Oil and Gas News Briefs Compiled by Larry Persily January 20, 2022

Oil-price rally sparks talk of \$100 crude

(Bloomberg; Jan. 19) - Surging demand, fading Omicron fears and OPEC+'s inability to ramp up output have underpinned an eye-watering rally in oil prices. Global benchmark Brent crude has jumped 25% to around \$88 a barrel since the end of November. Some in the market now think it's a question of when — not if — oil hits triple digits, somewhere it hasn't been since 2014. Goldman Sachs said this week it sees prices reaching \$100 in the third quarter as consumption surprises to the upside.

That would add to the already considerable inflationary pressure in the global economy, causing a headache for central banks and governments. But it's not a fait accompli. U.S. shale is coming back and could restrain the rally, while all eyes are on China to see if Omicron can breach COVID-19 defenses that have proved mostly impenetrable.

Oil has now more than recovered from the discovery of Omicron in late November, which sent Brent tumbling below \$70 a barrel. The relative mildness of the variant, high vaccination rates in much of the developed world, and a general reluctance to impose harsh lockdowns meant that a major hit to oil consumption didn't happen. Demand is roaring, with spot-market cargoes being snapped up. With the exception of a major virus outbreak in China or a scary new strain emerging, it's hard to see a demand reversal.

While U.S. oil output has been increasing it's still not enough to cool the price rally. Supply from the Permian Basin — the most prolific shale patch that spans Texas and New Mexico — rose to a record in December. Low production costs make the Permian the most appealing to drillers eager to cash in on rising prices, but higher overheads in other areas and supply-chain snarls have so far stifled a faster ramp-up in U.S. activity.

OPEC officials privately acknowledge \$100 oil is possible

(Reuters; Jan. 18) - Oil's rally may extend in the next few months due to recovering demand and limited capacity in OPEC+ to add supply, while prices could break \$100 a barrel, OPEC officials have told Reuters. Oil last traded at \$100 a barrel in 2014, after averaging \$110 a barrel over the previous two years. Rising U.S. shale output and competition among the world's top producers in 2014 heralded a period of lower prices that appears to be ending as the global economy emerges from the pandemic.

Until recently, the prospect of a return to triple digits was viewed as remote, but the market has recovered quickly from the unprecedented slump in demand sparked by the

pandemic in 2020. Brent crude is trading at around \$87 a barrel, a seven-year high, after a 50% gain in 2021 as demand recovered and OPEC and its allies, known as OPEC+, only cautiously eased their supply curbs.

Outages in Libya and elsewhere, plus a limited impact on demand from the Omicron coronavirus variant, have fueled further gains in 2022. Reuters spoke privately to five OPEC officials, some holding positions on OPEC and OPEC+ committees, about the prospect of \$100 oil. Only one said it was unlikely, while the others did not rule it out or said it may happen. "There will be increasing pressure on prices in at least the next two months," said an OPEC source from a larger producer. "Under these circumstances, the price of oil may be close to \$100 but it will certainly not be very stable."

IEA expects global oil demand to pass pre-pandemic levels this year

(S&P Global Platts; Jan. 19) – Global oil demand is set to surpass pre-pandemic levels in 2022 as fears over the latest coronavirus wave subside, creating the potential for another "volatile" year of oil prices, the International Energy Agency said Jan. 19. In its monthly oil market report, the IEA raised its demand estimates by 200,000 barrels per day for both 2021 and 2022, to reflect clear signs that impact on economic activity and oil demand from the Omicron variant remained "relatively subdued."

World oil demand was seen rising by 5.5 million barrels per day in 2021 and by 3.3 million barrels per day in 2022, the IEA said, surpassing its pre-pandemic levels by 200,000. Then, during the fourth quarter of 2021, the IEA said global demand "defied expectations" rising by 1.1 million barrels per day to 99 million. "If demand continues to grow strongly or supply disappoints, the low level of stocks and shrinking spare capacity mean that oil markets could be in for another volatile year in 2022." the IEA said.

The IEA's latest report comes as oil prices hit fresh seven-year highs at over \$88 per barrel, supported by a growing consensus that oil demand and supply balances are tightening this year, with some market watchers predicting Brent futures will hit \$100 later in the year. On the supply side, the IEA said it now sees OPEC+ spare capacity shrinking to 2.6 million barrels per day later this year from 5 million currently if the producer group continues unwinding its supply cuts and Iran remains under sanctions.

Russia falling behind OPEC+ oil production target

(Bloomberg; Jan. 18) - Russia may be able to deliver only about half of its scheduled increases in crude production over the next six months, joining the ranks of OPEC+ nations that are struggling to ramp up even as fuel demand rebounds from the pandemic. With crude already trading above \$85 a barrel in London, the outlook for

Russian output leaves the global market looking even tighter than expected. It risks amplifying the energy-price surge that's contributing to the highest inflation in decades.

In the Asian market, Russia's premium ESPO crude — a favorite grade among Chinese processors — has surged to the highest since November amid falling inventories in China, traders said. The OPEC+ member is supposed to be adding 100,000 barrels a day to the market each month, but its output growth ground to a halt in December. Due to last year's drop in drilling, most analysts polled by Bloomberg News expect Russia's monthly increases can't go above 60,000 barrels a day in the first half of 2022.

The Organization of the Petroleum Exporting Countries and its allies are in the process of restoring output halted during the pandemic. The coalition is supposed to pump an additional 400,000 barrels a day each month, yet the actual production increases have fallen short due to factors ranging from internal unrest to insufficient long-term investment in a number of countries. Last month, OPEC boosted output by just 90,000 barrels a day. Russia's production started stagnating in November, and in December it dropped below its OPEC+ quota for crude, according to Bloomberg estimates.

Saudis say they will not boost production to make up for shortfalls

(S&P Global Platts; Jan. 17) - Saudi Arabia does not plan to pump more crude beyond its quota to make up for other OPEC+ members' production shortfalls, the kingdom's energy minister, Prince Abdulaziz bin Salman, said Jan. 17, despite increasingly tight spare output capacity among the group. OPEC and its allies are hoping to restore their production to pre-pandemic levels by late 2022 through a series of monthly 400,000 barrels-per-day production hikes, but not all members are likely to get there, having already hit their maximum output levels or come close to it.

That has raised doubts about the OPEC+ alliance's ability to keep markets amply supplied and led to speculation other members with sufficient spare capacity — namely Saudi Arabia and the UAE — would have to step in to keep the market well-supplied. "We have an OPEC+ agreement, and I have to honor my colleagues and my friends," Prince Abdulaziz told S&P Global Platts in Dubai on the sidelines of a conference.

However, UAE Energy Minister Suhail al-Mazrouei said the OPEC+ alliance would ensure there is no supply squeeze in the market, so as to maintain stable prices. Platts estimates OPEC+ members with quotas pumped some 620,000 barrels per day below their combined caps in December. That, along with the resilience of oil demand to the Omicron variant, has some analysts predicting oil prices could hit \$100 a barrel or more in 2022. OPEC+ ministers next meet Feb. 2 to decide on their March production levels.

Jet fuel markets showing recovery

(Bloomberg; Jan. 17) - The jet fuel market is soaring in Europe as global air traffic withstands the impact of the Omicron virus strain. One of the fuel's most important market metrics, its differential to diesel, on Jan. 14 surged to its highest since September 2019 — long before COVID-19 decimated the continent's aviation industry.

"We're tight supply everywhere," said Mark Williams, an oil products and refining analyst at Wood Mackenzie. For Europe, "everyone was expecting demand to take a hit because of Omicron. That hasn't emerged — so jet demand has stayed pretty healthy." While flights are still way down from 2019, they're only slightly below where they were in November, according to data from FlightRadar24, which tracks commercial flights. That is in stark contrast to the plunge in global traffic and fuel demand in the spring of 2020.

The strong European prices aren't being reflected everywhere, however. China is slashing flights to fight Omicron outbreaks and Hong Kong recently banned flights from eight countries, including the U.S. Globally, jet fuel demand is forecast to surge about 45% from late January to early July, according to BloombergNEF, with growth particularly strong in North America and Western Europe.

Permian drillers face rising water disposal costs to avoid earthquakes

(The Wall Street Journal; Jan. 17) - Frackers in America's hottest oil field are facing an expensive new setback: earthquakes. Shale companies in West Texas will have to pay more to move millions of barrels of wastewater that surfaces from oil wells in the Permian Basin and can aggravate tectonic fault lines when injected underground. A recent spate of earthquakes prompted state regulators to stop companies from pumping as much water underground, forcing some drillers to move water farther afield.

Most of the earthquakes have been relatively mild so far and have caused limited property damage. The rising number of earthquakes has led the Texas Railroad Commission, which regulates the oil industry, to shut or sharply reduce the capacity of scores of so-called disposal wells to protect nearby communities. The wells are used by large oil companies to inject wastewater into geologic formations. The limitations have left drillers to find other ways to transport wastewater, including high-cost trucking.

Trucking the water to disposal wells elsewhere is about five times the cost of using pipelines, according to shale executives and analysts, though some companies said they can avoid trucking by sending water through pipelines to regions unaffected by seismic activity. Producers' collective annual cost to jettison that water could increase, conservatively, by more than \$200 million if they have to truck it all out, according to market intelligence firm Sourcenergy. If companies are unable to find new means of disposal, they may have to curtail tens of thousands of barrels a day of oil production.

Chinese LNG importers look to sell surplus gas

(Bloomberg; Jan. 19) - China, the world's biggest buyer of liquefied natural gas, has kicked off an unprecedented effort to resell some of its supply, alleviating global fuel shortage fears that have sparked record prices this winter. Two of China's biggest state-owned LNG importers released tenders this week offering to sell dozens of cargoes for delivery through November. With the end of the peak winter demand season within sight, Chinese traders are betting that the nation will avoid a crippling supply crunch and can offload excess cargoes.

The move has surprised traders and triggered a sell-off in spot gas from Asia to Europe. More LNG could be sent to energy-starved Europe, helping to ease pressure from its abnormally low inventories and curtailed supplies from top exporter Russia. CNOOC is offering to sell one cargo per month between May and November, while China Petroleum and Chemical Corp., known as Sinopec, is seeking to sell as many as 45 cargoes for delivery through October, according to traders. The tenders represent about 4% of China's LNG imports last year in one of the biggest offerings from the nation.

China spent much of last year buying spot LNG supplies and restocking inventories in preparation for this winter. But milder weather has left its energy giants with a glut of scheduled shipments. Reselling the cargoes into the pricey spot market could provide a profitable windfall for traders.

Qatar plans to regain title by 2026 as world's largest LNG producer

(Gulf Times; Qatar; Jan. 17) - Qatar is slated to regain its position as the largest exporter of liquefied natural gas by 2026 with the North Field output coming on stream, according to the latest Qatar Economic Outlook. Qatar's LNG exports ranked second to Australia in 2020, with the U.S. projected to take the No. 1 spot this year. The expansion is planned to boost Qatar's capacity from the current 77 million tonnes per year of LNG to 110 million tonnes in the first phase of North Field East, and then 126 million tonnes starting by the end of 2027 with the North Field South project.

The cost of the liquefaction capacity expansion is estimated at \$28.75 billion. Aiming to cover part of the project's costs by self-financing, QatarEnergy already has issued bonds amounting to \$12.5 billion. QatarEnergy has signed agreements with several major Korean and Chinese shipyards to reserve LNG ship construction capacity for building as many as 100 new LNG carriers at an estimated cost of about \$19 billion.

U.S. LNG returns through Panama Canal for higher price in Europe

(Bloomberg; Jan. 18) - Getting liquefied natural gas to energy-starved Europe is so profitable that one tanker carrying the fuel made a U-turn in the Pacific Ocean, crossed the Panama Canal twice and spent nearly \$1 million in tolls just to get to Europe. After nearly two months at sea, the Hellas Diana tanker carrying U.S. LNG declared the U.K. as its destination, underscoring the extent to which Europe's energy crisis continues to draw cargoes away from more traditional seasonal markets in Asia.

European natural gas prices are so high and shipping rates to the continent are so low that the costly, six-week voyage around the world would still be profitable even after paying an estimated \$950,000 in tolls, said Hadrien Collineau, an LNG industry analyst with the London office of consultancy firm Energy Aspects. The tanker left Cheniere Energy's Corpus Christi LNG terminal in Texas on Nov. 28, crossed through the Panama Canal and was on a path to Asia when it abruptly turned around on Dec. 20.

The tanker crossed through the canal a second time and then across the Atlantic Ocean to European waters, where it's expected to dock at Milford Haven on Jan. 19. Though the difference in prices between Europe and Asia has narrowed significantly, the lower shipping costs to cross the Atlantic still make it a more attractive market for U.S. cargoes. That may not last for long, with Citigroup analysts forecasting that gas prices on the continent have likely peaked this winter.

Gulf Coast LNG developer plans investment decision this year

(Reuters; Jan. 18) - Delfin LNG said it plans to make a final investment decision this year to go forward with its proposed Gulf of Mexico floating liquefied natural gas export project offshore Louisiana. "This is the best macro environment that the LNG business has ever seen," Delfin Chief Executive Dudley Poston told Reuters this week, noting he was "very confident" the company would make FID this year.

Delfin is one of 12 or so North American LNG projects that delayed decisions to start construction in 2020 and 2021 in part because coronavirus demand destruction made customers unwilling to sign enough long-term deals needed to finance the multibillion-dollar facilities. "We're now seeing the most sustainable interest from LNG buyers ... that we've seen in years and Delfin only needs two to three buyers," Poston said.

Delfin's project would send gas to up to four offshore liquefaction vessels that could each produce about 3.5 million tonnes per years of LNG. Poston said each vessel would cost about \$2 billion, with the first expected to enter service around 2026, four years after the FID. This would be the company's first LNG production venture.

Japan plans to explore offshore gas field

(S&P Global Platts; Jan. 17) - Japan intends to explore 1.4 trillion cubic feet of estimated recoverable natural gas reserves more than 60 miles offshore Shimane and Yamaguchi prefectures in the west that could produce 46.7 billion cubic feet of gas per year after starting output in 2032, an official at the Ministry of Economy, Trade and Industry told S&P Global Platts on Jan. 17.

The move follows "considerable gas shows" in a series of government-funded drilling operations conducted a couple of years ago by Inpex, marking the first domestic project to enter an exploration phase with the government's support from initial geological structure surveys, the official said. Inpex, which has obtained prospecting rights, will start exploratory drilling in a water depth of about 780 feet.

The block could more than double Japan's recoverable gas reserves from the current 1 tcf, the ministry official said. The exploration, operated 100% by Inpex, will last until 2028, with state-owned Japan Oil, Gas and Metals National Corp. providing a 50% equity investment, about \$144 million, the official said, adding that production is expected to start in 2032 if the project begins development as planned by 2028. This would be Japan's first gas project since its only offshore field started production in 1990.

Gazprom continues to limit natural gas flows to Europe

(Reuters; Jan. 17) - Russian state energy giant Gazprom said Jan. 17 it has not booked any capacity to pump natural gas to Europe through the Yamal pipeline next month, underscoring a sharp drop in Russian exports to the region this month. Gazprom said pipeline exports of Russian gas have tumbled 41% from a year ago so far in January.

Although the Kremlin-controlled company has not booked any capacity through the pipeline for February, this could change as it is able to take part in daily auctions. The link has been operating in reverse mode since Dec. 21, helping to drive up gas prices in Europe. Gazprom has said it needs to keep more gas in Russia to build up its reserves, while Europe has been pulling more gas out of its stockpiles.

Exports of Russian commodities have been under the spotlight amid a broader standoff with the West over Ukraine, as Moscow has initiated talks with the U.S. and NATO in an effort to stop Ukraine from joining the bloc. Russia has also been accused by some politicians and analysts of deliberately withholding gas exports in order to win clearance from Germany and the European Union for its Nord Stream 2 gas line, built to bypass Ukraine. It is not clear when the Yamal-Europe pipeline flow will revert to normal.

Russian control of European storage to blame for gas shortages

(Bloomberg opinion; Jan. 17) – Europe subcontracted its energy security to President Vladimir Putin — and now it's paying the price. If European energy regulators learn any lesson from this winter's soaring gas and electricity prices, it ought to be that they need a new set of rules governing gas storage ahead of the cold winter months.

It seemed like such a good idea allowing Gazprom — Europe's major gas supplier — to buy up storage facilities close to its customers. After all, Russia has been a reliable supplier of gas to Europe since the 1960s, with flows of the vital winter heating and power generation fuel largely untroubled by the Cold War, the breakup of the Soviet Union and the subsequent reassertion by Russia of its superpower status.

By selling gas storage sites to Gazprom, European consumers retained the comfort of a large store of readily available fuel on their doorstep, without distribution companies and utilities having to buy the gas until they needed it. The European utilities were happy to let Gazprom incur the cost of buying the gas and storing it when there wasn't a profit to be made in storage. But the same utilities are crying today about the lack of gas.

The system works just fine, as long as the storage was filled before the cold weather comes. This winter, they weren't. Gazprom, which controls nearly one-quarter of Germany's gas storage capacity, failed to fill its caverns. Gazprom either couldn't, or wouldn't, fill the storage it owns. The result for Europe is the same: fears of shortages and skyrocketing prices. Ownership of gas storage facilities in Europe ought to come with an obligation to fill them ahead of winter, backed up by legal sanction if they aren't.

Stopgap measures unlikely to tame Europe's energy price escalation

(Bloomberg; Jan. 16) - Europe is gripped by one of the worst energy crunches in history, forcing politicians to step in as soaring prices threaten to leave millions of households unable to pay their bills. But with markets signaling that the crisis will last way beyond the winter, the dilemma facing leaders is that their stopgap measures are unlikely to be enough. The cost of electricity and gas across the continent already looks like one of the biggest challenges as nations navigate their way out of the pandemic.

Ministers in the five biggest European economies — Germany, the U.K., France, Italy and Spain — have so far come up with a patchwork of grants and time-limited tax cuts to help consumers heat and power their homes. Indeed, the common thread seems to be to hope that the problem goes away while also leaning more on companies. Electricite de France shares plummeted by a record Jan. 14 as the French government confirmed plans to force the company to sell more power at a hefty discount.

Gas more than tripled last year and energy companies, analysts and traders all say that high prices are set to persist, already a key driver of inflation. Prices have eased from

their peak, yet the weather may get colder. There's also mounting tension with Russia over a possible invasion of Ukraine, which could disrupt supplies. "The scale of the crisis makes government measures insufficient to cover all impacts across the economy," said Simone Tagliapietra, a fellow at European economic thinktank Bruegel.

Another U.K. energy retailer fails under rising wholesale prices

(Bloomberg; Jan. 18) - U.K. supplier Together Energy Retail collapsed, the latest casualty in the crisis driven by surging wholesale energy prices. The company with 176,000 domestic customers, part-financed by a northern England government council, is the 25th British retail energy supplier to fold since the start of August and takes the tally of affected households past 4 million. The government is under increasing pressure to act to ease the burden on households and stem the tide of companies going under.

While natural gas and electricity prices have surged, companies in the U.K. are unable to fully pass on the costs to their customers due to a price cap set by the regulator Ofgem. The limit is scheduled to be raised in April and again in October, and the government is in talks with energy companies to try to soften the blow for households already contending with soaring inflation.

"The sustained increase in wholesale prices and the securities required to continue to forward purchase the energy have meant that it is untenable for us to continue," Together Energy Retail said in a statement on its website. The company is partly financed by northern England's Warrington Borough Council, which owns about half of Together. Ofgem will now choose another supplier for its customers. Together reported a post-tax loss of 3.8 million pounds (\$5.2 million) in the 2020 financial year.

Europe's smelters ask government aid from high energy prices

(Bloomberg; Jan. 18) - A group of Europe's leading metal producers has called on governments to deploy a package of measures including state aid and tapping national gas reserves to ease the power crisis and avert further smelter shutdowns. Eurometaux, which represents producers including Glencore, Rio Tinto and Norsk Hydro, sent a letter to the European Commission warning that more producers could be forced to cut output or close plants without additional support to protect smelters from rising power costs.

Aluminum and zinc producers have been hit particularly hard by soaring gas and electricity prices, with smelter cutbacks and closures over the past few months sparking regional shortages and sending product prices sharply higher. About 650,000 tons of aluminum capacity has been curtailed due to the crisis already, which equates to about 30% of the region's total, the group said in the letter.

While power prices have retreated from last month's peaks, smelters are still exposed to heavy losses from the gas spot market. Europe's gas inventories, meanwhile, are far below the levels usual for this time of year, with a lack of supply from Russia creating the risk of further price spikes through the winter. In the letter, Eurometaux suggested using national gas reserves to stabilize the market, as well as measures to make sure that carbon prices don't rise too high or too quickly as ways to lower costs.

Scotland awards rights to 25 gigawatts of offshore wind power

(Bloomberg; Jan. 17) - Scotland awarded rights for a massive offshore wind development more than twice the size of the U.K.'s current capacity, in a move that surprised the market for its scale and was welcomed by environmentalists. The list of winning projects in the tender adds up to nearly 25 gigawatts, far bigger than the 10 gigawatts that Scottish authorities had anticipated ultimately being built.

If constructed, the projects will help provide clean power for the electrification of cars, home heating and factories that will drive a doubling of electricity demand in the next three decades. In all, the Scottish government will net about 700 million pounds (\$955 million) in fees from the applicants. The U.K. counts offshore wind as a crucial homegrown source of clean electricity that can reduce the nation's reliance on fossil fuels — and help reach net-zero carbon emissions by 2050.

Iberdrola's Scottish Power unit won leases for the most capacity of any developer. Some of the fixed-bottom sites, such as the nearly 3 gigawatts of capacity won by BP and Germany's EnBW Energie Baden-Wuerttemberg, will likely be some of the earliest to come online, potentially before 2030. Still, there will be major hurdles to turning the wind farm plans into reality, such as planning permissions, electric grid capacities and sourcing turbines. Plus, most of the sites are for floating projects, a nascent technology that will likely require significant government support to make them financially viable.

North Sea majors will spend more money on wind than oil and gas

(Bloomberg; Jan. 18) - The biggest North Sea fossil-fuel producers are set to invest more in the region's wind power in the coming years than in its oil and gas. Shell, TotalEnergies and BP, which won rights to develop wind farms off Scotland this week, are shifting their spending priorities as they retreat from the aging oil province amid the accelerating energy transition.

"Even before the ScotWind round, TotalEnergies was set to spend more over the next few years on offshore wind than on oil and gas development in the U.K.," said Norman Valentine, a research director at global energy consultant Wood Mackenzie. "BP's capital investment in U.K. offshore wind was also set to eclipse oil and gas by middecade even without its new ScotWind projects."

BP, which aims to spend \$5 billion a year on renewables by 2030, plans a \$10 billion Scottish wind project. For Shell, its two proposed Scottish sites could push its wind investment above U.K. oil and gas spending in the second half of this decade, Valentine said. While the majors still retain a presence in North Sea oil and gas, they're a shadow of what they were. Half a century ago Shell and BP discovered the Brent and Forties fields, which at their peak each pumped half a million barrels a day. Shell is dismantling Brent, while BP no longer owns Forties, whose daily output has fallen to 20,000 barrels.

Kuwait suffers under global warming, but doing little to change

(Bloomberg; Jan. 16) - Trying to catch a bus at the Maliya station in Kuwait City can be unbearable in the summer. About two-thirds of the city's buses pass through the hub, and schedules are unreliable. Small shelters offer refuge to a handful of people, if they squeeze. Dozens end up standing in the sun, sometimes using umbrellas to shield themselves. Global warming is smashing temperature records all over the world, but Kuwait — one of the hottest countries on the planet — is becoming unlivable. In 2016, thermometers hit 132 Fahrenheit, the highest reading on Earth in the past 76 years.

For wildlife, the country almost is inhabitable. Dead birds appear on rooftops in the brutal summer months, unable to find shade or water. Vets are inundated with stray cats, brought in by people who've found them near death from heat exhaustion and dehydration. Even wild foxes are abandoning a desert that no longer blooms after the rains for what small patches of green remain in the city, where they're treated as pests.

Unlike countries that are struggling to balance environmental challenges with their teeming populations and widespread poverty, Kuwait is OPEC's No. 4 oil exporter. Home to the world's third-largest sovereign wealth fund and just over 4.5 million people, it's not a lack of resources that stands in the way of cutting greenhouse gases, but rather political inaction. So far, there's been little progress on plans to produce 15% of Kuwait's power from renewable sources by 2030, from a maximum of 1% now.

Exxon pledges net-zero carbon emissions by 2050

(Reuters; Jan. 18) - ExxonMobil on Jan. 18 pledged to cut to zero its net carbon emissions from its global operations by 2050, catching up with rivals that are minimizing their own carbon footprints. Exxon's 2050 plan, first mulled last year, covers emissions from its oil, gas and chemical production and from the power those operations consume, so-called Scope 1 and 2 targets. It made no commitment for emissions from consumers using those products, known as Scope 3.

"We are developing comprehensive roadmaps to reduce greenhouse gas emissions from our operated assets around the world," Exxon CEO Darren Woods said in a statement. The company is "working with our partners to achieve similar emission-reduction results" in properties where Exxon is not in charge of operations, he said.

U.S. producers have lagged many European rivals in embracing climate agreement goals of reducing the emissions that contribute to global warming. BP and Shell have pledged to cut emissions from fuels and products sold to consumers. Exxon's pledge puts it a step ahead of Chevron, which last October pledged to bring emissions from its upstream operations to zero by 2050 and lower the intensity of emissions elsewhere.

Australia's offshore oil and gas players pay decommissioning costs

(Sydney Morning Herald; Jan. 17) - Australia's big offshore oil and gas players face a massive spend to clean up their act after a federal government clampdown in response to the threat of a \$1.2 billion invoice to deal with an aging oil vessel. Decommissioning wells, platforms and pipelines in Australian waters is estimated to cost \$US40.5 billion to 2050, according to a federal government-sponsored report released in 2020, with half the work starting this decade. Companies have had three tactics to avoid this cost: sell the assets, delay, or bail out by arguing that facilities should be left in the ocean.

In 2015, Woodside played the sell tactic, and it has backfired expensively on the entire industry, with tougher enforcement of decommissioning obligations. Woodside was preparing to decommission its Northern Endeavour oil production vessel in the Timor Sea but then changed plans and sold it to a new one-man company Northern Oil and Gas Australia. But the company didn't have the financial strength to withstand technical and safety problems that cut production and went into voluntary liquidation in 2020.

The responsibility for the Northern Endeavour fell to the federal government, which has committed more than \$200 million so far to keep the vessel safe and prepare it for decommissioning. However, the bill will rest with the industry, not the taxpayer, after a levy on offshore oil and gas production was legislated in late 2020. The government also will check on the financial strength of buyers of offshore facilities and impose trailing liabilities that make sellers liable for decommissioning if new owners cannot pay. The changes were a rare case of the industry not getting its way with the government, and have halted a rush by oil and gas companies to exit aging Australian assets.

China hit record-high coal production in 2021

(Reuters; Jan. 16) - China's coal output hit record highs in December and in the full year of 2021, as the government continued to encourage miners to ramp up production to ensure sufficient energy supplies for the winter heating season. China, the world's

biggest coal miner and consumer, produced 384.67 million tonnes of the fossil fuel last month, up 7.2% year-on-year, data from the National Bureau of Statistics showed on Jan. 17. This compared with a previous record of 370.84 million set in November.

For the full year of 2021, output touched a record 4.07 billion tonnes, up 4.7% on the previous year. Since October, authorities have ordered coal miners to run at maximum capacity to tame red-hot coal prices and prevent a recurrence of September's nationwide power crunch that disrupted industrial operations and added to inflation.