demand from transport will increase to 55TWh per year by 2035, making up 14% of total demand. Additionally, it has a central estimate that 490,000 public charge points are needed by 2035, equivalent to a £7bn investment by 2035. It also states 60,000 enroute rapid chargepoints will be needed along the strategic road network by 2035, and that as many as 50% of public chargepoints need to be targeted at providing charging for drivers in homes without dedicated parking. Furthermore, it suggests without smart charging, domestic charging prices will be 25% higher.

As such, the taskforce has identified five key enabling conditions for creating charging infrastructure fit for the future. These aim to ensure that the deployment of charging infrastructure delivers good value for EV drivers, that it is attractive to investors, and accessible and available to build consumer confidence about their ability to charge when needed. This includes that public charging must be built ahead of need, to gain consumer confidence, and that local authorities must have tools, resources, and powers to ensure integrated transport and energy planning. It also sets out that public chargepoints must be visible, connected, accessible, secure, and interoperable and that smart charging is essential if system cost is to be managed. The importance of informing, educating and protecting EV users to create the understanding needed for mass market uptake is also highlighted.

EAC states need for a UK carbon border approach including a CBAM

On *4 April*, the Environmental Audit Committee (EAC) published *Greening imports: a UK carbon border approach*, stating that a UK carbon border approach is needed, which should include a carbon border adjustment mechanism (CBAM) to ensure an equivalent carbon price is applied to imports as is applied to domestic production – as part of a co-ordinated set of policies, including product standards.

EAC recommends the government begins work on a UK carbon border approach immediately for implementation during the 2020s. Additionally, it states the government should continue pursuing multilateral solutions including starting action to link the UK and EU Emissions Trading Scheme. It states multilateral solutions are the most effective way to address carbon leakage, but that in the short-term unilateral action is essential.

Alongside the CBAM, the EAC recommends that the UK's carbon border approach needs to comprise a set of complementary policies, including product standards, to tackle consumption emissions beyond those covered by explicit carbon pricing, and support decarbonisation across the economy. It highlights careful design is needed to ensure the carbon border approach is successful in achieving its environmental objectives while mitigating the risks of adverse impacts.

EAC calls for GHG estimates to be published alongside GDP figures

On *6 April*, the Environmental Audit Committee (EAC) announced it has called for estimates of greenhouse gas (GHG) emissions to be published alongside GDP figures to indicate whether economic growth and emissions reductions can be achieved together.

The committee has issued letters to the Chancellor of the Exchequer and to the National Statistician warning that, while the UK has had some success in decoupling carbon dioxide emissions from GDP growth, more must be done for the UK to meet future carbon budgets as the country works towards net zero. The EAC states that the inclusion of information on environmental sustainability and GHG emissions with the quarterly release of GDP figures will enable policymakers, commentators, and the media to make more accurate judgements on the state of the economy, the environment and wider society.

Environmental Audit Committee Chairman, Rt Hon Philip Dunne MP, said: "GDP has been a useful indicator for decades, but it can play a more useful role in the next 30 years alongside greener metrics as the UK strives to meet net zero. Publishing estimates of environmental performance and greenhouse gas emissions alongside the quarterly release of GDP figures will enable the public to see whether we are achieving economic growth while slashing emissions and improving environmental performance. A new metric could offer a helpful stocktake to highlight whether the UK's greening efforts are working, or whether they are merely greenwashing."

British Geological Survey to advise on shale gas extraction viability

The UK Government has commissioned the British Geological Survey (BGS) to advise on the latest scientific evidence around shale gas extraction. In an announcement on *5 April*, the government stated that it will only pursue the exploration of shale gas reserves in England if the science shows that it is safe, sustainable and of minimal disturbance to those living and working nearby.

It highlighted the previous decision to pause on activity in England in 2019 after a report by the North Sea Transition Authority found it was not possible to accurately predict the probability or magnitude of earthquakes linked to hydraulic fracturing operations. At the time, it was confirmed that the pause would remain in place until there was further evidence that shale gas extraction could be carried out safely. However, given Russia's invasion of Ukraine, the government considers it necessary to explore all possible domestic energy sources and has, therefore, *requested* that the BGS undertake a desk-based study to assess whether any progress has been made in this area. This includes investigations into whether there have been any new developments or techniques in the science of hydraulic fracturing and how the modelling of geologies, such as shale, has improved since 2019.

A report is expected before the end of June 2022.

Regulation

Government to create FSO to oversee UK energy system

Kate Morley-Hurst, k.morley-hurst@cornwall-insight.com

On *6 April*, the government and Ofgem announced their commitment to proceed with the creation of a new Future System Operator (FSO) to oversee and strengthen the resilience of the UK energy system.

In the joint *response* to their July 2021 consultation, BEIS and Ofgem stated that the FSO will be a new public body, funded by consumers through price control arrangements regulated by Ofgem. The new independent body will take on all the main existing roles and responsibilities of National Grid Electricity System Operator (ESO), through working with energy suppliers and networks to balance the electricity system and ensuring continued energy resilience and security of supply for consumers.

It will also provide strategic oversight of the gas system by taking on the longer-term planning, forecast, and market strategy functions, while the real-time operation of the gas system will remain with National Grid Gas (NGG). Furthermore, the FSO will have a duty to provide advice, analysis, and information, upon request, to Ofgem and the government to inform key policy decisions. In carrying out these roles, it is intended that the FSO will be a data-led organisation with powers to request information and data from other licensees and exemption holders.

The primary objectives of the FSO will be to facilitate the transition to net zero; maintain security of supply; and ensure an efficient, coordinated, and economical electricity and gas system. It will also have obligations around facilitating innovation and competition; having regard for consumer impacts; and looking at the GB energy system as a whole, integrating existing networks with emerging technologies such as hydrogen. BEIS and Ofgem consider that the creation of the FSO will strengthen the security and resilience of UK energy supplies and support the transition to net zero. It is noted that this is particularly pertinent in the context of the current high wholesale energy prices and renewed pressure on networks following Russia's invasion of Ukraine, which has highlighted the need to safeguard and boost domestically produced energy.

BEIS and Ofgem said that they will now work closely with National Grid, NGG, and the ESO to plan and prepare for the changes, with the intention that the FSO will be implemented via a phased approach to enable a smooth transition. While it is expected to be established by, or in, 2024 this will depend on a number of factors. This includes timings of legislation, as both primary and secondary legislation will be required to create the FSO and its associated duties and powers, as well as new and updated licensing arrangements and amendments to industry codes. Further industry engagement will also be needed to ensure that all stakeholders affected by the changes have access to the information needed to prepare for the transition to the FSO.

On the *same day*, the government and Ofgem published a response to their joint consultation on proposals for energy code reform, setting out their decision to proceed with their preferred option. As a result, Ofgem will be given new strategic code functions, including the ability to establish and regulate one or more code managers. As part of the decision, code administrators and code panels will be replaced with a class of newly licenced code manager, with their roles and responsibilities to be set out in a further consultation expected from Ofgem. It is anticipated that Ofgem's new strategic functions could be established around 2023, depending on the timings of legislation. BEIS and Ofgem consider that this decision will have long-term benefits for both industry and consumers by ensuring that the detailed technical and commercial rules that guide market participants keep pace with the net zero ambition. See page 15 for more coverage on the energy code reform decision.

"The arguments for an independent system operator date back more than a decade and the solution of the SO as part of National Grid was in many ways a half-way house. This change is likely to be welcome in many parts of the industry and government and is accompanied by an ambitious timetable. The arrangements for gas and electricity look different, replicating the governments likely ambitions for different energy vectors.

Regulation

Ofgem to become strategic body for code governance

William Belotti, w.belotti@cornwall-insight.com

On 6 April, BEIS published its response to its joint consultation with Ofgem on the Design and Delivery of the Energy Code Reform, deciding to implement its preferred option of appointing Ofgem as the strategic body and establishing separate code managers.

BEIS and Ofgem have been jointly working towards the creation of a new strategic function which would outline the strategic direction for codes, ensuring codes and code governance remains agile. Previously, two consultations have been published outlining two institutional energy code governance options. BEIS's preferred Option 1 is to have the strategic function performed by Ofgem as a strategic body over the codes with a number of separate licensed code managers. This option is considered to result in a less complex governance landscape than the alternative Option 2 of an integrated rule-making body (IRMB) within the Future System Operator (FSO), with the code manager and the strategic function combined. The majority of respondents agreed with the preferred Option 1 for the reform of code governance, and, as it builds on Ofgem's existing expertise, provides a greater net benefit, as well as being more straightforward and quicker to implement, BEIS has decided to implement Option 1. It is expected this will result in a long-term net benefit for industry and consumers with no adverse material impact on consumer energy bills. In the interest of regulatory and legislative simplicity, this decision will involve an expansion of Ofgem's existing functions as the strategic body, rather than the creation of a whole separate entity. The strategic code functions will constitute new roles for Ofgem, rather than Ofgem taking on a new body.

By taking on the role of the strategic body Ofgem will expand its remit to four new strategic code functions. The first will require it to publish an annual strategic direction on how it considers the codes should evolve over the following year, delegating responsibility to the code managers to implementing this. Secondly, Ofgem will be able to select and license these code managers for each in-scope code or engineering standard via a range of competitive and non-competitive options. The third would provide Ofgem with the ability to carry out direct code changes in limited circumstances where the normal processes are deemed inappropriate. Ofgem directed changes would be subject to a public consultation, potential veto from the Secretary of State and right of appeal to the Competition and Markets Authority (CMA) in order to limit this power. Finally, the regulator will have power to issue directions to in-scope central system delivery bodies, ensuring that they do what is required by a code or what is reasonably necessary to facilitate the efficient operation of the codes.

Code managers will replace code administrators and code panels. The proposed code manager functions include proposing, prioritising and managing code changes as well as facilitating cross-code coordination and change. They will also be required to make decisions currently made by code panels, including on whether to approve non-material code changes. The exact number of code managers will be dependent on the outcome of code consolidation, which Ofgem is expected to consult further on this year. Many respondents voiced concerns that removing panels and ultimately industry's role in decision-making, could result in reduced engagement, meaning code decisions will not benefit from industry's expertise and experience. The government will introduce stakeholder advisory forums, which Ofgem will consult on the detailed design on in due course, although BEIS does not consider that the forum's advice should be binding. Primary legislation will be required to implement the proposed reforms which BEIS intends to introduce when Parliamentary time allows. Secondary legislation will also be required for some proposals with details expected to be developed over the course of the next year. In the meantime, Ofgem will take the lead on transitionary arrangements. This will involve further consultation on detailed elements of code reform, such as code manager licence conditions and the roles played by stakeholder advisory forums, as well as the development of a high-level plan for code consolidation. Engagement on these topics will begin this year.

"While current code governance arrangements deal well with small changes they have not proven up to the task of large strategic change necessary for Net Zero. Giving Ofgem a strategic function should provide greater accountability and delivery of the government's strategic direction. However, there are still questions to be answered on timescales, code manager license conditions and how the industry's expertise will be accounted for.

Views sought on how to levy residual charges on mixed demand sites

The workgroup consultation for DCP388 *Amendments to Facilitate Appropriate Residual Charging for Sites with a Mix of Final and Non-Final Demand* was issued on *4 April*. The modification aims to introduce the concept of "Mixed Demand" and would enable any sites with a mix of final and non-final demand to exclude non-final demand volumes from liability for the distribution residual charge. Views are sought on four potential solutions developed by the workgroup for the identification of non-final demand volumes.

The first option would see the customer self-declare how much of its final demand is non-final demand, providing a certificate confirming this, which would then be used to deduct non-final demand from the site's residual charge liability. The second option is to have a deemed approach, using a predetermined standard (such as capacity/consumption being solely for the start-up and or operation of the generator) to determine the non-final demand element on a mixed-use site. Another proposed option is utilising or installing additional metering equipment to measure various components of a mixed-use site and introducing a process to provide the data in order to determine how much demand is non-final demand.

The final option proposes a settlements process similar to that developed for *P375 Settlement of Secondary BM Units Using Metering Behind the Site Boundary Point* where behind-the-boundary asset metering can be used for settlement purposes. The proposal may also make use of the solution being developed under *P395 Aligning BSC Reporting with EMR Regulations – an Enduring Solution* which sees electricity consumption for generation excluded from certain reporting used to establish users' environmental levies. Responses are requested until 4 May.

Open letter to suppliers on smart meter rollout

On *Tuesday 29 March*, Ofgem published its annual open letter to suppliers regarding the delivery and regulatory obligations of the smart meter rollout. The letter draws on Ofgem's observations in the past year and its expectations for the rollout in the coming months.

The regulator is currently assessing suppliers' compliance under the obligation that required suppliers to take "all reasonable steps" to ensure a smart meter was installed across all domestic and small non-domestic premises. The all reasonable steps requirement ended on 31 December 2021 and following the final submissions of information in January 2022, Ofgem is now progressing with assessment of suppliers' performance.

A new smart meter rollout framework took effect on 1 January 2022, setting binding annual targets for suppliers. However, the regulator has acknowledged the ongoing volatility in the energy retail market, and a number of suppliers have exited the market through the Supplier of Last Resort (SoLR) process, meaning that many suppliers have taken on new customers.

Ofgem recognises this has likely led to increased 2022 installation targets but considers that suppliers have ample time to adjust their targets early in the first rollout year under the new framework. Ofgem will be developing a template for suppliers to report on their performance against their targets and expects to include a section for suppliers to reflect on challenges, such as taking on customers through the SoLR process.

The regulator has also called for a particular focus on reducing the number of aborted installations and cancellations, and ensuring all customers have appropriate metering arrangements ready for when radio teleswitch meters are removed in March 2023.

Ofgem consults on FNC for Eastern HVDC project

On *30 March*, Ofgem issued a consultation on the Final Needs Case (FNC) and delivery model for the Eastern High Voltage Direct Current (HVDC) transmission projects. Ofgem considers that all available evidence suggests the project will deliver clear consumer benefits and would be the largest electricity transmission investment project in recent history in GB. The proposal for the Eastern HVDC is for two separate HVDC cables, each with 2GW capacity running from the east coast of Scotland to north-east England, the Torness to Hawthorn Pit subsea HVDC link (E2DC) and the Peterhead to Drax subsea HVDC link (E4D3). These are expected to be operational from 2027 and 2029 respectively.

Fulfilling the need for additional transmission reinforcement to bypass the congested network around the

Scotland-England border is highlighted as a distinct benefit of this investment. The total estimated cost of both links is £3.4bn, which the regulator views as an appropriate cost for achieving benefits which are reflective of the Network Options Assessment 2020-21 analysis outcomes.

Ofgem has also determined that as the Eastern HVDC is being considered under the Large Offshore Transmission Investment (LOTI) mechanism it is suitable for a late competition delivery model. However, the regulator has assessed that an extremely robust delivery plan will be required in order to avoid the costs of delays being inappropriately passed on to consumers. The regulator notes that the Electricity System Operator has highlighted that the impact of any delay would be highly costly to consumers and risk analysis for E2DC suggests such some delay is fairly probable.

Ofgem is now seeking responses on any aspect of the project by 4 May and will publish its final decision in early summer 2022.

Industry Structure

Bayford & Co reports 223% increase in turnover following acquisition of E

Harriet Walker, h.walker@cornwall-insight.com

Bayford & Co, which holds 100% of the ordinary share capital of energy supplier E (Gas and Electricity), published its annual report for the year ended 30 June 2021 on *22 March*, reporting a 222.8% increase in turnover, from £53.0mn in 2020 to £171.2mn in 2021. Gross profit amounted to £17.7mn, up from £8.1mn in 2020 and its operating profit was £3.9mn, up from a loss of £9.0mn.

The group, which acquired its 100% share in E on 9 March 2020, made a turnover of £169.2mn in UK energy supply in 2021, up from £49.9mn in 2020. Employees in its energy segment increased from 56 in 2020 to 179 in 2021. It had previously held a 24% share in Gas and Power Limited (*formerly* trading as HUB Energy), which it sold in January 2021 to enable it to "focus on new ventures" such as electric vehicle (EV) charging.

Commenting on its future developments, it said in light of the fast-evolving nature of the energy market it has "reappraised its business model and invested further into future technologies, IT and infrastructure", including significant investment in the EV charging market. It acquired a 42% stake in RAW Charging and "continued to build a strategic investment in Fulcrum PLC", culminating in owning a 21% stake in the company on 10 January 2022. On 28 February 2022, it also acquired 10% of Jumptech Ltd, a software business specialising in the EV charge point market.

E (Gas and Electricity) published its annual report and financial statements for the year ended 31 March 2021 on *30 March*, reporting a 4% decrease in turnover, from £172.9mn in 2020 to £166.2mn in 2021. Its gas segment generated £62.6mn of its turnover in 2021, down from £69.5mn in 2020, while turnover from its electricity segment was up marginally from £103.5mn to £103.7mn. Gross profit was £15.4mn, up 200% from £5.1mn and its operating profit was £4.8mn, compared to a loss of £7.4mn in 2020.

E said the Default Tariff Cap "still provides a high level of risk for the business". In order to mitigate these risks "a strict commodity hedging policy is in effect, but this does not provide protection from increased cold weather [energy] usage". The company is hedged out for 90-100% of expected gas and electricity usage.

Figure 1: Account numbers for Bayford & Co Limited and E (Gas and Electricity) Limited

	2021	2020	Percentage change (%)
Bayford & Co Limited (for year ended 30 June 2021)			
Turnover	£171.2mn	£53.0mn	222.8%
Gross profit	£17.1mn	£8.1mn	111.3%
Operating profit/(loss)	£3.9mn	(£9.0mn)	143.3%
E (Gas and Electricity) Limited (for year ended 31 March 2021)			
Turnover	£166.2mn	£172.9mn	(3.9%)
Gross profit	£15.4mn	£5.1mn	200.0%
Operating profit/(loss)	£4.8mn	(£7.4mn)	164.7%

Source: Companies House

"Following its acquisition of energy supplier E in March 2020, Bayford & Co. saw its turnover increase significantly to £171mn in 2021, £169mn of which was generated from its UK energy supply activity. It continues to support the development of the EV charging market, with recent investments in RAW Charging and Jumptech.

RenewableUK outlines steps to end UK gas power dependency in 5 years

RenewableUK has proposed a plan to the government outlining key steps to would enable the UK to end its dependence on gas for electricity within five years. Announced on *5 April*, measures in the Renewable Energy Response Plan include increasing the amount of new renewable capacity which will be secured in this year's auction for contracts to generate clean power, stating that this can be achieved by removing the limit imposed on the amount of onshore wind capacity that can go ahead and raising the budget available for offshore wind.

RenewableUK states by investing £68mn extra in the budget for offshore wind, consumers' exposure to gas bills can be cut by £1.5bn. It also says planning decisions for offshore wind projects should be taken within a statutory timeframe of 1 year, compared to the current 2-3 years, that Ofgem should urgently enable new grid investment and that if the government brought forward a 5GW renewable hydrogen target by 2030 it could replace 5% of total UK gas demand.

RenewableUK's CEO Dan McGrail said: "With the rocketing global cost of gas continuing to push up energy bills, government and industry need to work together to cut our reliance on gas to generate electricity as quickly as possible and I believe we can do that within five years. We can start on this by doubling down on what we can get in this year's clean power auctions, to protect consumers from global price shocks in the future."

E.ON scores highest in preparedness for low-carbon world

Following the publication of its new report, on *6 April* Bloomberg NEF announced that E.ON, Iberdrola, and EDF were found to rank the highest in its Utility Transition Scores, with E.ON receiving the greatest score. The Utility Transition Scores compare 98 major power companies on their preparedness for a low-carbon world, with the top scoring companies considered to be the best-poised to take advantage of opportunities arising from the energy transition.

While eight of the top ten scorers are based in Europe, boosted by a policy ecosystem that prioritises climate transition, seven of the bottom ten scoring companies have plans to grow coal-fired power generation. Many of these are located in Asian countries without government-mandated coal phase-out policies.

Jonas Rooze, BNEF's head of sustainability research, said: "Investors are increasingly asking questions about the climate transition because they recognise that it brings both potential risk and opportunity. Our proprietary transition scores, along with our revenue projections and other related research, help our clients identify and capitalise on the upside of the energy transition."

Wind capacity needs to quadruple to meet net zero

In its Global Wind Report 2022 published on *4 April*, the Global Wind Energy Council (GWEC) highlighted that 2021 was the "second-best year ever" for the wind industry, with almost 94GW of capacity installed globally. This brings the total cumulative wind power capacity to 837GW, which is year-over-year growth of 12%.

For offshore wind, 2021 was the "best-ever year", with 21.2GW commissioned. This was three times the amount of the previous year, 80% of which was the result of offshore installations in China. Despite this growth, GWEC notes that wind capacity needs to quadruple by the end of the decade to keep on track for a 1.5°C world and meet the net zero target.

Ben Backwell, GWEC CEO said: "The wind industry continues to step up and deliver, but scaling up growth to the level required to reach Net Zero and achieve energy security will require a new, more proactive approach to policy making around the world... The last 12 months should serve as a huge wake-up call that we need to move decisively forward and switch to 21st century energy systems based on renewables."

Developments in the Overall Customer Satisfaction league: April 2022

By Professor Stephen Littlechild

Friday saw the publication of the latest energy supplier ratings by Citizens Advice (based on data for Q421). Media reports claimed the worst customer service since 2017, driven by rising call waiting times, and highlighted a 19% fall in the lowest score since the previous quarter. However, the fall in average score was rather lower, at about 4%. And against the significant increases in complaints at Utilita, Outfox and Boost, there were small but worthwhile improvements in customer service, including at So and Bulb (easier to contact) and at British Gas (clearer bills).

Meanwhile, for the 14 energy suppliers in the Overall Customer Satisfaction league, Trustpilot recorded 2 small increases in TrustScores over the last two months, 6 small decreases, and 6 non-movers.

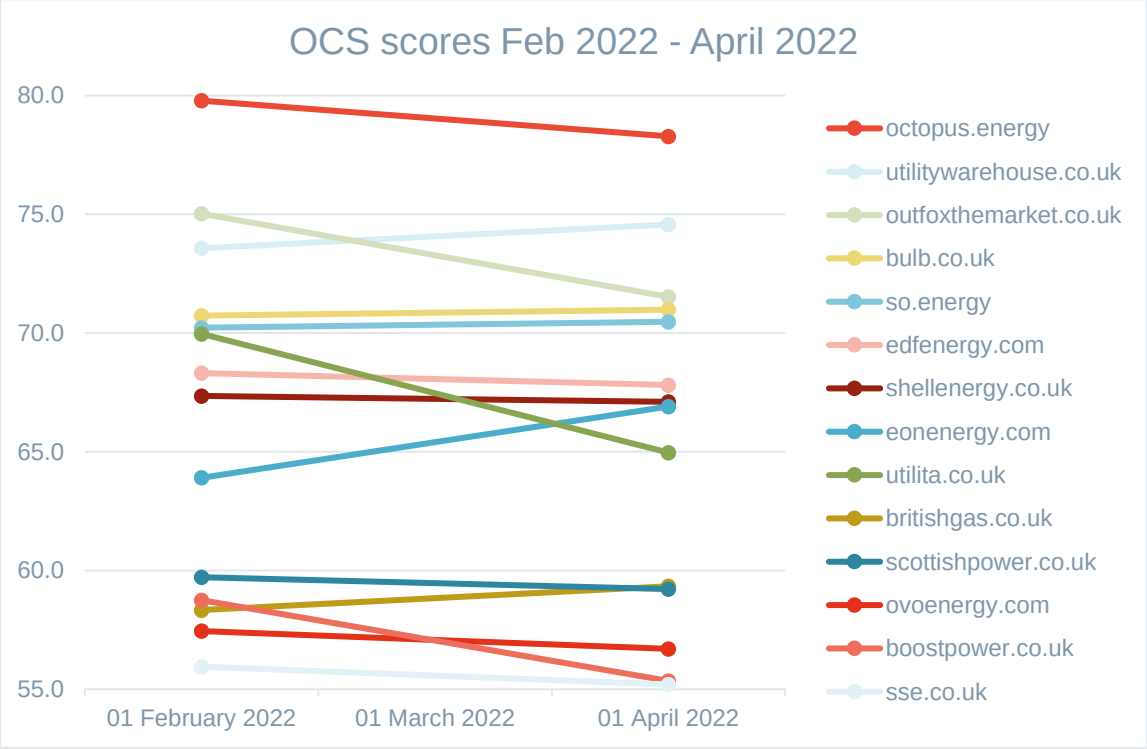
Octopus Energy is still way out in front at 78%, despite a reduced ability to contact the supplier. Utility Warehouse rises to second place at 75%, aided by clearer bills, Outfox falls to third place because of increased complaints. Bulb and So retain their positions, with higher Citizens Advice ratings offset by lower TrustScores.

EDF Energy and Shell retain their positions at the top of the middle group of suppliers at around 67%. E.ON UK rises to join them, but Utilita plummets to 65%, both on the back of the latest Citizens Advice ratings.

Clearer bills send British Gas just above Scottish Power at 59% at the top of the bottom group of suppliers. Three Ovo group suppliers fill the bottom three positions, down to 59%, all rated lower by Citizens Advice, especially Boost with more complaints and more difficult to contact.

Another half-dozen smaller suppliers are rated by Citizens Advice – M&S Energy & Affect near the top, Cooperative and E around the middle, and Good Energy and Ecotricity around the bottom. Unfortunately, Which? does not rate them so they do not currently appear in the OCS league. Nonetheless, the league seems to give a good indication of the overall performance of the leading UK energy suppliers, a performance that has generally been consistent over time.

Figures 1 shows what this means for the Overall Customer Satisfaction league (where the scores are an average of the ratings of the above two entities and of Ofgem and Which?)



Source: Professor Stephen Littlechild

Nutwood

Record wholesale energy price spikes – how markets have reacted to developments in the war

Lee Drummee, l.drummee@cornwall-insight.com

Following the Russian invasion of Ukraine towards the end of February, wholesale energy markets – a number of which commodities were already experiencing historically high prices – have seen further price rises along with heightened levels of volatility as they react to any developments and news surrounding the conflict.

The initial price reaction saw gas contracts – both short- and long-term – jump along with other global markets such as Brent crude oil, amid uncertainty of how this would impact gas and oil production as well as how the EU and other nations would react to reduce their energy dependence on the country.

In the days between Russia recognising the independence and sovereignty of the Luhansk and Donetsk regions of Ukraine and Russia's full-scale invasion, German Chancellor, Olaf Scholz, announced that Germany had suspended the certification of the Nord Stream 2 gas pipeline between Russia and Germany. Following this announcement, the GB day-ahead gas contract gained nearly 20p/th to 197p/th, while the two front seasonal contracts (winter and summer 2022) both breached 200p/th.

On the morning of 24 February, just three days after Russia recognised the Luhansk and Donetsk regions, Russia launched a full-scale invasion of Ukraine. Wholesale energy prices across European trading hubs rose with similar strong gains seen in GB gas and power markets. Day-ahead gas and power price rose by around 40% day-on-day, while the 2022 seasonal gas contracts increased by an average of 36% from the previous day. Seasonal power contracts for 2022 followed suit, climbing by 27% on average for 2022. Elsewhere, Brent crude oil prices rose above $100/bl for the first time since 2014 amid the risk of supply disruption from the world's third-largest oil producer in an already tight global market.

In the following days, wholesale prices bounced around considerably, showing a strong reaction to any news and developments from the conflict, whilst market participants also tried to determine the likelihood and severity of sanctions that could be imposed on Russia by other nations. The first major announcement was on 26 February, when the EU, UK, US, Canada, and Japan announced an action to remove some Russian banks from the global financial messaging system, SWIFT, in order to prevent the Russian Central Bank from deploying reserves to undermine sanctions imposed on Russia. However, this did not result in any major price rises in the immediate aftermath.

In the week between the start of the invasion and the first round of sanctions focussing on Russian energy, day-ahead gas ranged between 255p/th and 580p/th, whilst the 2022 seasonal contracts ranged between 258p/th and 566p/th. This volatility was mirrored in the power market, which saw the summer 22 contract drop from £240/MWh to £220/MWh, before rising to £450/MWh.

On 8 March, the US banned imports of Russian oil, liquified natural gas (LNG) and coal, swiftly followed in the coming days by similar announcements from the UK, Australia and Canada. The UK committed to phasing out Russian oil imports by the end of 2022, Australia banned imports of Russian oil and coal, while Canada banned the import of Russian petroleum products.

Despite these announcements which would surely exacerbate pre-existing concerns of tight supplies by removing a significant supply source from the market, the majority of wholesale markets moved lower, perhaps with the confirmation of sanctions removing a large portion of the uncertainty that had seen prices hit multi-year highs in the days before this first round of energy sanctions was announced.

In the days following these announcements, Brent crude oil fell away from its high of $127/bl, briefly dipping below the $100/bl mark before settling between $100-$110/bl. Similar movements were seen in the seasonal gas and power markets with prices shedding as much as 170p/th and £150/MWh between 8 and 11 March.

On 11 March, the EU, UK, US, Canada, and Japan imposed further trading sanctions on Russia, including denying it borrowing privileges at the World Bank and International Monetary Fund. This was followed four days later by another package of sanctions imposed by the EU which added export controls targeting the Russian energy industry.

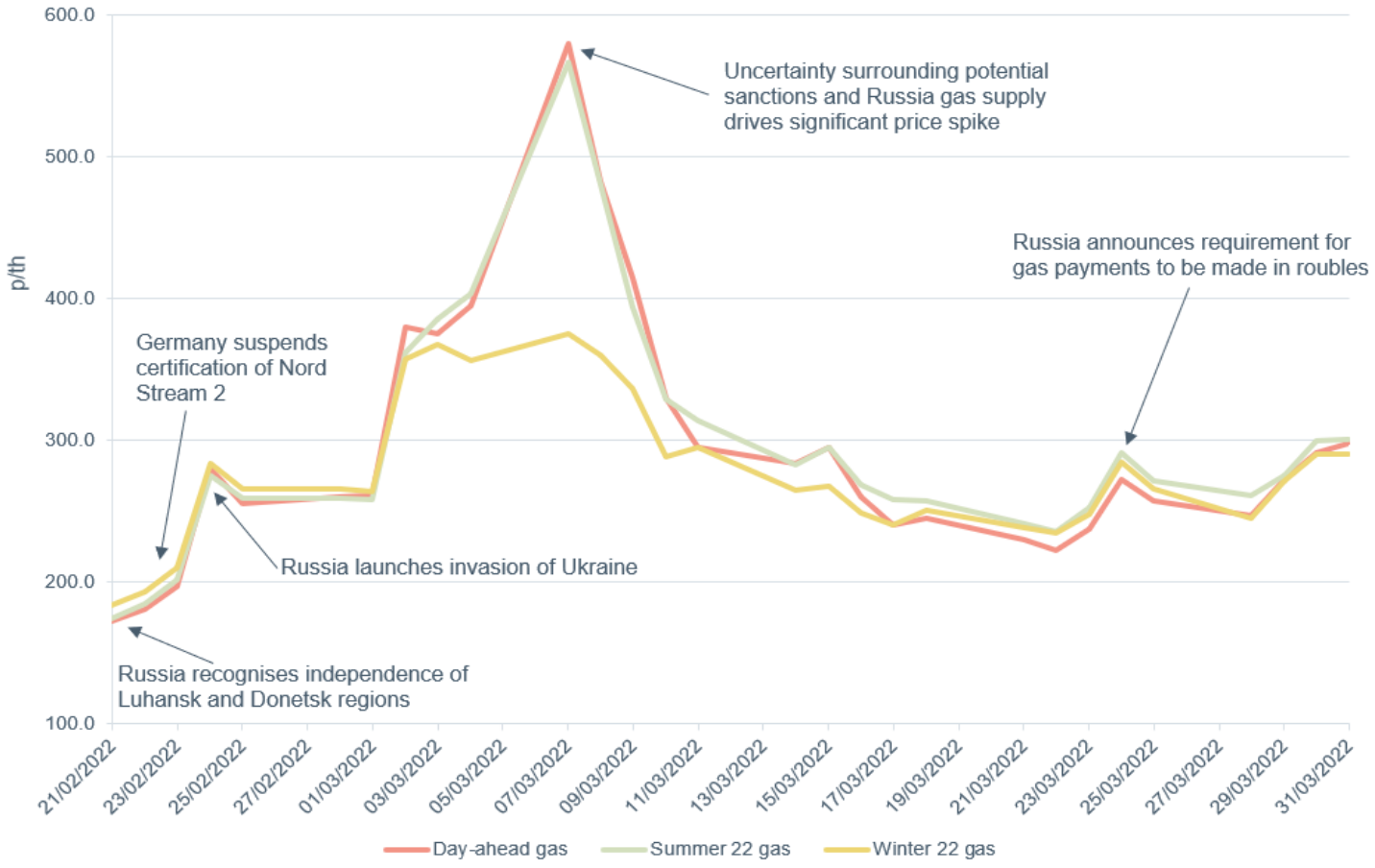
On 23 March, Russian President Vladimir Putin announced that from 1 April “unfriendly” countries would have to pay for Russian gas in roubles, rather than euros which the gas contracts are ordinarily denominated in. The move to force countries to pay for Russian gas in roubles rather than euros, would act to prop up the rouble which has seen its value plummet as a result of the numerous sanctions imposed on Russia.

Gas contracts reacted to this news by jumping between 35-40p/th depending on the contract. However, contracts subsequently lost the majority of these gains in the following days as short-term gas supplies were not expected to be impacted, with gas contracts for delivery from 1 April not required to be paid for until the second half of April or May at the latest. In addition, the requirement to pay in roubles was swiftly rejected by European buyers of Russian gas.

On 31 March, President Putin formally signed the decree requiring that “unfriendly” countries pay for gas in roubles. However, once again the price reaction was muted with the understanding that this would not immediately impact the flow of Russian gas into Europe. Additionally, the decree signed by Putin was not as strict as initially threatened, with European buyers still allowed to pay in euros and dollars. The decree instead authorised Gazprombank to open foreign currency and rouble accounts for gas purchases. European buyers would therefore still be able to pay in euros and then authorise Gazprombank to convert the payment into roubles, which would then be used to officially purchase the gas. This additional allowance further reduced concerns of gas supply from Russia stopping in the event of non-payment.

Since the beginning of hostilities between Russia and Ukraine gas, power and oil prices have shown notable growth, as geopolitical uncertainty always breeds risk induced price gains, while the threat of physical disruption to supply as a result of damage inflicted by war remains. However, prices have fallen from the extreme highs which were seen in the days immediately after the invasion as a lot of uncertainties have been removed or dampened by the responses of a number of nations.

Figure 1: GB gas prices, day-ahead, summer 2022 & winter 2022 contracts



Wholesale Markets

Gas

Day-ahead gas fell 19.8% to 239.00p/th, as wholesale gas prices remained volatile, with specific bearish drivers last week including periods of system oversupply. Similarly, May 22 gas was down 18.8% at 242.11p/th, and June 22 gas decreased 16.9% to 250.80p/th. Q322 gas moved 14.8% lower to 259.31p/th.

Most seasonal gas contracts rose last week, up by 18.5% on average. Winter 22 gas dropped 14.4% to 254.65p/th, while summer 23 gas increased 14.6% to 171.25p/th. The annual October 22 gas contract slid 4.7% to 212.95p/th, 6.8% lower than the same time last month, and 376.4% higher than the same time last year (44.70p/th).

Electricity

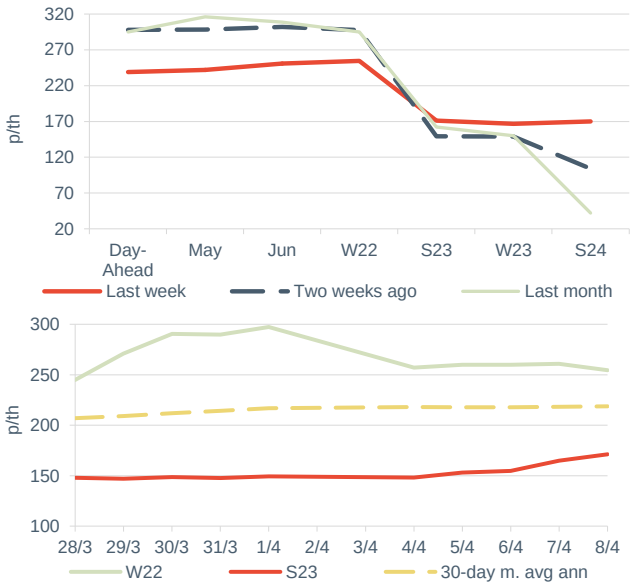
Day-ahead power fell 18.4% to £200.00/MWh, following losses in near-term gas price movements, coupled with periods of reduced wind outturn across the week. May 22 power slipped 14.5% at £213.00/MWh, and June 22 power decreased 12.3% to £222.00/MWh. Q322 power moved 8.5% lower to £238.00/MWh.

The majority of seasonal power contracts boosted last week, up on average by 7.5%. Winter 22 power decreased 8.5% to £238.00/MWh, while summer 23 expanded 8.9% to £152.50/MWh. The annual October 22 contract lost 2.4% to £195.25/MWh, which was 2.4% lower than the same time last month (£200.00/MWh), and 267.5% higher than the same time last year (£53.13/MWh).

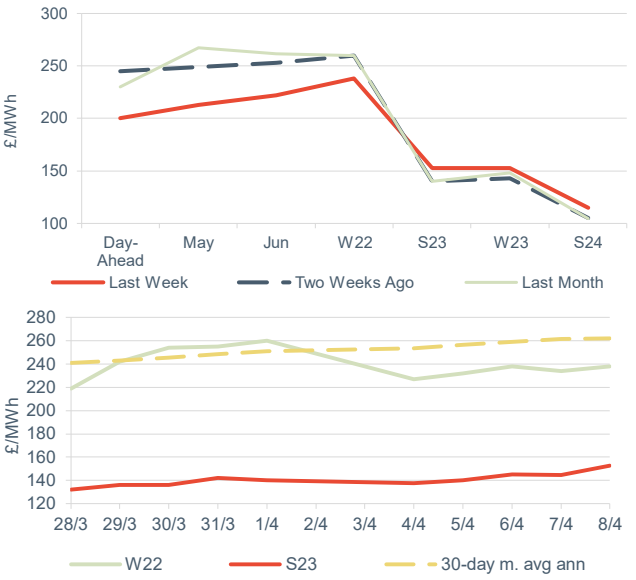
Oil, coal and carbon

Brent crude prices fell week-on-week, a second consecutive week of decline, subsequently falling 5.6% to average $104.82/bl. There were numerous fundamentals influencing the trajectory of crude oil prices last week, but with the most prevalent drivers having a suppressive impact overall. The US and other IEA member nations orchestrated the release of strategic crude reserves to help soften some of the ongoing market tightness, easing supply fear sentiment. Carbon markets experienced collective declines from the previous week. The UK ETS fell 2.3% to average £74.56/t, with the EU ETS sharing a similar week-on-week decline, down 4.9% to average £75.35/t.

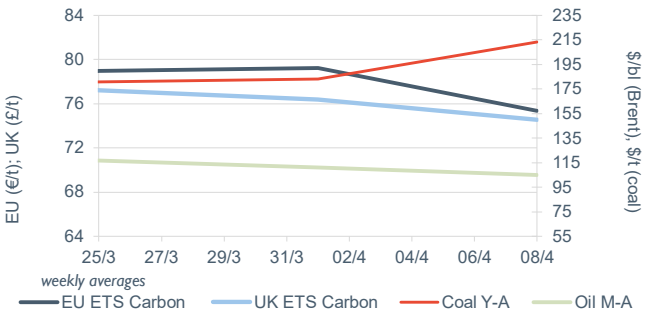
Gas forward curve (top) and seasonal contract movements (bottom) – prices taken 8 April 2022



Power forward curve (top) and seasonal contract movements (bottom) – prices taken 8 April 2022



Brent crude oil, UK ETS, EU ETS carbon & API 2 coal prices



CORNWALL INSIGHT

CREATING CLARITY

Level 3, The Union Building
51-59 Rose Lane, Norwich, Norfolk NR1 1BY

T 01603 604400
E enquiries@cornwall-insight.com
W cornwall-insight.com

CORNWALL INSIGHT

CREATING CLARITY

Online learning and development 'Annual subscription service'

Staff development

- Enhanced understanding through expert-led courses
- 4 colleagues per full-length course
- Stay up-to-date with a changing market
- Interact with experts and ask questions

Flexible learning

- Create tailored learning and development programmes
- Develop knowledge in specific areas with our training pathways
- Feed into our course schedule with your suggestions

Save time

- Shorter sessions spanning a few days
- Fit learning around the work day
- Save time travelling

Save Money

- Make significant savings compared to individual course prices
- Reduce costs for travel

Contact the team on training@cornwall-insight.com