

Norway plans exit from GO market

Norway's new government said this week it wants to withdraw from the guarantees of origin (GO) market

In a policy statement, however, the Labour and Centre parties did not specify how or when they wanted to pull Norway out of GOs, with experts telling Montel previously that such a move would face legal hurdles.

The new government will also need support of at least one opposition party since it does not have an outright majority in parliament. A proposal by Labour to pull Norway out of the system was rejected



by parliament in 2020.

Labour said then that the system removed a competitive advantage for Norwegian industry, since companies were forced to buy GOs to prove their power supply came from renewables despite the fact the country's power mix was already close to 100% green.

A Norwegian exit would potentially have a significant impact on the market, with the country being the single largest

supplier of GOs thanks to its 140 TWh/year hydropower production.

It would also be strongly at odds with EU policy, where the GO market was given a key role in its so-called Fit for 55 climate package, which was due to bring in stricter climate goals.

The Norwegian coalition, meanwhile, said it would not approve new cross-border power links for at least the next four years. *OV/GOM/HM*

Norwegian court rules wind farm licence invalid

Norway's Supreme Court has ruled the licence for two wind farms in central Norway, of 544 MW combined, is invalid because it violates the rights of the indigenous population

"We are of course surprised by the verdict," said Torbjorn Steen, spokesman for farm operator Fosen Vind. "We received a valid licence to build the wind farms from Norwegian authorities in 2013 after what we considered was a long and thorough process."

Steen said it was too early to know how the ruling would affect operations at the Roan (256 MW) and Storheia (288 MW) wind farms. "Now we will have to await the actions of the oil and energy ministry before we can say more about the consequences."

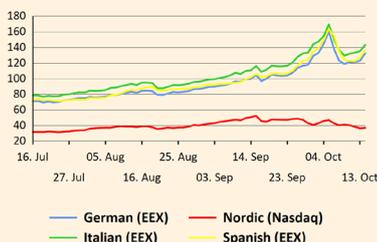
The ministry agreed it was too early to know the consequences of the court decision because it requires further clarification.

The two wind farms are part of the giant 1 GW Fosen project in central Norway, which became the country's largest when finished last year. Norwegian power producer Statkraft is the main owner.

The ruling could affect other wind farm projects where crucial Sami interests are at stake, the head of the Sami Parliament in Norway, Aili Keskitalo, told Adresseavisen. *GOM*

Power

European Power, front year (base), EUR/MWh



TGE Polish Power, front year (base), PLN/MWh



ICE UK power, front quarter (base), GBP/MWh



Green steel profitable with CO2 at EUR 80-100/t

The cost of producing steel from green hydrogen could be equally profitable with that produced from fossil fuels with carbon prices at EUR 80-100/t, said green steel consortium Hybrit.

The technology “will break even” despite carbon at that price, Hybrit chairman Andreas Regnell told the SVD Energy Summit in Stockholm.

The outlook for so-called clean steel had improved massively, he added, and in August Hybrit supplied its first unit of carbon-free steel to car manufacturer Volvo, in what it hoped was a revolution that would enable Sweden and other industrial countries to continue producing steel while hitting ambitious climate targets.

Demand had risen much faster than anyone dared to believe 4-5 years ago, said Regnell, pointing to a “snowball” effect.

Henrik Henriksson, CEO of rival H2 Green Steel, said the cost of making steel from green hydrogen – produced from excess renewables – was currently 20-25% higher than from fossil fuels but added the situation could soon change if and when fossil fuels faced higher taxes and clean steel received subsidies.

A shift from fossil fuels to green hydrogen in steel production could potentially boost power demand in Sweden’s metals sector from a few TWh currently to 60-70 TWh by 2045, corresponding to about 45% of the country’s current electricity consumption, industry figures said. *WZ*



Macron announces EUR 1bn for new reactors

France will invest EUR 1bn by 2030 in developing small modular reactors while becoming “the leader” in green H2, says president Emmanuel Macron

Reactors ranging from 10-300 MW would be France's energy investment priority in a wider EUR 30bn plan aimed at boosting the industry, energy, health and food sectors, he added at a press conference outlining plans for the next decade.

Small modular reactors (SMRs) were “a safer technology, with better waste management”, he said, without providing further details.

The new investment “responds to the need to give a boost to innovation in our own nuclear sector” in order to compete with research at the global level, said France’s energy ministry.

“It is not an industrial plan but a research and development plan,” said a ministry spokesman.

The Nuward project, a pair of 170 MW capacity SMRs, developed by EDF and its partners since 2019, will benefit from credits under the plan, the spokesman added.

The aim was to “launch the construction of a prototype before 2030, preferably in

France, so that it will be operational in 2035”, Valerie Faudon, president of the French Nuclear Energy Society (SFEN), a nuclear lobby, told Montel.

Green hydrogen – typically produced from excess renewables – was the second plank of the investment plan, with France planning to build two “giga” factories by 2030. In September 2020, the government said it was targeting 6.5 GW of hydrogen capacity over the next decade.

To take the lead in green hydrogen, France could manufacture hydrogen abroad and then reimport it, or it could use the nuclear fleet for very low-carbon electrolysis, said Macron.

“The 200,000 people employed in nuclear represent an opportunity to reduce CO2,” he said, noting “many projects” were needed to meet European net carbon neutrality goals by 2050.

The government would also allocate EUR 500m to renewables growth and invest massively in decarbonising industry, he added. *MB/LFT*

AI

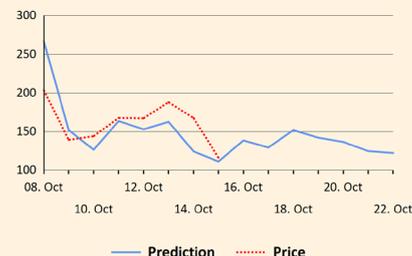
Montel AI Day Ahead Auction forecasts Nord Pool (base), EUR/MWh



Montel AI Day Ahead Auction forecasts France (base), EUR/MWh



Montel AI Day Ahead Auction forecasts Germany (base), EUR/MWh



GOs dip with wholesale power declines

Prices for European guarantees of origin (GOs) traded down in the week to Thursday as the wholesale power market retreated from recent record highs

The benchmark Nordic Hydro Cal 21 contract was between EUR 0.85-1/MWh, according to broker indications. It had traded as high as EUR 1.14/MWh last week. Cal 22 was also trading around EUR 0.10 down at between EUR 1.55-1.65/MWh.

Traders attributed the decrease to a recent drop in prices on the wholesale power market which had hit record highs.

“If electricity prices continue to drop then one would assume that GO prices drop somewhat as well, probably not 100% correlation but some,” one trader added.

There was also a “psychological effect” behind the trend, said Jorge Ruiz, CEO and trader at Meteco. “People see prices falling and think that the whole market is going to fall so they sell their

GOs and the circle continues.”

A lack of buyers as the end of the year approaches could also be contributing to the drop, said Cecilia Lopez Miranda, of Axpo Iberia.

Spanish GOs for domestic production in 2021 were selling at around EUR 0.95-1/MWh.

Hydropower and wind generation in Europe has also recovered from recent lows, which would dampen GO prices, traders agreed.

Norway’s 10-day weather outlook estimated precipitation equivalent to 10.8-13.1 TWh of potential hydropower production, well above the seasonal average of 7 TWh, according to Montel’s Energy Quantified (EQ).

The country’s hydrological balance – a measure of reserves stored in

reservoirs, snow and soil – was set to increase from 13.7 TWh below normal currently to 8.6 TWh below normal in the coming two weeks, EQ data showed.

Average Nordic wind power output was set to jump from 4 GW currently to 12 GW on Thursday.

Nordic wind Cal 21 was trading at EUR 0.97/MWh at one broker this week, with Cal 22 at EUR 1.54/MWh.

Wind GOs previously traded at a premium over hydro but this spread “has definitely vanished as hydro can be even higher a bit than wind these days”, the first trader said.

This would be compounded on forward years by more wind becoming available as German plants fall out of subsidy schemes and become eligible to sell GOs on the market, he added. *RB*

Few climate benefits in non-green hydrogen – study

Only hydrogen produced with renewable energy met eligibility standards under the EU’s renewable energy directive, according to a study published this week.

The study, produced by the International Council on Clean Transportation (ICCT), found various other sources of hydrogen production failed to deliver the requisite 70% reduction in emissions relative to fossil fuels required by the directive, which is presently under revision.

The findings come as the EU prepares recommendations to support hydrogen as an energy carrier that can cut emissions in industrial sectors that depend on fossil fuels and in power generation, which needs long-term sources of clean energy storage.

Hydrogen produced through biomethane or through natural gas in conjunction with carbon capture and storage (CCS) had the potential to deliver significant emissions reduction.

Yet it was possible these methods could emit even more greenhouse gases than fossil alternatives to hydrogen.

“This is due to the potentially high methane leakage rate

during biomethane production or from upstream natural gas extraction and transporting.”

The study noted CCS had the potential to sequester up to 99.9% of associated carbon emissions with fossil-based hydrogen production.

“However, it is unlikely to achieve that capture rate for economic reasons. Current industrial practices can only capture approximately 55% of the total CO2 generated during hydrogen production.”

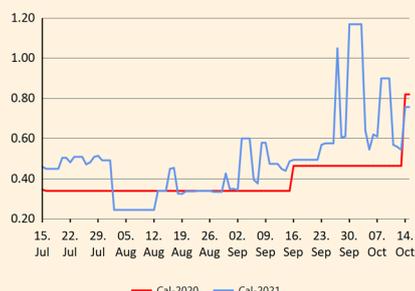
The ICCT recommended the European Commission not encourage fossil-based hydrogen under its review of the renewable energy directive or upcoming legislative packages for clean gasses.

It also recommended excluding crop-based biomethane from climate policies.

“This is because of the significant GHG [greenhouse gas] emissions emerging from direct and indirect land use change associated with crop growing, which fails to meet decarbonisation goals. *NW*

GOs

GPH Hydro GO, EUR/MWh



EEX Wood Pellets, CIF NWE, Front Month, USD/t



Energy crunch spurs PPA demand

Europe's energy crisis has spurred demand for power purchase agreements (PPAs), experts told Montel

Prices increased by EUR 3.59/MWh, 8%, quarter on quarter on aggregate in Q3 to EUR 48.68/MWh, platform provider LevelTen said. This was due to demand "far outstripping" supply amid record highs in wholesale power and carbon.

"Europe's energy crunch is due to a myriad of issues and while it may be temporary, to avoid this crisis in the future, the answer is building more renewable energy capacity," the report said.

Solar PPA prices rose 6% to EUR 44.73/MWh while wind increased 10% to EUR 52.64/MWh.

There was an almost 13% month-on-month rise in September PPA prices to EUR 57.20/MWh from EUR 50.7/MWh at the end of August, according to renewable energy software company Pexapark.

The number of deals signed last month also increased by 75%, six more than in August, it added.

Increases in the gas and wholesale power markets could have a "positive impact in the PPA market in the upcoming period, particularly an increased appetite for shorter-term PPAs and corporate deals", it said in a report.

There was "very broad interest from corporates in PPAs, particularly as they have just been reminded that electricity prices can be extremely volatile and expensive", Flemming Sorensen, vice president of Europe at LevelTen Energy, said.

Many corporates still prefer traditional "vanilla" PPAs, which are contracts for differences on an as-generated shape with a fixed price, he added.

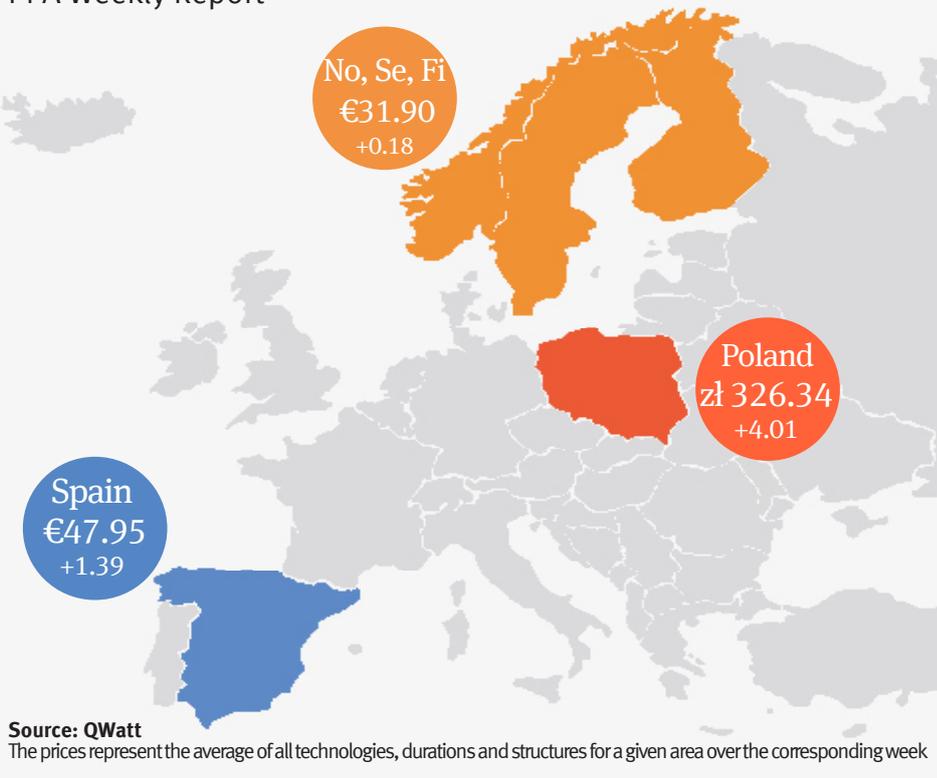
There has also been increasing demand for baseload PPA structures and various pricing structures such as market-following pricing, upside sharing models and sleeved PPAs – when a utility acts as an intermediary between the producer and offtaker.

"Contract structures will continue to evolve to meet customer needs, such as navigating the very dynamic conditions we're seeing on the wholesale market energy market at the moment," he said.

LevelTen and consultancy Aurora have announced a partnership to deliver accelerated PPA transactions in the face of growing demand.

Total European PPA demand, including corporate, utility and electrolyzers, would reach 600 TWh by 2030, Aurora estimated.

PPA Weekly Report



"We've talked to a lot of people who are trying to get PPAs done right now, the big question is how PPA offtakers will look at risk," said Werner Trabesinger, head of quantitative products at Pexapark. Volatility over the past two-to-three weeks was a great deal higher than it used to be and "structurally is there to stay".

However, construction costs, internal long-term price forecasts, logistics costs and national level policy had more of an influence on PPA prices, Freddie Lyons,

senior price analyst at Zeigo PPA platform, said.

There had been a "decoupling" between the wholesale energy markets with "very little increase" in PPA prices, he added.

"As PPAs are long-term contracts, shorter-term fluctuations have little impact."

He said the EUR 3-5/MWh price increase over the past three months was driven by an increase in solar costs rather than the wholesale market. *RB*

Energy Transition Weekly
Are you prepared for the green shift?

Get the latest market, tech, and policy news - sign up to **Montel's Energy Transition Weekly newsletter** and get it for free until 1 September.
<https://info.montel.energy/energy-transition-weekly>

CO2 surges on technicals, gas concerns

European carbon prices made a late surge on Friday on technical trading and gas supply concerns after consolidating in a lower range for most of the week, with uncertainty expected next week

The benchmark Dec 21 EUA contract was last seen trading at EUR 60.83/t, up 4% on last Friday's settlement. It had mostly traded within a EUR 58-60/t range during the week before surging late on Thursday to a high of EUR 61.80/t and touching EUR 61.96/t on Friday.

"The bullish EUA comeback was underpinned by carbon technicals and firmer gas dynamics," Icis analyst Yann Andreassen said.

Dip buying was apparent around EUR 59/t, "a key level which has been acting as support throughout September", he added.

Gas fundamentals should be likely drivers next week amid the risk of political intervention in the markets, including the ETS, in response to soaring energy prices, another analyst said.

"There is a gas capacity auction on Monday which will be closely watched by the market and will provide some volatility, so that will definitely influence EUAs," she added.

The technical situation was "quite positive" after EUAs broke above EUR 60/t and the 50-day moving average, she said.

"It's hard to say [what would happen next week]. Many things are in play," one trader said.

"[Russian president Vladimir] Putin is trying to verbally calm down the gas market. He certainly assures he's able and ready to calm the market. The condition is, I suppose, to allow flows

through Nord Stream 2."

Putin said recently that gas flows into Europe could increase to ease rising prices. At the same time, Russia is awaiting regulatory approval of its Nord Stream 2 gas pipeline linking the country to Germany.

Carbon could "easily" revisit the mid-to-low EUR 50/t range but could also "equally likely" retest EUR 65/t, the trader added.

Volatility at EUR 58-65/t could continue through Q4, with prices "broadly" driven by the same factors as in Q3, according to Energy Aspects analysts.

Some large EU member states were also expected to hand out free carbon allocations imminently but there was unlikely to be a "rush of selling from industrials", they added.

Any further political announcements could also bring volatility to carbon, traders agreed. An EC meeting next Thursday and Friday to discuss the recent energy price hikes "might be closely watched by the market participants and provide further volatility to prices, as some calls for policy intervention might re-emerge", the analyst said.

The EU's financial watchdog Esma plans to examine trading behaviours in the carbon market, though the European Commission noted on Wednesday that there was "no evidence that speculation is a major driver of EU carbon prices". *RB*

EC to ask watchdog to probe CO2 trading activities

The European Commission will ask the EU's financial watchdog Esma to examine trading behaviours in the carbon market and produce a first report by 15 November.

It said there was "no evidence in recent market information that speculation is a major driver of EU carbon prices" in a paper outlining its response to unusually high energy prices this winter.

Prices for the benchmark Dec 21 EUA contract have recently reached record highs in excess of EUR 65/t.

Data from Esma (European Securities and Markets Authority) in mid-September showed more than 90% of positions in the EU ETS were held by compliance buyers and banks, said the EC.

Banks played "an important role in servicing the hedging needs" of the compli-

ance buyers, it said.

Financial participants in the ETS "should increase liquidity" and so help to reduce price volatility. However, the EU executive would ask Esma to "examine more closely patterns of trading behaviours and the potential need for targeted actions".

It would also call in the financial watchdog to provide a more detailed analysis of carbon market trading by early 2022.

The EC would then assess if "certain trading behaviours would require further regulatory actions". Esma is already considering a complaint of market abuse in the ETS amid this year's price surge.

The EC also planned to step up market surveillance in the energy markets, saying it was "investigating as a matter of priority all allegations of possible anti-competitive commercial conduct by

companies producing and supplying natural gas to Europe".

Commercial conduct implied that companies could make their own decisions, without being compelled to behave in a certain way by law, it said.

Russia's Gazprom, the EU's single biggest external supplier, for example, had fulfilled its long-term contractual supply obligations to its EU customers. It had, however, offered little or no extra supply yet, with Europe currently hit by record high gas prices amid historically low storage levels and strong demand.

The EC added it would work with EU energy regulatory agency Acer and national competition authorities to ensure the EU's Remit rules on energy market transparency and integrity were fully enforced. *SH*

ICE EUA, Front Dec, EUR/t



EEX EUA Auction Results & Calendar

	This week's results	Next week's schedule
	EUR/t	Volume
Monday	59.33	2,515,500
Tuesday	58.86	2,515,500
Wednesday	59.63/58.75	2,066,500
Thursday	59.43	2,515,500
Friday	61.01	1,805,000

Energy transition is “too slow” to reach net zero goal – IEA

The world is gradually transitioning towards green energy but the pace is too slow to achieve net zero emissions by 2050, the International Energy Agency (IEA) said.

Achieving the net zero goal would require investment in clean energy projects and infrastructure to more than triple over the next decade, the Paris-based agency said in its annual World Energy Outlook report.

The report comes just weeks before the UN COP26 climate summit in Glasgow, where representatives from nearly 200 nations will discuss how to achieve the 2015 Paris agreement to limit global warming to well below 2C – and preferably to 1.5C – above pre-industrial levels.

The IEA said a net zero emissions by 2050 scenario was consistent with limiting global warming to 1.5C.

Based on the energy and climate measures governments had put in place to date, global average temperatures would still rise when they hit 2.6C above pre-industrial levels in 2100, the IEA said.

But even if all the net zero emissions pledges announced by governments so far were implemented in time and in full, the global average temperature rise in 2100 would be held around 2.1C. Under this scenario, demand for fossil fuels peaks by 2025, and global CO2 emissions fall by 40% by 2050.

Climate scientists have warned that rising temperatures would bring even more catastrophic flooding, bush fires and extreme weather. They largely attributed the increase in warming to greenhouse gas emissions, such as CO2 and methane.

Despite a surge in the deployment of solar and wind, the world’s consumption of coal had grown strongly this year, pushing CO2 emissions towards their second largest annual increase in history, the IEA said.

“The world’s hugely encouraging clean energy momentum is running up against the stubborn incumbency of fossil fuels in our energy systems,” said Fatih Birol, the IEA executive director.

“Governments need to resolve this at COP26 by giving a clear and unmistakable signal that they are committed to rapidly scaling up the clean and resilient technologies of the future. The social and economic benefits of accelerating clean energy transitions are huge, and the costs of inaction are immense.”

Under a net zero emissions scenario by 2050, the consumption of fossil fuels – coal, gas and oil – would need to decline, albeit at different speeds, according to the IEA.

For instance, global oil consumption would need to fall to 25m bbl/day by 2050, compared with around 100m bbl/day today. Although natural gas demand would increase over the next five years, it would then diverge sharply, the IEA said.

“Today’s climate pledges would result in only 20% of the emissions reductions by 2030 that are necessary to put the world on a path towards net zero by 2050,” the IEA’s Birol said.

“Reaching that path requires investment in clean energy projects and infrastructure to more than triple over the next decade. Some 70% of that additional spending needs to happen in emerging and developing economies, where financing is scarce and capital remains up to seven times more expensive than in advanced economies.”

The report stressed that the extra investment to reach net zero by 2050 was less burdensome than it might appear. More than 40% of the required emissions reductions would come from measures that pay for themselves, such as improving efficiency, limiting gas leakage, or installing wind or solar in places where they are now the most competitive electricity generation technologies, the IEA said.

And pursuing the net zero goal would see the market for wind turbines, solar panels, lithium-ion batteries, electrolysers and fuel cells would swell to well over USD 1 trillion a year by 2050 – comparable in size to the current oil market. Also, it would create more opportunities for fuel suppliers to produce and deliver low-carbon gases and create tens of millions of jobs in clean energy and related sectors. *JC*

ENBW plans new gas plant to replace old coal units

German utility ENBW plans to replace two ageing hard coal-fired units in Altbach (769 MW), southwest Germany, with a new gas-fired plant (750 MW) by 2026.

“The Altbach/Deizisau site is to be completely coal free by 2026,” said ENBW board member Georg Stamatelopoulos.

It aimed to operate the new unit with natural gas until “enough hydrogen or other green gases are available”, the company said in statement.

“With the help of the green fuel, the combined cycle plant in Altbach/Deizisau could also be operated in a climate-neutral manner from around the middle of the 2030s and continue to be used flexibly for energy generation.”

The Karlsruhe-based utility would discuss the project with local stakeholders and NGOs in a first step, before taking a final investment decision, it added.

Hard coal-fired unit Altbach 1 (433

MW) has stopped commercial generation but was blocked from decommissioning by the BNA network regulator, as it is considered relevant to maintain grid stability in southern Germany. Altbach 2 (336 MW) is still active in the power market.

ENBW also operated several gas turbines on site, which recently switched to burning oil amid soaring gas prices, Montel reported last week. *CD*

Norway plans tax on onshore wind power

Norway's outgoing government has proposed introducing a tax on onshore wind power production, it said when presenting the national budget for 2022.

It planned to set the tax at NOK 10/MWh (EUR 1/MWh), with the money going to the municipalities which host the wind farms, it said.

The tax would be applied to existing wind farms as well as future projects.

The government also proposed raising the country's CO2 tax by 22% to NOK 766/t (EUR 77.5/t) next year.

The measure was a key part of the country's climate strategy towards 2030, when it has signalled the tax would be NOK 2,000/t in a bid to drive investments from fossil fuels to renewables.

The tax is applied to sectors which are not part of the EU ETS.

Norway is on track to miss its national climate goals, according to the government's latest estimate, which was presented in connection with the budget.

The estimate said the country would emit 41.3m tonnes of greenhouse gases in 2030, just 20% below 1990 levels. This compares with a national target of a 50-55% cut. Measures presented in the budget would however mean it was on track to meet a 40% cut from 2005 levels, as required by the EU.

Other energy-related proposals in the budget include earmarking NOK 3.9bn for carbon capture and storage development, the majority of which would be for its Longship project launched last year.

The government also said it would establish a research and development centre for hydrogen and ammonia. It would provide NOK 30m in annual support for up to eight years and cut electricity consumption taxes by NOK 0.015/kWh to NOK 0.1519/kWh. This would cost the government around NOK 1.1bn in income, it said.

In a bid to boost state coffers, the government proposed more than doubling

the dividend taken from state-owned power producer Statkraft to NOK 7.4bn. It also proposed increasing the dividend from energy major Equinor, in which the government owns 67%, from NOK 7.5bn this year to NOK 13bn next year.

The dividends had been cut sharply this year due to record low power prices in 2020 as well as generally weaker markets amid the pandemic.

The government also proposed to continue waiving VAT on electric vehicles for a further year. The measure has helped make the Nordic nation a world leader in the sector. In the first nine months of 2021, 63% of new car sales in Norway were electric.

The budget would likely face adjustments before being approved by parliament, with a new centre-left minority government set to take office later this week following September's general election. It is not yet clear what changes they would prioritise. *OV/RF*

French energy-intensive firms call for "emergency" aid

France's energy-intensive industry needs "emergency measures" to cope with high energy and gas prices without curbing output and axing jobs, an industry official told Montel.

The government should make an early pay-out of 80% of the carbon offsetting aid for 2021 "as soon as possible", said Guillaume de Goys, vice president of the HEI group, representing the hyper-energy-intensive industry.

The state aid is aimed at establishing a level playing field with countries where CO2 costs less than in the EU.

"The advance will allow industry to pay its bills and get past this blockage," he said. "Without these emergency measures, there will be falls in output and [...] possibly even partial unemployment. It's very clear," said de Goys.

France's energy minister, Barbara Pompili and industry minister Agnes Pannier-Runache will meet representatives of energy-intensive industry – including metallurgy, glass-

making, chemicals, agribusiness – next Tuesday to "identify the levers of action for the short and medium term, to better protect [their] business," according to the ministry.

Carbon offsetting was worth "about EUR 60m" this year for Aluminium Dunkerque, which consumes 4 TWh of power annually, said de Goys, who is also deputy CEO of the Alvanco Aluminium group.

Soaring power prices had led to around EUR 17m in extra costs in Q3 for his firm, he said.

Elsewhere, the UK government looks set to announce financial support – possibly loans worth hundreds of millions of pounds – to energy-intensive industries hit by soaring gas and power prices.

Big industrial consumers in France also want the government to make available more nuclear power at the EUR 42/MWh regulated rate, which is currently three times cheaper than wholesale prices.

Some firms, which did not buy Arenh

power when market prices fell below EUR 42/MWh as the Covid 19 pandemic emerged, now had to purchase all their power for the year at market prices, one industry source said.

The energy-intensive industry was also calling for long-term power purchase contracts, covering 10-15 years at least, at a reduced rate, said de Goys.

"This crucial visibility on the power price will allow energy-intensive industry to maintain and even increase output."

Power use accounts for an average of 20% of production costs for the energy-intensive sector, which consumes 70 TWh annually, but up to 35-40% of production costs for hyper-energy-intensive industry, which accounts for 14 TWh annually. Total French commercial power consumption is around 115 TWh annually.

Last year, the energy-intensive and hyper-energy-intensive industries demanded 70 TWh out of a total 445 TWh of gas consumed in France. *ST*

German green capacity to rise to 180 GW by 2026

Germany's renewables capacity should rise to 180 GW by end-2026, with the bulk of growth stemming from solar power, according to a study conducted for the country's TSOs.

The study said the total would rise from 125 GW at end-2020.

Solar capacity should rise from roughly 52.5 GW in 2020 to 96.8 GW in 2026. Ground-mounted solar parks would account for 40% of the share, up from less than 30%, according to the study by the Cologne-based R2G

energy consultants.

The growth should come from rising subsidy tender volumes and a stronger market-driven expansion via power purchase agreements, as solar profits have grown, said the study, one element of the TSOs' subsidy forecast for the coming years.

Despite the expected growth, Germany's renewables levy on household bills is expected to fall from EUR 65/MWh currently to EUR 37.23/MWh next year, TSOs 50Hertz,

Amprion, Tennet and Transnet BW said on Friday. High wholesale prices lead to higher earnings, which means less money needed from households via the levy.

The German government will also help lower the levy through EUR 3.3bn in subsidies, it said.

On Thursday, the TSOs reported a EUR 4.6bn surplus in the green energy fund, which is financed by the renewables levy and earnings from renewables generation. *AL*

Lithuania to add 5 GW of renewables by 2030

Lithuania plans to add 5 GW of renewables capacity by 2030, while mulling clean hydrogen production and was also considering another interconnector to the Nordic region to capitalise on cheaper power, said the head of TSO Litgrid.

"Currently we produce only a third of our annual electricity consumption. We have to change that, and therefore we want to facilitate a sharp rise in wind and solar generation this decade," Litgrid CEO Rokas Masiulis told Montel in an interview.

"Our grid can easily adapt around 3.3 GW of onshore wind and solar capacity by 2030 only with relatively minor investments. We also expect to add 1.4 GW of offshore wind capacity through two 700 MW parks by the end of this decade," he said.

This would be "more than enough" to cover domestic peak demand of 2.2 GW.

But the country also needed back-up power in periods with low wind and solar production and Litgrid had already invested in a 1 MW battery for test purposes, said Masiulis, a former energy minister who was appointed CEO of Litgrid in February.

Its parent company, Epso-G, was also investing in a larger 200 MW battery project.

"We are also looking seriously into green hydrogen [made from excess renewables] production, which can help us offset peak supply in the grid. We plan to complete a hydrogen strategy by the end of next year," said Masiulis.

Spot power prices in the Baltic state, meanwhile, had averaged EUR 124.51/MWh in the month to date, inflated by Europe's energy price crisis that has seen gas and carbon costs skyrocket, though the TSO was not concerned about supply security this winter.

"We have ample opportunities for import[s] from Sweden, Poland, Latvia and Russia. Thankfully our strong links to the Nordic power market have shielded us somewhat from the high prices we currently see in Germany," he said, referring to the 700 MW Nordbalt link to Sweden.

"In general our participation in the Nordic market has served us well, as it gives access to an area with relatively lower prices than [the rest of] continental Europe. We would gladly invest in a second cable to Sweden but currently the Swedes are not interested."

However, grid capacity to Poland would triple from around 500 MW now to 1,500 MW by 2025 when the Harmony cable

was completed and the existing Litpol link expanded.

This was also the year Lithuania, along with fellow Baltic states Latvia and Estonia, planned to desynchronise from the former Soviet power grid and effectively cut all power flows with Russia, Belarus and the Russian exclave Kaliningrad.

"There will be no power exchange with Russia whatsoever after desynchronisation. Therefore we have to strengthen our links to Poland and Scandinavia as well as our domestic supplies," said Masiulis, though the country was currently in dispute with its neighbours on current Russian imports.

The Baltic states used to receive all commercial power imports from Russia via the Belarus-Lithuania link until last year, when the latter's launch of the new 1.2 GW Astravyets nuclear reactor prompted a Lithuanian boycott.

Since then, Latvia and Estonia have continued to import Russian power via Latvia, though Lithuania contended supplies were still emanating from Belarus, prompting it to impose unilateral measures last month that reduces the risk of Belarussian power being sold to the Baltic region. *OV*

UK asset manager, Irish developer plan solar, storage

UK asset manager Gresham House and Irish renewables developer Strategic Power Projects (SPP) plan a joint venture to build over 1 GW of solar and battery storage assets, SPP said.

The assets would be located close to major grid infrastructure hubs in Northern

Ireland and the Republic of Ireland. Gresham House would own the assets.

SPP had recently secured planning approval for a number of utility-scale solar and battery energy storage sites, one of which was touted to become Ireland's largest hybrid project once

completed, it said in a statement.

"We look forward to generating impactful renewable energy assets that will make a real difference and continue to move the country towards a carbon neutral economy by 2050," said Paul Carson, SPP managing director. *KP*

Finnish companies plan wind, solar, storage hybrid by 2023

Finnish renewables developer VSB Uusiutuva Energia and solar power firm Solarigo Systems plan to complete Finland's first combined wind, solar and storage plant by 2023, Solarigo CEO Antti Koskelainen told Montel.

Annual power output from the project, where the wind farm is already under construction, would amount to

136 GWh, according to a joint statement from the companies. Commercial electricity generation is set to start next autumn, while construction of the solar farm was scheduled to start next year.

The plant, located in Kalajoki, western Finland, would combine output from a 40 MW wind farm and a 13 MW so-

lar farm with 2 MW of battery storage to increase grid reliability, Koskelainen said.

He added that the companies hoped to make a final investment decision this autumn and to receive state aid for technology development.

VSB Uusiutuva Energia is a Finnish subsidiary of the German VSB Group. *CEW*

Protium plans 40 MW green hydrogen facility in UK

UK energy company Protium plans to build a green hydrogen project that would include up to 40 MW of electrolysis capability and hydrogen storage in Teesside, northeast England.

The project marked the area's largest announced green hydrogen project to date and was expected to be completed by 2026, subject to planning and engineering works, Protium said.

Last month, Protium announced plans

to deliver 1 GW of green hydrogen in the UK by 2030. Green hydrogen generally refers to when electricity from renewables is used in the electrolysis process, splitting water into hydrogen and oxygen.

The country is aiming to produce 5 GW of low-carbon hydrogen by 2030 as part of its plan to transition to net-zero emissions. In March, the government unveiled GBP 3m in investment to de-

velop Tees Valley as the UK's first ever hydrogen transport hub.

"The project will allow us to work with local businesses to decarbonise their operations and the area's deep industrial legacy provides the perfect infrastructure foundations for us to leverage. The growing hydrogen hub offers a faster route to market for the deployment of this clean energy source," said Chris Jackson, Protium CEO. *KP*

UK raises ETS cost curb measure 7% for January

The UK has raised its cost curb measure for emissions certificates – UKAs – by 7% month on month to GBP 56.58/t for January.

For the so-called cost containment mechanism (CCM) – a measure to prevent prices rising by boosting supply – to be triggered in January, the monthly average price of carbon allowances in the preceding three months would need to remain above that threshold.

This compares with December's trigger of GBP 52.88/t – the monthly average for September, October and

November – and November's trigger of GBP 50.37/t – the monthly average for August, September and October.

The next possible opportunity for the CCM to be triggered is December.

"This means that if the price remains on average above GBP 52.88/t in October and November, the CCM will be triggered in December," the government said.

In October to date, the average settlement price for the Dec 21 contract on the UK ETS stood at GBP 65.93/t.

When the CCM was triggered, in-

terventions could include redistributing allowances between the current year's auctions, bringing forward auctioned allowances from future years to the current year, drawing allowances from the market stability reserve mechanism or auctioning up to 25% of the remaining allowances in the new entrant reserve, the government said.

The UK ETS Authority updates CCM trigger prices on a monthly basis and will release the next threshold on 10 November. *ET*

Energy Transition Weekly

Published by: Montel Ltd

Editor-in-Chief: Richard Sverrisson

Sub-Editors: Robin Newbold, Jeff Coelho, Christopher Harder

Editorial staff: Isaac Bah, Belén Belmonte, Rachael Burnett, Tasmin Chowdhary, Marcin Czekanski, Gert Ove Mollestad, Leila Fernández Thévoz, Kelly Paul, Enza Tedesco, Sophie Tetrel, Olav Vilnes, Laurence Walker, Carl-Emil Wickström, Nathan Witkop, Wilhelm Zakrisson

Montel AS, www.montelnews.com, Holbergs gate 1, 0166 Oslo, Norway

Contact: +47 22 99 42 00 / sales@montelnews.com





Energy markets move fast. With **Montel Online** you move faster.

- Real-time data for every major European energy market, from electricity to EUAs
- More than 30 dedicated reporters across Europe
- Advanced online charting tools, extensive interactive maps and a customisable interface
- Direct Excel and API feed solutions

There's never been a better time to come and get to know Montel Online. This spring, we're offering you **one month's free service.**

Sign up for a free trial

