



Press Release  
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## Shell and Uniper to work together on blue hydrogen production facility in the UK

- Shell and Uniper sign co-operation agreement to progress plans for low-carbon hydrogen production at Uniper's Killingholme site in North Lincolnshire
- Hydrogen produced could be used to decarbonise heavy industry, transport, heating and power across Humber and beyond
- Project recently passed eligibility phase for UK Government's Phase-2 carbon capture, usage and storage Cluster Sequencing Process

Uniper has signed an agreement with Shell to progress plans to produce blue hydrogen at Uniper's Killingholme power station site in the East of England. The hydrogen produced could be used to decarbonise industry, transport and power throughout the Humber region.

The Humber Hub Blue project includes plans for a blue hydrogen production facility with a capacity of up to 720 megawatts, using gas reformation technology with carbon capture and storage (CCS).

The captured carbon would be fed through the proposed Zero Carbon Humber onshore pipeline, part of the East Coast Cluster, recently selected as one of two CCS clusters to receive initial government support under the government's cluster sequencing process.

The Humber Hub Blue Project recently passed the eligibility criteria for Phase-2 of the government's cluster sequencing process. Successful projects which could be eligible for Government funding will be shortlisted from May 2022. Phase-2 projects are expected to take final investment decisions from 2024 to then be operational from 2027.

Blue hydrogen production at Killingholme could see the capture of around 1.6 million metric tonnes (Mt) of carbon a year through CCS. The UK Government has set a target to capture 10 Mt of carbon a year by 2030.

The agreement follows a memorandum of understanding signed by both companies in 2021 to explore accelerating the development of a hydrogen economy in Europe. Shell and Uniper will now jointly progress process design studies and site development activity, with a view to taking the project to front end engineering and design by 2023.

"The Humber Hub Blue hydrogen project is a key part of Uniper's hydrogen ambitions in the UK and we're extremely pleased that Shell is joining us on this initiative," said Axel Wietfeld, CEO of Uniper Hydrogen.

"The development of a hydrogen production hub at Killingholme represents a significant step towards decarbonising the UK's largest industrial cluster. Future proofing the industry, this investment has the potential to secure and grow the region's economy," added Mike Lockett, Uniper UK Country Chairman and Chief Commercial Officer Power.



“Shell is ready to play our part in ensuring an orderly transition to net zero while bolstering the UK’s energy security,” said David Bunch, Country Chair, Shell UK. “We plan to invest up to £25 billion in the UK energy system over the next decade subject to Board approval, and more than 75% of this is for low and zero-carbon technology. Hydrogen and CCS will be key to these plans. They can also help stimulate economic growth and jobs. That is why it is critical that both government and industry continue to work together to drive change.”

British Minister of State for Business, Energy and Clean Growth Greg Hands said: “We’ve set ambitious targets for hydrogen production in our British Energy Security Strategy and are investing £360 million in innovative energy technologies to get us there. Today’s announcement shows real confidence in hydrogen - creating high-quality jobs to level up the Humber region, based on this clean, cutting-edge new super fuel.”

#### **Notes to editors**

Blue hydrogen refers to hydrogen produced by the reformation of natural gas. The carbon dioxide produced as a result of this process is captured and stored using CCS technology.

The project will be focusing on potential industrial uses of the hydrogen but, to give a sense of scale, production of 720 megawatts would be enough low-carbon hydrogen to heat more than half a million homes a year.

Uniper is also a partner in the Zero Carbon Humber project to develop the necessary carbon dioxide pipeline transport for blue hydrogen production. As part of the East Coast Cluster, the captured carbon dioxide will be stored permanently offshore in the Northern Endurance Partnership’s facility in the UK’s North Sea.

Uniper continues to develop a separate green hydrogen project, using electrolytic hydrogen production technology, as part of the overall Humber Hub development at Uniper’s Killingholme site. Uniper, along with its project partners, will shortly complete the Project Mayflower feasibility study, part funded by the Department for Transport’s Clean Maritime Demonstration Competition, administered by InnovateUK, looking at the decarbonisation of port related activities at the Port of Immingham.

#### **About Shell**

Shell has played a vital role in powering the UK’s industry, transport systems and homes for more than 120 years. Today, Shell is a global group of energy and petrochemical companies, operating in more than 70 countries. In the North Sea, we have explored for and produced oil and gas for more than 50 years. We are now one of the region’s biggest producers and produce around 10% of the UK’s oil and gas and provide the processing infrastructure that enables around 20% of the UK’s gas supply to reach homes and businesses.

Globally, Shell is building an integrated power business that will provide customers with low-carbon and renewable energy solutions. Shell Renewables and Energy Solutions spans trading, generation and supply. We offer integrated energy solutions including hydrogen, solar, wind and electric vehicle charging at scale, while buying nature-based carbon credits and using technology to capture emissions from hard-to-abate sectors of



the energy system. Today Shell has deployed or is developing more than 6 gigawatts of wind power generation capacity across North America, Europe, the UK and Asia, and in January 2022 Shell secured the seabed leases to develop up to 5 gigawatts of floating offshore wind in the ScotWind leasing round.

Shell's target is to become a net-zero emissions energy business by 2050, in step with society. For more information on our net-zero emissions customer-first strategy visit [here](#).

### **About Uniper**

Uniper is a leading international energy company, has around 11,500 employees, and operates in more than 40 countries. The company plans for its power generation business in Europe to be carbon-neutral by 2035. Uniper's roughly 33 gigawatts of installed generation capacity make it one of the world's largest electricity producers. The company's core activities include power generation in Europe and Russia as well as global energy trading and a broad gas portfolio, which makes Uniper one of Europe's leading gas companies. In addition, Uniper is a reliable partner for communities, municipal utilities, and industrial enterprises for planning and implementing innovative, lower-carbon solutions on their decarbonization journey. Uniper is a hydrogen pioneer, is active worldwide along the entire hydrogen value chain, and is conducting projects to make hydrogen a mainstay of the energy supply. The company is based in Düsseldorf and is one of Germany's largest publicly listed energy supply companies. Together with its main shareholder Fortum, Uniper is also Europe's third-largest producer of zero-carbon energy.

### **About Uniper UK**

In the UK, Uniper owns and operates a flexible generation portfolio of seven power stations, a fast-cycle gas storage facility and two high pressure gas pipelines, from Theddlethorpe to Killingholme and from Blyborough to Cottam. We also have significant long-term regasification capacity at the Grain LNG terminal in Kent, to convert LNG back to natural gas.

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### **Uniper Cautionary Note**

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### **Shell Cautionary note**

The companies in which Shell plc directly and indirectly owns investments are separate legal entities. In this press release "Shell", "Shell Group" and "Group" are sometimes used for convenience where references are made to Shell plc and its subsidiaries in general. Likewise, the words "we", "us" and "our" are also used to refer to Shell plc and its subsidiaries in general or to those who work for them. These terms

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#### Forward-Looking Statements

This press release contains forward-looking statements (within the meaning of the U.S. Private Securities Litigation Reform Act of 1995) concerning the financial condition, results of operations and businesses of Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "aim", "ambition", "anticipate", "believe", "could", "estimate", "expect", "goals", "intend", "may", "milestones", "objectives", "outlook", "plan", "probably", "project", "risks", "schedule", "seek", "should", "target", "will" and similar terms and phrases. There are a number of factors that could affect the future operations of Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this press release, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell's products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, judicial, fiscal and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects and delays in the reimbursement for shared costs; (m) risks associated with the impact of pandemics, such as the COVID-19 (coronavirus) outbreak; and (n) changes in trading conditions. No assurance is provided that future dividend payments will match or exceed previous dividend payments. All forward-looking statements contained in this press release are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Additional risk factors that may affect future results are contained in Shell plc's Form 20-F for the year ended December 31, 2021 (available at [www.shell.com/investor](http://www.shell.com/investor) and [www.sec.gov](http://www.sec.gov)). These risk factors also expressly qualify all forward-looking statements contained in this press release and should be considered by the reader. Each forward-looking statement speaks only as of the date of this press release, April 12, 2022. Neither Shell plc nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this press release.

#### Shell's net carbon footprint

Also, in this press release we may refer to Shell's "Net Carbon Footprint" or "Net Carbon Intensity", which include Shell's carbon emissions from the production of our energy products, our suppliers' carbon emissions in supplying energy for that production and our customers' carbon emissions associated with their use of the energy products we sell. Shell only controls its own emissions. The use of the term Shell's "Net Carbon Footprint" or "Net Carbon Intensity" are for convenience only and not intended to suggest these emissions are those of Shell plc or its subsidiaries.

#### Shell's net-Zero Emissions Target

Shell's operating plan, outlook and budgets are forecasted for a ten-year period and are updated every year. They reflect the current economic environment and what we can reasonably expect to see over the next ten years. Accordingly, they reflect our Scope 1, Scope 2 and Net Carbon Footprint (NCF) targets over the next ten years. However, Shell's operating plans cannot reflect our 2050 net-zero emissions target and 2035 NCF target, as these targets are currently outside our planning period. In the future, as society moves towards net-zero emissions, we expect Shell's operating plans to reflect this movement.

#### Forward Looking Non-GAAP measures

This press release may contain certain forward-looking non-GAAP measures such as cash capital expenditure and divestments. We are unable to provide a reconciliation of these forward-looking Non-GAAP measures to the most comparable GAAP financial measures because certain information needed to reconcile those Non-GAAP measures to the most comparable GAAP financial measures is dependent on future events some of which are outside the control of Shell, such as oil and gas prices, interest rates and exchange rates. Moreover, estimating such GAAP measures with the required precision necessary to provide a meaningful reconciliation is extremely difficult and could not be accomplished without unreasonable effort. Non-GAAP measures in respect of future periods which cannot be reconciled to the most comparable GAAP financial measure are calculated in a manner which is consistent with the accounting policies applied in Shell plc's consolidated financial statements.

The contents of websites referred to in this press release do not form part of this press release.

We may have used certain terms, such as resources, in this press release that the United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. Investors are urged to consider closely the disclosure in our Form 20-F, File No 1-32575, available on the SEC website [www.sec.gov](http://www.sec.gov).