

democrats unveil clean energy initiative



Reuters/ Washington

Rising Democratic star Representative Alexandria Ocasio-Cortez and Democratic Senator Ed Markey have laid out the objectives of a Green New Deal to achieve net-zero greenhouse gas emissions in 10 years, setting a high bar for Democrats who plan to make climate change a central issue in the 2020 presidential race.

The resolution is the first formal attempt by lawmakers to define the scale of legislation to create large-scale government-led investments in clean energy and infrastructure to transform the US economy.

“The Green New Deal fully tackles the existential threat posed by climate change by presenting a comprehensive, 10-year plan that is as big as the problem it hopes to solve while creating a new era of shared prosperity,” according to a summary of the resolution released by the lawmakers yesterday.

Ocasio-Cortez has said that she will immediately begin to work on legislation that would “fully flesh out the projects

involved in the Green New Deal”.

Republicans have already criticised the initiative, waving off any kind of proposal as heavy-handed.

The Trump administration does not believe action on climate change is necessary and is focused on increasing production of oil, gas and coal on federal and private land.

Doug Lamborn, a Republican from Colorado, said at a climate change hearing in the House natural resources committee on Wednesday that the policy was akin to a “Soviet five-year plan”.

The non-binding resolution outlines several goals for the United States to meet in 10 years, including meeting 100% of power demand from zero-emissions energy sources.

It also calls for new projects to modernise US transportation infrastructure, de-carbonise the manufacturing and agricultural sectors, make buildings and homes more energy efficient, and increase land preservation.

The Green New Deal also aims to create an economic safety net for “frontline” communities that will be affected by a radical shift away from fossil fuel use.

“We ... need to be sure that workers currently employed in fossil fuel industries have higher wages and better jobs available to them to be able to make this transition, and a federal jobs guarantee ensures that no worker is left behind,” according to a summary of the plan.

The Green New Deal was put into the media spotlight by a youth coalition called the Sunrise Movement and Ocasio-Cortez, 29, the youngest woman to serve in Congress.

Markey, a veteran lawmaker from Massachusetts, introduced sweeping climate change legislation a decade ago, which passed in the House but stopped short in the Senate.

At least a half dozen Democratic 2020 presidential hopefuls have said they would adopt Green New Deal policies, without offering specifics.

EU adopts French-German compromise on Russia gas pipeline



European Union member states adopted a Franco-German compromise yesterday allowing Berlin to remain the lead negotiator with Russia on the Nord Stream 2 gas pipeline to Europe. France, a pivotal player in the EU gas talks, had said earlier it would support European Union oversight of new offshore energy pipelines. This had raised concerns in Berlin that resistance from other EU members could undermine plans for the undersea pipeline between Russia and Germany. But Paris and Berlin now agree that chief responsibility lies with Germany, the “territory and territorial sea of the member state where the first interconnection point is located,”

according to a text seen by AFP. The pipeline is due to emerge at the German Baltic port of Greifswald, from where gas will be distributed to other EU countries.

"There was indeed an agreement which was only possible thanks to close cooperation between France and Germany," German Chancellor Angela Merkel told reporters in Berlin when asked about Nord Stream 2. The compromise text replaces older wording stipulating the EU rules on gas imports will be applied by "the territory of the member states" and or the "territorial sea of the member states". The new text was adopted as part of reforms for gas market rules at a meeting of EU ambassadors in Brussels. "The French- German compromise was adopted pretty much unanimously," one diplomat told AFP. Romania, current holder of the rotating EU presidency, said it "was given the mandate... to enter negotiations with the European Parliament on the amendment of the EU gas directive." France's earlier support for giving EU countries more say in the pipeline project appeared likely to shift the balance away from Germany. Nord Stream 2 faces opposition from many countries in eastern and central Europe, the United States and particularly Ukraine because it risks increasing Europe's dependence on Russian natural gas. Combined with the planned TurkStream pipeline across the Black Sea, Nord Stream 2 would mean Russia could bypass Ukraine in providing gas to Europe, robbing Moscow's new foe of transit fees and a major strategic asset. An EU diplomat said US officials lobbied their European counterparts until just before the start yesterday's meeting in a bid to block the gas pipeline. "Washington has put enormous pressure on EU capitals in recent days to prevent Nord Stream 2," the diplomat said on condition of anonymity. "The fact that the gas directive was then almost passed by consensus is also due to the growing displeasure among the EU states over the attempted US influence." Kremlin spokesman Dmitry Peskov said in Moscow that Washington was spearheading efforts to undermine fair competition. "This international project is necessary for Russia and the EU, but

it is constantly at- tacked by third countries, more specifically by the United States,” Peskov said.

Peskov accused Washington of “under- handed competition” by trying to encour- age Europeans “to buy more expensive American gas”. Russia will “follow developments very closely”, Peskov said, adding “we hope that the EU member countries will know how to settle this issue themselves”. French President Emmanuel Macron’s of- fice said the compromise puts Nord Stream under “European oversight”. “It will challenge a certain number of project parameters which will have to provide transit guarantees via Ukraine as well as transit through Slovakia,” an off icial said. The draft compromise sought to tackle concerns over Ukraine saying: “We con- sider a (gas rules) directive in this spirit indispensable for a fruitful discussion on the future gas transit through Ukraine.” Merkel has so far insisted that the pipeline is a “purely economic project” that will ensure cheaper, more reliable gas supplies. She has said there will be no dependence on Russia if Europe diversifies at the same time. Construction has already begun, involving companies such as Germany’s Wintershall and Uniper, Dutch-British Shell, France’s Engie and Austria’s OMV. Gas is due to start arriving in Germany by the end of the year.

Total’s profit jumps on record production



French energy major Total said its net adjusted profit rose 10% in the final quarter of 2018, lifting its full year earnings by more than a quarter after record oil and gas production.

Total said yesterday that output reached an all-time high of 2.8mn barrels of oil equivalent per day in 2018 thanks to the start-ups of various operations and increased production in Australia, Angola, Nigeria and Russia.

It reported a 28% rise in full-year profit to \$13.6bn, following on from strong results from other oil majors.

Total also announced yesterday a major, new discovery off the coast of South Africa.

Total said its results would enable it to continue its shareholders' return policy announced last year.

After increasing dividends by 3.2% in 2018, it plans a 3.1% rise in 2019.

It will also buy back \$1.5bn of its shares in 2019 after buying back the same amount last year.

Total added it would eliminate its scrip dividend scheme from June 2019.

T-Mobile US

T-Mobile US Inc yesterday reported quarterly revenue and

profit that beat Wall Street estimates, as the wireless carrier added more customers than expected after expanding its network, particularly in US rural markets.

T-Mobile said it added a net of about 1mn so-called postpaid phone subscribers in the fourth quarter compared with 891,000 additions a year earlier.

The company's net income fell to \$640mn, or 75 cents a share, in the fourth quarter, from \$2.71bn, or \$3.11 a share, a year earlier, when it recorded a big one-time tax related gain.

Revenue rose to \$11.45bn from \$10.76bn.

Analysts were expecting revenue of \$11.39bn and profit of 69 cents per share, according to IBES data from Refinitiv.

Twitter

Twitter shares took a pounding yesterday as an unsettling update on its global user base offset upbeat figures on revenues and profits in the past quarter.

The short-messaging platform said it posted a \$255mn profit in the final three months of 2018, compared with \$91mn a year earlier, as revenues rose 24% to \$909mn.

Monte dei Paschi

Italian bank Monte dei Paschi di Siena said yesterday it had cut its financial forecasts in a restructuring plan to 2021 to take into account weaker-than-expected economic conditions.

Despite the gloomier outlook, the lender posted a full-year profit of €279mn (\$316mn) in 2018 – its first since 2015.

That figure includes €202mn of restructuring charges, the bank said.

The bulk of those charges weighed on the fourth quarter, which ended with a loss of €101mn.

Non-performing loans now account for 16.4% of total loans, down from 35.8% less than two years ago but still high when compared to a ratio of less than 10% for healthier banks like Intesa Sanpaolo and UniCredit.

DNO

Oil firm DNO is looking to buy more assets after its recent

takeover of London-listed Faroe Petroleum to further expand its North Sea presence.

Oslo-listed DNO, which produces most of its oil in the Kurdistan region of Iraq, clinched a hostile takeover bid for London-based Faroe Petroleum, valuing Faroe at £634mn (\$823mn), in January.

DNO posted a higher-than-expected fourth quarter operating profit of \$230mn, up from \$25.7mn a year before and beating a \$68.5mn forecast in a Reuters poll of analysts.

The earnings increase came as a result of a change in revenue recognition criteria.

Kellogg

Kellogg Co reported a fourth-quarter loss yesterday as it suffered the effects of a strong dollar and the costs of an ongoing restructuring and preparations for Brexit.

Net loss attributable to Kellogg was \$84mn, or 24 cents per share, compared with a profit of \$417mn, or \$1.20 per share, a year earlier.

Excluding items, Kellogg earned 91 cents per share, beating analyst expectations of 88 cents, according to Refinitiv data. Kellogg said net sales rose 4.1% to \$3.32bn in the quarter, ended December 29, helped by acquisitions, including its 2017 purchase of RXBAR.

The company said currency translation hurt sales by 3%.

Tata Motors

Indian automaker Tata Motors Ltd lowered its profit margin guidance for the current fiscal year after it posted its biggest quarterly loss yesterday, hurt by an impairment charge for its British luxury car business Jaguar Land Rover (JLR). Tata Motors expects the EBIT (earnings before interest and tax) margin for the fiscal year 2018-19 ending March 31 to be "marginally negative" compared with an earlier guidance of breaking even, chief financial officer, PB Balaji said.

Tata Motors' loss came at Rs269.93bn (\$3.78bn) for the three months ended December 31, compared with a profit of Rs11.99bn

in the year-ago period. Revenue rose 5.8% to Rs762.65bn. The company took a non-cash charge of Rs278.38bn (\$3.9bn) to cover the impairment at JLR in the three months to December 31.

Voestalpine

Specialty steelmaker Voestalpine expects further downward pressure on earnings from a slowing European economy, it said yesterday after a swing to a quarterly loss knocked 5% off its share price.

Voestalpine issued its second profit warning in four months in January and its statement yesterday sent its shares down as much as 5.6%. Finnish stainless steel maker Outokumpu and German steelmaker Salzgitter also warned of weaker profits.

Voestalpine, whose share price fell by nearly half last year, reported a net loss of €40.5mn (\$46mn) for the October-December quarter.

That compared to a net profit of €167mn in the same period a year earlier.

Marathon Petroleum

US refiner Marathon Petroleum Corp yesterday posted a 53% fall in quarterly profit compared with a year earlier, when it recorded a \$1.5bn gain related to the US tax overhaul.

Net income attributable to Marathon fell to \$951mn, or \$1.38 per share, in the fourth quarter ended December 31, from \$2.02bn, or \$4.13 per share, a year earlier.

Total revenue rose to \$32.54bn from \$21.24bn.

Norwegian Air Shuttle

Struggling low-cost airline Norwegian Air Shuttle said yesterday it would sacrifice growth in a bid to return to profitability after posting losses for the second year in a row.

Norwegian, Europe's third budget airline behind Ryanair and Easyjet, has been hit by an extended period of financial turbulence after years of unbridled expansion.

It announced a net loss of 1.46bn kroner (\$170mn, €150mn) in

2018, after dropping 1.79bn kroner the previous year.

"The company was hit by several unforeseen challenges during 2018.

Continued tough competition and high jet fuel prices affected the results, in addition to significant costs related to Rolls Royce engine issues on the Dreamliners," the company said in a statement.

ArcelorMittal

ArcelorMittal, the world's largest steelmaker, forecast yesterday a moderate expansion in global steel demand in 2019 after a healthy market drove its 2018 earnings to their highest in a decade.

The company said it expected demand to grow by 0.5 to 1% this year after rising 2.8% in 2018.

"Although this is a more moderate level than 2018, market fundamentals do remain positive," chief financial officer Aditya Mittal told a news conference.

Net debt at the end of 2018 was at \$10.2bn, slightly up from the \$10.1bn at the end of 2017.

ArcelorMittal, which returned to an investment grade rating last year, is seeking to reduce debt to below \$6bn.

The company reported fourth-quarter core profit (EBITDA) of \$1.95bn, a 9% decline from a year earlier as prices declined.

That was broadly in line with the company-compiled consensus of \$1.96bn from a group of about 20 brokers. For the full year the figure was \$10.27bn.

Publicis

Publicis shares slumped by more than 10% yesterday, as the French advertiser's weaker-than-expected quarterly revenue failed to convince investors and analysts.

The world's third-biggest advertising firm on Wednesday reported a 0.3% fall in fourth-quarter net revenue to about €2.49bn (\$2.83bn), excluding the impact of acquisitions and foreign exchange, far below market expectations of growth of 2.5%.

Outokumpu

Finland's Outokumpu warned yesterday that first-quarter profit would weaken as high distributor inventory levels pressure the stainless steel market, sending its shares sharply lower.

In the fourth quarter the firm's adjusted earnings before interest, taxes, depreciation and amortisation (EBITDA) rose 9% to €89mn, in line with analysts' average forecast of 89.2mn from a Reuters survey.

However the company forecast that EBITDA in the January to March period would be below €89mn, sharply down from 133mn a year earlier.

Societe Generale

France's Societe Generale cut its profitability target after it was hit by a fourth quarter market downturn, joining other European banks battling a tough climate.

The country's third largest listed bank expects its return on tangible equity to be between 9 and 10% in 2020, down from a previous target of 11.5%. Societe Generale also said it would not meet its 3% revenue growth target after revenue fell 6.3% in the fourth quarter to €5.93bn (\$6.7bn), in line with analyst forecasts collected by Infront Data.

The bank issued a profit warning three weeks ago, hitting its shares.

Volvo Cars

China-owned Volvo Cars yesterday said the company sold more than 642,000 cars in 2018 – a record – but net profits dipped. Net income for the full year was 9.76bn kronor, (1bn dollars), down 4.5 per cent compared to 2017. Revenue rose 21 per cent to 252bn kronor.

The car maker said it sold 642,253 cars in 2018 – its fifth consecutive year of record sales.

SUV models, including the XC60 and XC40 series, accounted for roughly half of Volvo's sales.

In China, the world's largest car market, it sold about 130,000 cars – up over 14 per cent compared to 2017 although

the overall market in the Asian powerhouse declined for the first time in two decades. In the United States, Volvo's second largest market, sales in 2018 increased 20 per cent year-on-year to about 98,000 cars.

Norsk Hydro

Norwegian metals producer Norsk Hydro warned it would miss its 2019 savings targets after falling far short of fourth-quarter earnings forecasts due to restricted output in Brazil, sending shares down 8% to their lowest in two years.

Higher costs also impacted underlying operating profit, which fell 85% to 534mn Norwegian crowns (\$62.48mn) versus the 1.45bn crowns expected by analysts in a Reuters poll.

"Our results are reflecting the challenging situation we face in Brazil and higher raw material costs," chief executive Svein Richard Brandtzaeg said in a statement.

Securitas

Sweden's Securitas, the world's biggest security services group by revenue, missed market forecasts for fourth quarter sales growth yesterday due to slowing business in Europe and North America.

The group announced late on Wednesday programmes to modernise its IT platform, reduce costs and boost margins in North America, and flagged plans for a similar programme for its European operations.

Securitas, a rival of Britain's G4S, reported a fourth-quarter operating profit before amortisation of 1.5bn crowns (\$161mn) yesterday, up from 1.3bn crowns a year earlier.

But that lagged a Reuters poll forecast of 1.4bn as organic sales growth slowed to 5% from 6% in the same quarter of 2017. The group, whose services range from manned guarding and alarm surveillance to airport security, also proposed a slightly lower than expected dividend of 4.40 crowns per share.

Sanofi

French drugmaker Sanofi yesterday pledged further increases in full-year profit helped by new drug launches and its

reorganisation efforts.

It forecast an increase of 3-5% in 2019 earnings per share as it posted slightly higher-than-expected quarterly earnings, powered once again by its rare diseases Genzyme unit.

Sanofi, whose struggle to find new products has weighed on previous earnings as diabetes patents expired, is placing its hopes on the success of its new rare blood disorder franchise and a continued upswing for its eczema treatment Dupixent.

Sanofi's fourth-quarter business net income was up 4.3% at constant exchange rates to €1.36bn, while revenue rose 3.9% to 9bn.

Analysts polled by Reuters in partnership with Infront Data had on average been expecting a business net income of €1.32bn on sales of 8.9bn.

Sales at Genzyme surged 37.4%. Revenue at the diabetes and cardiovascular unit, however, fell 11.3%. At a conference in the US earlier this year, newly-appointed chief financial officer Jean-Baptiste de Chatillon said the division would "still face headwinds" in 2019.

DNB

DNB, Norway's largest bank, reported lower-than-expected fourth-quarter earnings yesterday while boosting its full-year dividend.

The company's pre-tax profit before impairments rose to 7.32bn Norwegian crowns (\$856.4mn) from 7.26bn a year ago, lagging the average forecast of 7.58bn in a Reuters poll of analysts.

DNB plans to pay a 2018 dividend of 8.25 crowns per share, up from 7.10 crowns the previous year, while analysts on average had expected a payout of 7.90 crowns.

AGL Energy

AGL Energy, Australia's top power producer, reported a 10% rise in half-year underlying profit, but warned that profits would be weaker in the next six months as it steps up spending on maintaining its ageing coal-fired plants.

Earnings in the second-half of the financial year that started

in July will also be hit by lower gas sales to large business clients, a continued price war for customers and retail electricity price cuts in the state of Victoria, new chief executive Brett Redman said yesterday.

AGL, which has the nation's biggest fleet of coal-fired power plants, said it would hold off from buying back shares.

The firm yesterday abandoned its three-year cost-saving target to 2021 and halved its target for the year to June 2019 to A\$60mn (\$43mn) taking into account the extra spending on its coal fleet.

AGL's underlying profit for the six months to December 31, which excludes one-off items, rose to A\$537mn from A\$487mn at the same time last year, boosted by strong wholesale power prices.

AGL said it was on track to hit the midpoint of its forecast range for underlying profit of between A\$970mn and A\$1.07bn in the year to June, roughly flat on last year.

Revenue slipped 1.8% to A\$6.34bn.

Prudential Financial

Prudential Financial Inc on Wednesday reported a 12% drop in adjusted operating income, partly due to a loss in its individual life insurance business and declines in other units.

The US No 1 life insurer by assets reported adjusted operating income, which excludes realised gains and losses from investments, of \$1bn, or \$2.44 per share, compared with \$1.2bn, or \$2.69 per share, in the year-ago quarter.

Analysts had expected \$2.78 per share, according to IBES data from Refinitiv.

Adjusted operating income for PGIM, Prudential's asset management arm, fell 20.6% to \$243mn from \$306mn a year earlier, the company said.

PGIM managed \$1.16 tn in assets as of December 31, \$6bn more than at the end of the year-ago quarter.

Prudential's US individual life insurance unit reported a \$26mn adjusted operating income loss compared to \$98mn in

income a year ago.

MetLife

US life insurer MetLife Inc missed analysts' estimate for fourth-quarter revenue on Wednesday, hit by weaker underwriting fees in its Asia and Europe, the Middle East and Africa (EMEA) markets.

Revenue was also weighed down by weaker capital markets in Asia and the impact of the US tax overhaul on the EMEA unit, the company said.

Total revenue fell 1% to \$15.66bn, missing analysts' average estimate of \$15.93bn, according to IBES data from Refinitiv.

MetLife's net investment income slid to \$3.46bn from \$4.45bn a year earlier, driven by changes in the estimated fair value of certain securities.

Adjusting for those changes, net investment income rose 7%. Net income fell to \$2bn from \$2.3bn.

Earnings at the company's US retirement business more than doubled, buoyed by volume growth, higher investment margins and lower taxes, helping overall adjusted profits rise 38% in the region. Excluding one-time items, MetLife earned \$1.35 per share. Analysts on average had expected earnings of \$1.28 per share.

Zurich Insurance

Zurich Insurance announced a dividend increase yesterday following a 24% jump in annual profit, and said that would set a floor for future payouts.

Europe's fifth-largest insurance company said its cost savings plan was on track and business operating profit (BOP) rose 20% last year to \$4.6bn, driven by underlying growth across the business, particularly in life, and underwriting improvements in property and casualty.

Still, insurance premiums rose modestly, to \$49.5bn from \$49.1bn in 2017, and were unlikely to show much growth this year.

"I expect top line to be pretty flat in 2019," finance chief

George Quinn told reporters.

Zurich said it was well on track to deliver on its financial targets for the 2017-2019 period with \$1.1bn in cumulative net cost savings achieved.

“We still have about \$400mn (in savings) to deliver pretax. That would be rightly the biggest driver of the additional improvement that we expect to see from the group in 2019,” Quinn said.

Breaking Germany's coal addiction



By Johan Rockstrom And Owen Gaffney /Berlin

Germany is about to break its coal addiction. Last year, the government created a 28-member “coal commission” – comprising scientists, politicians, environmental campaigners, trade unions, and utilities representatives – with the unenviable mandate of deciding when the country would get clean.

Balancing pragmatic considerations with recognition of the reality of climate change, the commission has now set 2038 as the deadline for reaching zero coal, with the withdrawal beginning immediately.

The Wall Street Journal calls it the “world’s dumbest energy policy.” In fact, Germany’s shift is vital and long overdue. The real question is whether it will be enough to support meaningful progress in the global effort to mitigate climate change.

It is scientifically well established that if the world is to keep the average increase in global temperature “well below” 2C relative to pre-industrial levels – the “safe” limit enshrined in the 2015 Paris climate agreement – no more than another 500-800bn tonnes of carbon dioxide can be emitted. On current trends, this would take just 12-20 years.

Instead, the world needs to follow a trajectory called the “carbon law,” which requires reducing CO2 emissions by half each decade until, 30-40 years from now, we have achieved a carbon-free global economy. Growing evidence shows that adhering to the carbon law is technologically feasible and economically attractive. In this process, coal – the most polluting energy source – must be the first to go, exiting the global energy mix entirely by 2030-2035.

This will be particularly challenging for Germany, which, despite its reputation as a climate leader, has long had a dirty secret: the most polluting type of coal – lignite – remains the country’s single biggest source of electricity. Although renewables have penetrated 40% of the electricity market, coal still accounts for 38%.

A decision to phase out nuclear power, spurred by the 2011 Fukushima disaster, left Germany with a significant energy gap, filled partly by coal. Germany has built ten new coal-fired power plants since 2011, bringing its total to about 120. As a result, it is set to miss its 2020 emissions goal (a 40% reduction, compared to 1990), and, barring decisive action, it could miss its 2030 target (a 55% reduction) as well.

The coal commission's plan – which still needs to be turned into legislation by Chancellor Angela Merkel and the Bundestag – would reduce Germany's coal emissions from 42 gigawatts today to 30 GW by 2022, and to 17 GW by 2030. This is a cut of more than 50% over one decade, making it even more ambitious than the carbon law trajectory – but only if coal is not replaced by natural gas. Indeed, if the coal phase-out is going to work, it will need to happen alongside a rising carbon price.

In any case, 2038 is still a long way off. A sluggish exit from coal by Germany – the world's fourth-largest economy – could send a signal to other coal-dependent European Union countries that there is no rush. Countries like Hungary, Poland, and the Baltic states may even pursue a coal renaissance. This would further weaken the EU's climate leadership and its ability to reform its carbon-trading system. Confident that coal will continue to be burned in the long term, investors would keep the money flowing.

Moreover, because Germany's influence extends far beyond Europe, a weak stance on coal could trigger a domino effect – what we call the “road to hell” scenario. US President Donald Trump might cite Germany's slow action as proof of its double standards on climate change – and even attempt to use it to justify, however weakly, his effort to revive the US coal industry. Brazilian President Jair Bolsonaro might do likewise, as he distances his country from the Paris climate agreement.

Australia, where climate politics are tense and an election is pending, could also be tempted to increase coal use. China and India, too, could become more inclined to expand coal-fired power plants. With that, meeting the 2C threshold would become impossible, and the devastation of Hothouse Earth would potentially become inevitable.

But there is good reason to think this will not happen. Even if the 2038 deadline is not ambitious enough, the immediate pace of the coal phase-out follows the carbon law. If Germany implements what it has agreed on paper, one should not

underestimate the symbolic value of a coal-dependent industrialised economy setting a clear end date for coal, and locking itself to a quantified phase-out plan. This, together with definitive shorter-term targets, would signal to investors that they can confidently invest in alternative energy sources.

This dynamic could well accelerate the timeline for Germany's exit from coal. A clause in the agreement creates the potential for an earlier exit from coal. After all, the best-performing major commodities in 2018 were European emissions allowances.

Designed to make coal less competitive, those allowances are expected to double in price in the next year or two. Hedge funds and other investors have already taken notice.

A deadline on German coal use would reinforce confidence that the value of allowances will keep increasing, creating a positive feedback loop of rising prices. Add to that a precipitous drop in the costs of wind and solar power, and it is not unrealistic to

imagine that the markets will bring about a much faster departure from coal than any policy would.

Sometime in the 2020s, it will become cheaper to build new renewable systems than to continue running

existing fossil-fuel plants in parts of Europe. At that point, there will be little chance of stopping the fastest energy transition in history. – Project Syndicate

* Johan Rockström is Director of the Potsdam Institute for Climate Impact Research. Owen Gaffney is a global sustainability analyst at the Potsdam Institute for Climate Impact Research and the Stockholm Resilience Centre.

Thirst for oil threatens a pristine Arctic refuge



Trump administration is hurriedly clearing way for exploration. It is the last great stretch of nothingness in the United States, a vast landscape of mosses, sedges and shrubs that is home to migrating caribou and the winter dens of polar bears. But the Arctic National Wildlife Refuge – a federally protected place of austere beauty that during a recent flyover was painted white by heavy snowfall – is on the cusp of major change. The biggest untapped onshore trove of oil in North America is believed to lie beneath the refuge's coastal plain along the Beaufort Sea. For more than a generation, opposition to drilling has left the refuge largely unscathed, but now the Trump administration, working with Republicans in Congress and an influential and wealthy Alaska Native corporation, is clearing the way for oil exploration along the coast.

Decades of protections are unwinding with extraordinary speed

as Republicans move to lock in drilling opportunities before the 2020 presidential election, according to interviews with over three dozen people and a review of internal government deliberations and federal documents. To that end, the Trump administration is on pace to finish an environmental impact assessment in half the usual time. An even shorter evaluation of the consequences of seismic testing is nearing completion. Within months, trucks weighing up to 90,000 pounds could be conducting the tests across the tundra as they try to pinpoint oil reserves. The fate of the refuge's coastal plain is in the hands of Ryan Zinke, the interior secretary, who has appointed top deputies with deep professional and political ties to Alaska to oversee its development. Congressional approval to open the area to oil exploration was inserted in tax overhaul legislation last December under the guise of generating revenue for the federal government, and by next year, the Interior Department expects to begin selling the first drilling leases.

The hurried timeline has created friction, with some specialists in the federal government concerned that environmental risks are being played down or ignored. And many outside scientists and environmentalists share the concerns, warning that plans for seismic testing and eventual drilling could harass, injure or kill polar bears and other wildlife. "It seems as though the administration is in a headlong rush to put the drill bit into the coastal plain," said David J. Hayes, a deputy interior secretary in the Obama and Clinton administrations. "Given the virgin territory of the refuge, with the unique wildlife dependency issues, I don't know how you do this in an artificially fast and truncated fashion." Mr. Zinke's Alaska-friendly appointees, who have long pushed for oil exploration in the coastal plain, say the fears are overstated. They point out that years ago, Congress left open the eventual possibility of allowing development there. Exploration is in the best interest of Alaskans, they say. "I feel like there is a lot of expectations, hopes and dreams

from people who I know and love that are riding on this,” said Joe Balash, one of the appointees, who has worked in Alaskan political circles for two decades and now oversees the Bureau of Land Management.

An Alaska Native company, Arctic Slope Regional Corp., has been a major force behind the push and stands to enjoy a windfall if drilling proceeds. The corporation, which has been awarded more than \$7.5 billion in federal contracts in the past 10 years, expanded its lobbying under the Trump administration, records show, and Mr. Zinke appointed one of its executives to a top post. Known as A.S.R.C., it is among 13 regional businesses created in the 1970s to foster economic development among Alaska’s indigenous population. It has myriad financial interests in the state’s oil-rich North Slope region, which includes the refuge’s coastal plain and Prudhoe Bay, home to one of the largest oil fields in North America. And it has been a key financial backer of Senator Lisa Murkowski, Republican of Alaska, who has been the drilling plan’s biggest champion in Congress. Many Natives on the North Slope – including Inupiat who live in Kaktovik, the village inside the refuge – support oil development.

But a different Native group that lives south of the refuge, the Gwich’in, fears oil development would disturb the migration of porcupine caribou, animals it has hunted for centuries and still relies on for much of its food. Ms. Murkowski declined to comment, as did Alaska’s other elected representatives in Washington. Mr. Zinke also declined to comment. But he told a Senate committee in March that he was “very bullish on the Arctic.”

A HISTORY OF FRUSTRATION The struggle over oil exploration in the Arctic National Wildlife Refuge has its roots 50 years ago in the discovery of petroleum reserves around Prudhoe Bay, west of the refuge. In 1980, when Congress voted to conserve much of the federal land in Alaska, drilling advocates pushed for oil and gas development on the coastal plain. Then, as now, the move was

supported by many Alaskans, who generally favor oil development, in part because some of the revenue is returned to them in the form of an annual dividend. The advocates were unsuccessful but had an opening: The 1980 bill allowed Congress to authorize oil and gas development at a later date. The 1.5-million-acre coastal plain, identified in Section 1002 of the legislation, has been known since as the 1002 Area. Despite the close ties, industry officials insist they are not getting a free pass.

"I'm not expecting a rubber stamp," said Kara Moriarty, the chief executive of the Alaska Oil and Gas Association, who has a framed photo with Mr. Zinke in her Anchorage office. "I'm expecting a very diligent and thorough process." But those who oppose drilling in the refuge, including many Democrats in Washington, suspect the Department of Interior is not being so diligent. Representative Raúl M. Grijalva, Democrat of Arizona, who will become chairman of the House Natural Resources Committee next month, said he would probably call a hearing about the Arctic development with the goal of slowing it down. "We can make sure that corners are not being cut," said Mr. Grijalva, who last week called for Mr. Zinke to resign because of ethics allegations against him, prompting a personal attack from the secretary. Scores of environmental organizations are also watching closely, ready to sue whenever an opportunity arises. "There's going to be damage, going to be long-lasting effects from what they do," said Geoffrey L. Haskett, president of the National Wildlife Refuge Association and a former Alaska regional director with the United States Fish and Wildlife Service, the managing agency of the refuge. "I just can't imagine that what we're going to see is going to be adequate," he added, referring to the environmental evaluations.

The decision to conduct an environmental assessment of the seismic testing proposal, a less rigorous review than a full environmental impact statement, was especially troubling for

many drilling opponents. They point to damage done to the tundra by seismic testing in the mid-1980s; some vehicle tracks from that work remain visible more than 30 years later. And they worry about the disruption of polar bears. Steven C. Amstrup, chief scientist with Polar Bears International, a conservation group, said the coastal plain in the refuge "is the most important maternal denning area" for the southern Beaufort Sea population. Dr. Amstrup, a former United States Geological Survey zoologist who has studied the bears for three decades, said his research had shown that the heat sensing technology used to detect dens would probably miss about half the dens, which would probably be disturbed during the seismic work. Jeff Hastings, chairman of SAExploration, part of the seismic-testing joint venture, said improved technology would prevent damage to the tundra this time around. He also said his company was working with the Interior Department on ways to protect the bears.

CORPORATE MUSCLE When Mr. Zinke went in search of influential Alaskans to fill top posts in his Interior Department, he turned to people who had worked for elected officials in the state and for past Republican administrations in Washington. He also looked to A.S.R.C., a multibillion-dollar business that stands to gain the most financially if drilling commences in the 1002 Area.

Tara Sweeney, its former executive vice president for external affairs, is now assistant secretary for Indian affairs. With nearly \$2.7 billion in annual revenue, A.S.R.C. is the largest of the Alaska Native corporations and ranks 169th on Forbes' nationwide list of private companies by revenue. Still, A.S.R.C. has little name recognition outside Alaska, allowing it to attract relatively little attention while lobbying. But there are deep disagreements over A.S.R.C.'s role in the drilling campaign, and whether its corporate interests align with those of Native families who have lived off the land for generations. For decades, the Gwich'in have led the Native opposition to drilling, arguing that opening the 1002 Area could affect the porcupine caribou, a major source of food and

a spiritual touchstone. “We are asking to continue to live the way we always have,” said Bernadette Demientieff, the executive director of the Gwich’in Steering Committee, which opposes oil development in the refuge and recently joined with the Sierra Club to try to persuade banks to hold back financing for exploration. Matthew Rexford, the tribal administrator of Kaktovik and the president of Kaktovik Inupiat Group, said the drilling could be done responsibly and should go forward. Unlike the Gwich’in, Rexford’s village stands to benefit financially. “I have given this a lot of thought, and our community has given this a lot of thought,” he said. “We do feel it can be done in an environmentally safe and sound manner.”

The truth about big oil and climate change



Luca D'Urbino

IN AMERICA, THE world's largest economy and its second biggest

polluter, climate change is becoming hard to ignore. Extreme weather has grown more frequent. In November wildfires scorched California; last week Chicago was colder than parts of Mars. Scientists are sounding the alarm more urgently and people have noticed—73% of Americans polled by Yale University late last year said that climate change is real. The left of the Democratic Party wants to put a “Green New Deal” at the heart of the election in 2020. As expectations shift, the private sector is showing signs of adapting. Last year around 20 coal mines shut. Fund managers are prodding firms to become greener. Warren Buffett, no sucker for fads, is staking \$30bn on clean energy and Elon Musk plans to fill America’s highways with electric cars.

Yet amid the clamour is a single, jarring truth. Demand for oil is rising and the energy industry, in America and globally, is planning multi-trillion-dollar investments to satisfy it. No firm embodies this strategy better than ExxonMobil, the giant that rivals admire and green activists love to hate. As our briefing explains, it plans to pump 25% more oil and gas in 2025 than in 2017. If the rest of the industry pursues even modest growth, the consequence for the climate could be disastrous.

ExxonMobil shows that the market cannot solve climate change by itself. Muscular government action is needed. Contrary to the fears of many Republicans (and hopes of some Democrats), that need not involve a bloated role for the state.

For much of the 20th century, the five oil majors—Chevron, ExxonMobil, Royal Dutch Shell, BP and Total—had more clout than some small countries. Although the majors’ power has waned, they still account for 10% of global oil and gas output and 16% of upstream investment. They set the tone for smaller, privately owned energy firms (which control another quarter of investment). And millions of pensioners and other savers rely on their profits. Of the 20 firms paying the biggest dividends in Europe and America, four are majors.

In 2000 BP promised to go “beyond petroleum” and, on the face of it, the majors have indeed changed. All say that they support the Paris agreement to limit climate change and all are investing in renewables such as solar. Shell recently said that it would curb emissions from its products. Yet ultimately you should judge companies by what they do, not what they say.

According to ExxonMobil, global oil and gas demand will rise by 13% by 2030. All of the majors, not just ExxonMobil, are expected to expand their output. Far from mothballing all their gasfields and gushers, the industry is investing in upstream projects from Texan shale to high-tech deep-water wells. Oil companies, directly and through trade groups, lobby against measures that would limit emissions. The trouble is that, according to an assessment by the IPCC, an intergovernmental climate-science body, oil and gas production needs to fall by about 20% by 2030 and by about 55% by 2050, in order to stop the Earth’s temperature rising by more than 1.5°C above its pre-industrial level.

It would be wrong to conclude that the energy firms must therefore be evil. They are responding to incentives set by society. The financial returns from oil are higher than those from renewables. For now, worldwide demand for oil is growing by 1-2% a year, similar to the average over the past five decades—and the typical major derives a minority of its stockmarket value from profits it will make after 2030. However much the majors are vilified by climate warriors, many of whom drive cars and take planes, it is not just legal for them to maximise profits, it is also a requirement that shareholders can enforce.

Some hope that the oil companies will gradually head in a new direction, but that looks optimistic. It would be rash to rely on brilliant innovations to save the day. Global investment in renewables, at \$300bn a year, is dwarfed by what is being committed to fossil fuels. Even in the car industry, where scores of electric models are being launched, around 85% of

vehicles are still expected to use internal-combustion engines in 2030.

So, too, the boom in ethical investing. Funds with \$32trn of assets have joined to put pressure on the world's biggest emitters. Fund managers, facing a collapse in their traditional business, are glad to sell green products which, helpfully, come with higher fees. But few big investment groups have dumped the shares of big energy firms. Despite much publicity, oil companies' recent commitments to green investors remain modest.

And do not expect much from the courts. Lawyers are bringing waves of actions accusing oil firms of everything from misleading the public to being liable for rising sea levels. Some think oil firms will suffer the same fate as tobacco firms, which faced huge settlements in the 1990s. They forget that big tobacco is still in business. In June a federal judge in California ruled that climate change was a matter for Congress and diplomacy, not judges.

The next 15 years will be critical for climate change. If innovators, investors, the courts and corporate self-interest cannot curb fossil fuels, then the burden must fall on the political system. In 2017 America said it would withdraw from the Paris agreement and the Trump administration has tried to resurrect the coal industry. Even so, climate could yet enter the political mainstream and win cross-party appeal. Polls suggest that moderate and younger Republicans care. A recent pledge by dozens of prominent economists spanned the partisan divide.

The key will be to show centrist voters that cutting emissions is practical and will not leave them much worse off. Although the Democrats' emerging Green New Deal raises awareness, it almost certainly fails this test as it is based on a massive expansion of government spending and central planning (see Free exchange). The best policy, in America and beyond,

is to tax carbon emissions, which ExxonMobil backs. The *gilets jaunes* in France show how hard that will be. Work will be needed on designing policies that can command popular support by giving the cash raised back to the public in the form of offsetting tax cuts. The fossil-fuel industry would get smaller, government would not get bigger and businesses would be free to adapt as they see fit—including, even, ExxonMobil.

ExxonMobil's drilling in context



As ExxonMobil approaches the end its drilling campaign, rumours about the results abounded this week as have the extravagance of some of the claims. So let's put what we know in context. What I present below is based on information,

seismic data, satellite data, even hearsay, but we all need to be mindful that so far ExxonMobil has not made any announcements.

It appears that Delphine has not struck commercial quantities of gas, but it is likely to have encountered gas presence. Even though disappointing, given expectations, this does not mean that there is no gas in the reservoir. This can only be ascertained by evaluating the results from Delphine and potentially carrying out further drilling in the vicinity of this target. Seismic and satellite data show a strong potential for a substantial gas reservoir at this location. We need to wait and see what ExxonMobil announces.

The positive news is that there appears to be a gas discovery at Glafcos, but there are no indications of quantities, commerciality, etc. In fact, it appears that the target was penetrated only recently and there is some way to go before drilling of the complete reservoir column is completed. This will probably happen over the next week or so. Just to remind ourselves, the gas-bearing column at Zohr was about 630m deep. ExxonMobil will need to completely penetrate the reservoir in order to obtain the data required to evaluate its gas potential.

Despite articles to that effect, it is not likely that drilling has encountered oil. ExxonMobil's programme was not only designed on the basis of drilling for gas, but oil deposits, if any, would be at much greater depths, over 6000m below seabed level, in comparison to gas reservoirs which are at about 3500-4000m below seabed level. In any case, gas reservoirs overlay oil. Oil does not come into it at present.

What's next

On completion of this drilling campaign ExxonMobil will probably spent time evaluating the results before it makes any announcements. This may take a few weeks, with any results

expected to be released towards the end of February, and I will not be surprised if this is delayed to early March. It all depends on the complexity of the results from both Delphine and Glafcos.

As is usual with frontier type drilling, which is the case here, ExxonMobil will then follow completion of this drilling phase with evaluation of the results, and any other data available in and around block 10, and recalibration of its geological model before deciding how to proceed next. Certainly block 10 contains other potential drilling targets, not just Delphine and Glafcos. There is the much bigger Anthea and more. There may also be wider interest around block 10.

What is encouraging for Cyprus is that in ExxonMobil, Shell, Total and ENI we have some of the biggest international oil companies (IOCs) exploring in our EEZ. We also have Noble Energy that started this back in 2008. Moreover these companies cooperate with each other and share information they gain from their exploration activities, seismic campaigns and drilling, and geological models, thus maximising benefits and potential value of this data.

I hope that this process will show sufficiently encouraging results for ExxonMobil to continue with plans for further drilling at some future date. But make no mistake. With ExxonMobil's global exploration interests, and very possibly other more promising areas getting a higher priority, this process may take time, even years, not just a few months.

But there are also risks that we should be aware of. Should the results be disappointing and ExxonMobil decides to abandon its interest in block 10, this could have knock-on effects on the future of further exploration in Cyprus' EEZ. Based on seismic data, block 10 is the most promising of all licensed blocks. Disappointing results would reduce the likelihood of future significant discoveries and thus impact interest. However, based on what we know so far, I would like to hope

that this is an unlikely outcome.

Timing

In one of the articles published recently, it was claimed that the recent two-month extension to the liquefied natural gas (LNG) import terminal tender by the natural gas public company (Defa) is linked to a hope for gas discoveries at Glafcos and Delphine. The tender specifies that the LNG terminal should become operational within 2020, in order to avoid serious penalties from the EU due to the use of heavy fuel oil and the high levels of carbon emissions.

Even if a substantial discovery were to be made by ExxonMobil, it could not impact timing of the LNG import terminal.

Such a discovery would need to be followed by appraisal drilling to confirm gas volumes, requiring at least another year. It would then take another two years to reach a final investment decision and 3-4 years to construct the facilities. That would take us to 2025-2026 at the earliest.

There is no way that Defa's LNG project could wait that long! However, with the sale of Aphrodite gas to Shell's Idku LNG plant in Egypt reportedly getting closer, it would make sense to plan to build a small diameter pipeline to bring gas from Aphrodite for Cyprus' needs. Even if the price of gas at the platform is \$4/mmbtu, which is very high, the total cost of gas delivered to EAC using such a pipeline would be about \$6/mmbtu. This is substantially lower than the \$10-\$12/mmbtu that the gas from the LNG project would cost EAC.

The latter would lead to an increase in the cost of electricity. The former would lead to a substantial reduction. Should the Aphrodite gas sale be completed, and we will know soon, this option must be considered seriously.

What is the goal

Going back to block 10 drilling, ExxonMobil is looking for substantial quantities of gas, not just from one gas-field but

likely several, to support its ultimate plan to build a liquefaction plant in Cyprus for LNG exports. Commercial viability improves with the number of liquefaction trains. Two or three such trains, with a capacity of 5 million tonnes/yr each, will require gas quantities of the order of 15 trillion cubic feet (tcf).

That is the ultimate goal. And even then, success will depend on global markets and prices. These are not getting any easier as time passes. The relentless increase in renewable energy and shale gas mean that competition to secure a share of the global gas market is increasing.

We should not be disheartened if the results from this drilling campaign are not conclusive. But equally we should temper our expectations. Global gas markets are challenging and it takes time to get greenfield projects off the ground. However, if we were to discover the quantities of gas required to progress into major export projects, ExxonMobil, Shell, Total and ENI are some of the most capable companies to achieve this.

China LNG imports in Jan rise to another record amid high stocks



Reuters/Singapore

China's imports of liquefied natural gas (LNG) rose to another monthly record in January, even as the country grapples with high gas inventories amid a warmer-than-usual winter, according to shipping data and industry sources.

The world's second-largest LNG importer took 6.55mn tonnes of LNG in January, beating the previous record hit in December by nearly 2%, according to Refinitiv Eikon shipping data.

China's imports last year surged 41% from 2017 after gas shortages the previous winter prompted Chinese companies to stock up on supplies and pre-order cargoes, with Beijing continuing to push millions of households to switch to gas from coal for heating.

But the import growth is not wholly due to a rise in demand, said an industry source familiar with the Chinese market.

"When people see these numbers, they think Chinese demand is up... but actually it is causing a headache (for importers) as (they) have overbought and can't find demand to absorb the cargoes," the source said, declining to be identified as he was not authorised to speak with media.

China National Offshore Oil Corp (CNOC) resold at least one LNG cargo in January and possibly another, an unusual move

during what is typically a peak demand period and highlighting this year's warmer weather, industry sources said.

Chinese traders are offering LNG cargoes to international buyers or selling into their domestic market at lower-than-expected prices, the first source said. The Lunar New Year holiday has also made the situation worse because factories are shutdown for a least a week, he said.

Wholesale LNG from small, land-based liquefaction plants fell to 3,500-3,950 yuan (\$519-\$586) a tonne on February 2, less than half levels of last year, according to Chinese gas-price monitoring agency yeslng.com.

Quotes at receiving terminals in East China's Shandong and North China's Tianjin last stood at 4,500 yuan (\$667) a tonne, down 17% and 5%, respectively, from late November, shortly after heating season started.

China's gas demand growth should decelerate from the past two years, said James Taverner of energy consultancy IHS Markit.

"Coal-to-gas switching mandates are moderating due to... security of supply concerns, and weakening economic growth," Taverner said.

There is also limited capacity in North China for further LNG ramp-up after big increases the past two years, he said. Trade tensions between the United States and China have also tightened financial conditions, dragging China's growth last year to its weakest in 28 years.

Siemens-Alstom's expected EU veto unleashes political

backlash

The Siemens logo, consisting of the word "SIEMENS" in a bold, teal, sans-serif font.The Alstom logo, consisting of the word "ALSTOM" in a bold, blue, sans-serif font, with a red circular graphic element integrated into the letter "O".

When Siemens AG and Alstom SA unveiled their rail merger in 2017, the former archrivals hailed the deal as a historic union, forming the basis of a European champion with the heft to take on an expansionist Chinese competitor.

The plan may well go down in history books, but not for the reasons the companies hoped.

Rather, the European Commission's likely rejection of the merger on antitrust grounds is generating a political backlash in Paris and Berlin against Europe's independent competition regulator.

French Finance Minister Bruno Le Maire has called for an overhaul of policy to make it easier for the region's companies to grow and take on aggressive Chinese rivals. German Chancellor Angela Merkel has also talked of loosening EU rules.

Le Maire raised his rhetoric last week when Competition Commissioner Margarethe Vestager got the backing of member-country regulators to block the deal

A formal decision may come as soon as this week.

“Alstom and Siemens are symbols of French and German industry,” said Marc Ivelidi, a professor at the Toulouse School of Economics who studies competition issues.

“The case won’t be forgotten and there will likely be consequences.”

At the heart of the controversy is a fundamental disagreement over the role of Brussels in European business. On one side of the issue are powerful European officials like Vestager, who see themselves as umpires calling balls and strikes with a view of protecting consumers.

On the other are politicians, who fear rigid EU attitudes are hobbling Europe’s top corporate players from forming ever-larger combinations.

Vestager came under unprecedented political pressure to approve the tie-up. This has raised alarm bells that a move is on to rewrite the region’s laws in the face of mounting global protectionism.

“We should worry,” said John Fingleton, a consultant and former head of the U.K. and Irish competition authorities. “The political independence of mergers is under attack everywhere.”

The European Commission’s antitrust watchdog is one of the most feared on the planet and has regularly wrung hefty concessions from companies seeking mega-mergers by forcing them to sell off prized assets. Other would-be dealmakers have chosen to abandon transactions instead.

“The mission of the EU regulator isn’t industrial policy but to ensure fair competition. It’s looking out for the interests of consumers,” said Sarah Guillou, an economist at SciencesPo in Paris.

Yet within Europe’s biggest trading partners, strategic

bulking up is underway. Some of the most valuable U.S. companies, from Microsoft Corp. and Alphabet Inc. to JPMorgan Chase & Co., have used M&A to expand over past decades.

The Chinese government has been busy playing matchmaker to transportation, technology and other businesses to spawn giants, including CRRC in 2015.

The EU's focus on enforcing merger rules at home risks doing "everything wrong" for businesses to succeed globally, Siemens Chief Executive Officer Joe Kaeser said in defending his rail deal.

European merger rules have been in place for nearly three decades.

The competition division looks at the threat deals pose to market share, prices and innovation. Companies can assuage concerns with remedies like asset sales, but its decisions are most often waved through by the EU's top political brass.

The EU argued that the Siemens-Alstom deal could come at a huge cost to customers in Europe. Chinese suppliers weren't likely to enter the region in the near future and the tie-up could lead to "high prices, less choice and less innovation."

"We've spent last the 20 years dismantling monopolies in telecoms and energy and in other areas built up to be national champions," said Fingleton, the former regulator. "We should learn from that."

France's Europe affairs minister said Sunday the bloc's competition rules were absurd and needed to be overhauled, citing the difficulties Alstom and Siemens are facing over their planned rail business merger.

"I'm not criticizing the [European] Commission for applying the rules ... But these rules are absurd and were set up in the 20th century and we're in 2019," Nathalie Loiseau told LCI

television.

A green new deal for Europe



By Massimiliano Santini And Fabrizio Tassinari /Florence

Jim Yong Kim abruptly resigned from his post as World Bank president recently, leaving a pillar of the international financial order without leadership or direction. Kim will join a private equity firm, where he believes he can “make the largest impact on major global issues like climate change.”

True, the private sector has an important role to play in mobilising funds for upgrading business models to address the threat posed by climate change. But governments and multilateral institutions remain indispensable to securing the comprehensive economic transformation that is needed.

The scientific evidence for global warming is unequivocal. According to conservative estimates, an increase in global temperature of more than 1.5°C above pre-industrial levels by

the end of the century would cause widespread environmental devastation. Increasingly severe weather conditions would destroy biodiversity and livelihoods, while straining resources. Rising sea levels would cause coastal towns to disappear. All of this would contribute to social instability and large-scale migration.

With the human population expected to reach 8.6bn by 2030 – a billion more than today – the only way to achieve our climate goals is to transform the way the world does business. And here, Europe is well-positioned to take the lead by implementing a Green New Deal.

The idea of a Green New Deal – defined as a “national, industrial, economic-mobilisation plan” that would bring about a rapid transition “away from fossil fuels and toward clean energy” – is not new. Even US President Barack Obama included the concept in his 2008 campaign platform.

Under Obama’s leadership, from 2009 to 2016, the United States led the fight against global warming. At home, this meant promoting clean and renewable energy and introducing incentives to spur carbon-reducing innovations in products and services. Internationally, the Obama administration was integral to concluding the 2015 Paris climate agreement.

But, under Obama’s successor, Donald Trump, the US has gone from climate-action leader to climate-change denier. Now, Democratic members of the new US Congress – especially freshman Representative Alexandria Ocasio-Cortez – are working to renew the push toward a green economy. Over the next two years, however, Congress will probably be largely preoccupied by a broader battle over the legitimacy of the Trump administration.

This means that Europe now has an ideal opportunity to lead the world’s green structural transformation, much as it has led on privacy rules and competition policy over the last two decades. To that end, following the European Parliament elections in May, Europe’s liberal and progressive parties and movements should work to implement a Green New Deal.

Success will require, first and foremost, broad public support

for a green social contract. But, despite some momentum – for example, the Green Party's recent electoral success in the German states of Bavaria and Hesse – this will not be easy.

As the Yellow Vest protests in France demonstrate, people will not support making the world greener if it makes their daily lives harder. And there is no doubt that the structural transformation required by a Green New Deal for Europe would require vast funding that might otherwise be spent on programmes with more visible or immediate benefits.

Political leaders advocating a Green New Deal for Europe must therefore work hard to protect citizens' interests. As French President Emmanuel Macron put it in an open letter intended to calm the protesters, "Making the ecological transition allows us to reduce spending on fuel, heating, waste management, and transport. But to make this transition a success, we need to invest on a huge scale and support our fellow citizens from the most modest backgrounds."

Beyond practical pledges, political leaders must provide a convincing and even inspiring narrative to spur climate action. Cognitive scientists, such as George Lakoff, have long argued that people are more responsive to political arguments that are framed according to their own values (as opposed to those of the person making the argument). So, if liberal and progressive forces want a majority of the electorate to support the spending required to mount an effective response to global warming, they need to frame the Green New Deal – not unlike US President Franklin D Roosevelt's original New Deal in the 1930s – in terms of security.

People need to be protected from the instability that increasingly extreme weather will create, and they need support during the transition to greener (higher-quality) employment. Meanwhile, businesses need incentives to pursue the long-term opportunities created by the economic transformation.

This unifying emphasis on long-term societal, personal, and economic security would contrast sharply with prevailing populist narratives, which frame security as an identity issue

and thus tend to trigger emotional – and divisive – responses. And there is reason to believe that it could work. One of the key, albeit contested, legacies of Angela Merkel's chancellorship in Germany, for example, is her government's leadership of the *Energiewende*, or energy transformation, which gained traction after the 2011 Fukushima nuclear disaster raised questions about the long-term security of supplies.

Other European countries have also demonstrated leadership on global climate action. The Danish government, for example, recently pledged to phase out the sale of all gasoline- and diesel-powered cars by the year 2030, and a broad political consensus sustains the goal of reaching a carbon neutral society by 2050.

But, to achieve a safer and more prosperous future, all of Europe – and, indeed, the world – needs to pull its weight. A transnational compact uniting Europe's liberal and progressive movements ahead of the European Parliament election can leverage the force produced by cross-partisan consensus and broaden popular support.

Europe desperately needs to take ownership of its future once again. A new vision centred on the Green New Deal can enable it to do just that. – Project Syndicate

* Massimiliano Santini is a fellow with the European University Institute and a senior economist on leave from the World Bank. Fabrizio Tassinari is Executive Director of the School of Transnational Governance at the European University Institute.