Delphi Economic Forum — The Challenge of Inclusive Growth



March 2019

This year's fourth edition of the Delphi Economic Forum featured several days' worth of sessions, addresses, and other activities, and much of it focused on both the challenges and the opportunities spawned by rapid technological change. Numerous discussions also honed in on ways in which states and other actors can help ensure that growth is more inclusive in this coming new age, a challenge which was at the heart of this year's Forum. Another recurring theme at Delphi this year was concern over the outcome of the upcoming European parliamentary elections, with the rise of Euro-sceptic and nationalist tides threatening to re-shape the Union's political landscape. In addition, considerable attention was paid to how the Eastern Mediterranean is being transformed, one country at a time, into a major hydrocarbon-producing region, and what role(s) Greece should play in this continuing

process.



Greek President Prokopios Pavlopoulos

Greek President Prokopios Pavlopoulos used his opening address on Thursday to warn that while human civilisation has benefited mightily from technology, the coming period threatens enormous socioeconomic dislocation unless effective solutions can be found.

Around the world, experts agree that developments in key fields like wireless communications, batteries, robotics, and artificial intelligence are converging as they mature, opening the way for technology to become even more ubiquitous than it already is — and decisively so. Simply put, the new machines will be so capable that they will be able to replace human input across broad swathes of the global economy, potentially leading to mass unemployment and a long list of related social and economic challenges.

"Modern man's relationship with technology and its achievements are fraught with contradictions, even more so in recent years," Pavlopoulos said. "These are not contrasts,

which could be compromised through a dialectical synthesis, but actual contradictions" attributable to both "the justified pride the creator takes in his creations" and the "fear [which], almost subconsciously, fuels the composite emotion that results from the mixture of the paradox and the absurd," he added. "This mixture is, ultimately, the awe felt by the creator when his creations begin to operate outside the scope of his designs and expectations. It is even more acutely felt when the creator thinks that he may be about to be surpassed or displaced by his creations."

Pavlopoulos also noted that both the causes and the ramifications of these contradictions help explain why "modern man" has so much trouble synthesising individual elements of technology with the objectivity and competence required by science. This weakness is particularly costly when it comes to technological unemployment, he said, at least partly because job losses are too often accepted as a given in such matters. It also increases the insecurity and marginalisation of those who have lost their livelihoods to technology, giving them little reason to hope for a better future.

The Greek president took issue with the bleak outlook described above, arguing that technological unemployment does not constitute an ineluctable side-effect of technological progress. "Nothing prevents us from using the new means of technology in order to replace, to a great extent, the jobs that have gone with new ones," he said. "In this way, each one of us would be enabled to contribute to the society to which he belongs."

Pavlopoulos also noted that representative democracy offers institutional and political defences alike which might provide a degree of resistance, helping to prevent, contain, or compensate for potential incursions by increasingly pervasive technologies. The president also warned, however, that in order to take full advantage of these defences, "we must take the responsibility of our actions; otherwise, the next generations will pay a hefty price they do not deserve."



Former EU Commission President Jose Manuel Barroso

Former European Commission President Jose Manuel Barroso, who spoke on Sunday, shared some of his experiences from a previous episode of EU insecurity, namely the Greek sovereign debt crisis that marked the last five years his 2004-2014 tenure.

At the height of the crisis, as it began to emerge how much austerity would be imposed on Greece in return for a bailout by the EC, the European Central Bank, and the International Monetary Fund, he recalled, "Greece came very close to Grexit."

Several factors made the situation worse, Barroso added, including the fact that financial instruments appropriate for a crisis of such magnitude had not yet been created.

He also acknowledged that both sides had committed missteps during the bailout negotiations. When large numbers of Greeks joined raucous street protests to condemn the tough terms laid down in the bailout programmes, Barroso said, the resulting scenes did not inspire confidence in European governments.

"There were mistakes from the Greek side," he told his audience, "but also from the European [side] too. Some countries should have been more generous and shown greater solidarity."

As for today's challenges, Barroso said he had faith in Europe's capabilities.

"Yes, we have serious problems to deal with — Brexit, illegal immigration, populism and nationalism, and the fact that Europe is behind in the digital revolution," he acknowledged. "But we also have the resources and means to overcome them."

When asked whether he believes that Greece can and should reduce its primary surplus and its tax burden, he was diplomatic, noting that this was a very sensitive moment because the country will hold elections this year. "I think the first thing that needs to be done by the government that will arise from the elections is to show its commitment to reforms," he said.



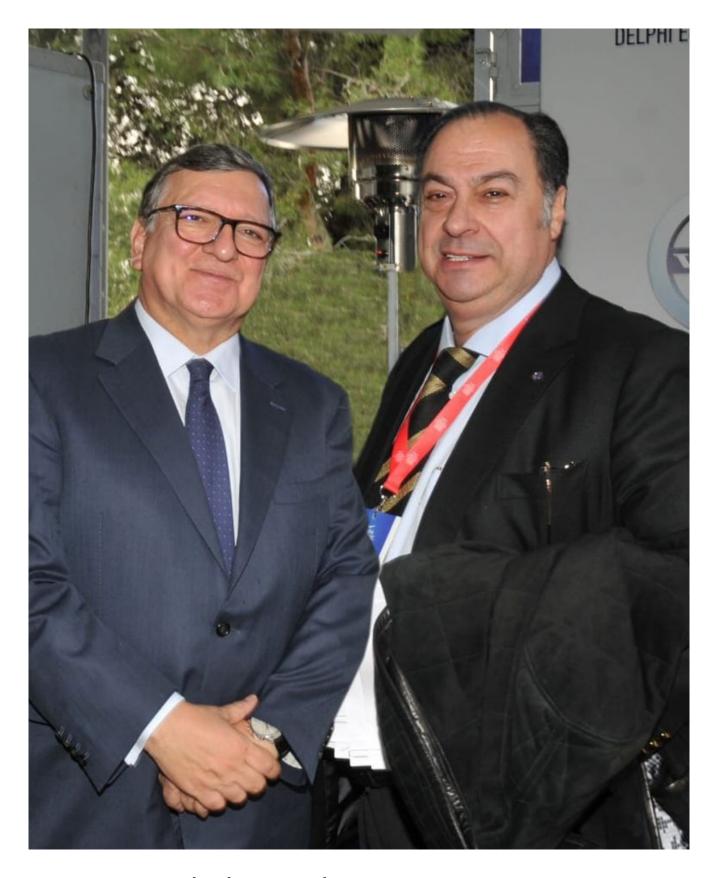
European Commissioner for Migration, Home Affairs, and Citizenship Dimitris Avramopoulos

European Commissioner for Migration, Home Affairs, and

Citizenship Dimitris Avramopoulos warned of mounting problems if steps were not taken to address the reasons for rising populism and nationalism. "Europe is suffering an existential crisis," he said during in a Q&A session on Saturday, noting that the surge in such sentiments was particularly dangerous with EU-wide elections taking place in May. Avramopoulos' concerns echoed those of many participants and attendees, namely that too many European citizens feel let down by the EU and are searching for other options, at least some of which are antithetical to the entire European project.

Energy Geopolitics and the Role of Greece

Doha-based Energy and Environment Holding CEO Roudi Baroudi acknowledged the same problems but struck a much more optimistic tone. He said the solution to Europe's problems was not less integration, but smarter integration designed to meet the interests of and families and communities, not just companies and governments. He also linked this perspective to the very origins of the European project, to the goal of closer integration with neighbouring regions, and to the very latest developments in the energy revolution that promises to rejuvenate the EU.



Former EU Commission President Jose Manuel Barroso, left, with Energy and Environment Holding CEO Roudi Baroudi

Baroudi, who has advised companies and governments on three continents during a career spanning more than 40 years, also has helped shape EU policy on energy and non-energy matters

alike. The broad net cast by his remarks merits substantial reproduction here.

"For almost 70 years now, ever since the Schuman Declaration of 1950, most of Europe has been moving toward greater integration," Baroudi said during a session titled "Energy Geopolitics and the Role of Greece" on Saturday. "Decades later, following the 1995 Barcelona Declaration, that vision expanded, specifically by way of the Euro-Mediterranean Partnership and its most conspicuous result, the Union for the Mediterranean."

"These goals can never be fully realized unless we accept the fact that integration must be implemented in such a way as to not only promote geopolitical stability, expanded trade, and faster economic growth, but also to increase social equality, strengthen social cohesion, and ensure greater harmony within and between different sectors of society, he added. "Indeed, many of the problems facing the EU today stem from a failure to ensure that political and security partnerships between governments and militaries would come part and parcel with direct benefits for every-day citizens from all walks of life."

"The consequences of this failure have been particularly troublesome for several key members of the Euro-Med family," Baroudi noted. "Far too often, we hear the setbacks of the past decade described in broad strokes: massive government debt, troubled banking sectors, 'haircuts' for investors, etc. Those are all valid stories, but the real tragedies are the personal ones involving jobs lost, families scattered, and dignity under assault. These are the indicators that have to change if we are to make good on the European dream, and if we are serious about inclusiveness, the Euro-Med region is actually a great place to start."

The industry veteran also endorsed President Pavlopoulos' observations about technological unemployment, stressing the need for a holistic approach that seeks to mitigate the unintended consequences often wrought by otherwise advantageous developments. "Human civilizations have always

struggled with how to balance these factors, and a similar approach must apply to oil and gas development," Baroudi told the audience.

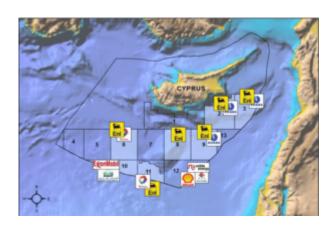
"On both sides of the Mediterranean, this part of the world has known more than its share of headaches and heartaches in recent years, including rows over immigration policy, tight debt markets, and weak investor confidence," he added. "What a feat it would be, then, if the countries of this same region set an example for the rest of the world by overcoming their differences to establish a common area of peace, prosperity, and stability."

And as a centrepiece of both European and Mediterranean history, geography, and civilization," he noted, "no country has a more important role to play in this process than Greece does."

Baroudi then turned to the issue of how the Mediterranean's emergence as a major energy producing region could help restore faith in the European dream.

"It is true that after the past 15 years of political drift, some people have doubts about the Euro-Med ideals. For many more, however, the experience has only demonstrated the need to revive the spirit of Barcelona — and, this time, to finish the job. If we can do that, and if all of the countries involved agree to be bound by the United Nations Charter and other international laws and regulations, the tools are available to carve out a happier future for all of our peoples," he said.

"Ladies and gentlemen, so are the resources. Not very far from here — from Crete and Cyprus to Egypt and the entire Levantine Basin — exploration has uncovered numerous undersea deposits of oil and gas. With so many resources buried under the Mediterranean seabed, right on the doorstep of the world's single largest energy market, the conditions could not be better. In fact, just yesterday ExxonMobil confirmed a massive find off Cyprus."



Map showing offshore blocks, including ExxonMobil's, in Cypriot waters of the Eastern Mediterranean

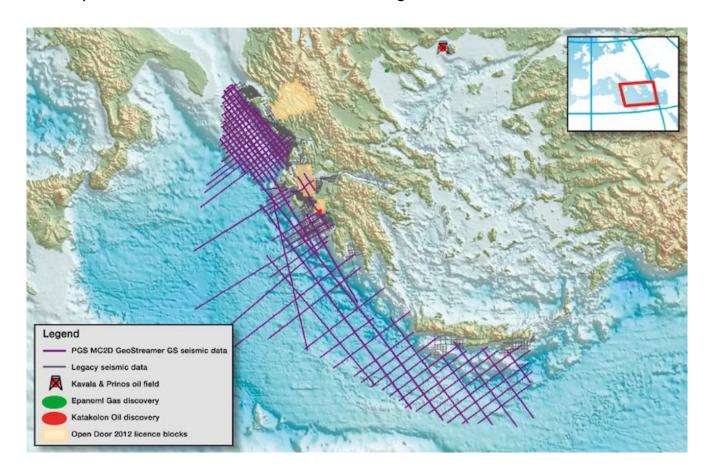
"So long as everyone abides by the rules, there is significant scope for dialogue, not to mention the promise of enormous potential rewards for actual cooperation. Each country that becomes an energy producer — and even non-producers that benefit from lower prices and greater security of supply — will have greater capacity to invest in hospitals, roads, schools, and other powerful contributors to the healthier societies," Baroudi said. "And each new form of cooperation will bind neighbours that much closer together, pooling their resources and increasing their ability to work together ... Again, as one of the victims of the global economic slowdown, Greece has unquestionable credentials to be among those leading the recovery."

Returning to the theme of balance, he also expressed confidence in the modern energy industry's ability and willingness to measure and manage the risks associated with oil and gas.

"We all know that the extraction and use of hydrocarbons poses threats to the environment, not just in terms of climate change, but also due to the danger of spills that directly affect ecosystems and the animals and plants that inhabit them," he said. "What we must never forget, though, is that today the energy industry is better-equipped than ever to prevent mishaps — and to contain or mitigate the damage when an accident occurs. We also have global standards, including the recommendations of the COP 21 and COP 24 climate summits,

and the governments in question just need to be muscular about implementing and enforcing these rules. Greece's role will no doubt include continued leadership on this score, too."

"All of these opportunities are real," Baroudi concluded, "and they are will within the grasp of the peoples involved. What is needed is greater awareness of the need for understanding and cooperation, and of the oil and gas industry's evergrowing capacity to help ensure sustainable and inclusive development across the Euro-Med region."



Map depicting key areas for exploration off Greece's southwest coast

Shifting Forces in the Regional Energy Ecosystem

ExxonMobil's Vice President for Europe, Russia and the Caspian, Tristan Aspray, spoke on Saturday during a session dedicated to "Shifting Forces in the Regional Energy Ecosystem". Reiterating his satisfaction at his company's recent discovery of huge natural gas deposits off Cyprus, he outlined the prospects for Southeastern Europe's emerging as a

key source of gas supply to promote energy security across the continent.



ExxonMobil VP for Europe, Russia, and the Caspian Tristan Aspray

While ExxonMobil's find is the biggest so far, Aspray noted that other companies also have located significant deposits in Cypriot waters, and nearby discoveries off Romania and Egypt were similarly encouraging for the East Med region as a whole. With exploration and investigation still in progress, the full extent of Greece's offshore hydrocarbon resources remains uncertain, but Aspray concluded by saying that already, "all of these regions have the potential to operate as major alternative energy sources in Europe."



Greek Minister of Environment, Energy, and Climate Change George Stathakis

Speaking on the same panel as Aspray, Greek Minister of Environment, Energy and Climate Change George Stathakis described his country's efforts to regulate energy markets in a way that helps achieve climate change targets stretching as far as the year 2030. He said Greece's strategy included multiple approaches, including conservation and an increase in the amount of energy produced from renewables to 65%. He also acknowledged, however, that progress has been slow on some fronts. "It is clear that things are falling short with respect to energy saving," Stathakis explained. "Today, the reduction in consumption is limited to 1.5% per year."

Conclusions

The foregoing is a small but representative slice of the views, insights, and analyses provided by the dozens of speakers who attended this year's Delphi Economic Forum. Whatever their individual topics or perspectives, most participants were mindful of the numerous serious challenges facing the European Union and its citizens, but they were also

confident that none of these problems was insoluble. In particular, there was an unofficial consensus that, like other key components of the global economic system, the EU needs to become more sensitive to the fact that macro-policies can spawn micro-crises that then mutate into mass emergencies. Only by being more responsive to the short-term needs of its regions, it seems, can Brussels ensure the long-term success of the entire Union.

As more than one session heard, Europe has the resources — institutional, financial, intellectual, natural, etc. — required to regain public trust, restore faith in the European project, and reinvigorate even its most economically distressed areas. The questions are whether the EU can muster those resources, how soon it can do so, and whether this will be enough to hold things together until better economic times return.

The need for a new European direction is manifest. At a time when much of the world is being destabilized by bigots and demagogues, the ideals of the EU should show the way to a more harmonious future in which fears and rivalries are replaced by genuine partnerships and inter-dependence. Europe cannot play its rightful role on the world stage, however, at least not to the full, unless and until it effectively addresses disparity and other socioeconomic ailments at home.

IQ 5-year plan focuses on productivity, efficiency

gains



Premier blue chip group Industries Qatar's (IQ) base case business plan for the next five years will continue to focus on market development, productivity, and efficiency gains via its on-going cost optimisation programmes.

This, according to the board of directors' report announced on Tuesday at IQ's annual general assembly, which was presided over by HE the Minister of State for Energy Affairs, Saad Sherida al-Kaabi, who is also IQ chairman.

"Additionally, we will selectively invest in capital investment projects that we believe will increase our competitive position and add value to our esteemed shareholders. Moreover, our efforts on optimisation will continue until the group achieves its full potential," according to the report.

During the meeting, the general assembly approved the proposed total annual dividend distribution of QR3.6bn, equivalent to a payout of QR6 per share, representing a payout ratio of 72.2%. In a speech, al-Kaabi announced that the group settled "almost all of its outstanding debt during 2018, making it almost a debt-free entity."

Al-Kaabi reported that sales volumes reached 9.8mn metric tonnes, which is a "new record" for the group. Also, he said changes to the distribution strategy, migration of steel

marketing, sales and distribution to Muntajat, and a general increase in demand "aided the group's sales volumes to reach this new height."

Since May 1, 2018, al-Kaabi said, marketing, sales, and distribution of the group's steel products have been migrated to Muntajat. The arrangement brings both financial and operational benefits via efficiency improvement, cost reduction, a better distribution model, and operational synergies, he noted.

"The group will constantly focus on effective sourcing of raw materials, rationalisation of operations, while striving for efficiency and effectiveness to further enhance its operating expenditure," he continued.

He said Qatar Fuel Additive Company (Qafac) operated throughout the year, without having either planned or unplanned outages. A reputed industry benchmark report has highlighted that Qafac's performance is within the first quartile in the industry. Qafac was also ranked as the number one operator in the methanol industry last year.

Also, al-Kaabi said Qatar Fertiliser Company (Qafco) exported the highest volumes of urea in March 2018, which is considered "a world record" of export quantity in a month from a single location and from a single entity.

Al-Kaabi said 2018 was "another remarkable year" for the group, which reported a 52% jump in net profit to reach QR5bn in 2018, with earnings per share amounting to QR8.3.

He said the group's revenue reached QR16.3bn, or a 16% jump on the previous year. The increase was aided by the combined effect of higher product prices and sales volumes, al-Kaabi noted.

"The cash and bank balances across the group reached QR13.1bn, a new record for the group. Strong cash flows from operations, optimised working capital, reduced Capex and minimal debt repayment contributed to the significant growth in the cash and bank balances," he added.

Russian minister visits GECF in Doha



As part of his official visit to Qatar, Russia's Foreign Minister Sergei Lavrov and his accompanying delegation paid a visit to the Gas Exporting Countries Forum (GECF) Secretariat in Doha yesterday.

Discussions regarding energy policy were an important component of the Russian delegation's trip.

Russia and Qatar, both major producers of natural gas and key GECF members, have resolved to align their energy policies.

"We agreed to continue co-ordinating steps in the global energy market, including with the Doha Gas Exporting Countries Forum", Lavrov stated at a press conference following a meeting with Qatar's Deputy Prime Minister and Foreign Minister HE Sheikh Mohamed bin Abdulrahman al-Thani.

The relationship between the GECF and Russia is a long-standing one. Russia is one of the forum's founding members and has been a great supporter of the organisation.

The country acted as host of the Second GECF Summit of Heads of State and Government of GECF Member Countries in Moscow earlier.

"So there was plenty of food for discussion during yesterday's meeting," GECF said.

Apart from the anticipated exchange of views on topics of mutual interest, GECF secretary-general Dr Yury Sentyurin familiarised Lavrov with the forum's range of deliverables — from the 'daily brief' to the 'Global Gas Outlook' — and informed him of important recent events like the GECF's participation in the 9th IEA-IEF-Opec Symposium on Energy Outlooks last week and major upcoming events such as the 21st Ministerial Meeting in October and the 5th GECF Summit that will take place in Malabo, Equatorial Guinea, in November this year.

Sentyurin also took time to discuss the forum's progress on its environmental agenda, such as the GECF's recently obtained status as an Observer to the United Nations Framework Convention on Climate Change (UNFCCC) and its participation in the G20 chain of events relating to energy transitions.

Likewise, the secretary-general made mention of the wider work the GECF has undertaken with other UN subsidiaries.

"The overall goal of the meeting was the further strengthening of the sound relationship between Russia's Ministry of Foreign Affairs and the GECF," the forum said in a release.

A radical outlook needs strategy to match



By 2035, renewables (solar and wind) will account for more than 50 per of global powergeneration; electric vehicles will be the low-cost option for car, van and small-truck drivers; oildemand will be declining; and gas demand will have peaked. Total energy demand will beplateauing despite a growing global economy and a still-rising population. This is not, as you might imagine, the latest summary of aspirations from a campaign group suchas Greenpeace or Friends of the Earth. Nor is it an ambitious claim by one of the renewables tradeassociations. In fact, all the statements above are drawn from a serious, considered projectionproduced by McKinsey, the global management consultancy. The quality of the McKinsey energy outlook for 2019 lies in its internal consistency and the clarity of its conclusions. The view presented is simple but entirely credible because of how it isconstructed. The authors justify each judgment with a logic that is built on a bottom-up forecast, region by region and sector and sector.

Crucially, the study is based on economics rather than public policy. This is not a thesis about what could or should be, but a description of how the trends that are already evident are likely to evolve. Policy can certainly support and accelerate the trends but very little in this projection is

dependenton government decisions. The key is the falling cost of renewables, which are set "to become cheaper than existing coal andgas in most regions by 2030", McKinsey says. That will encourage electrification across the globaleconomy, driving efficiency by replacing less productive forms of supply. The authors resist making too many guesses about the implications of their projection, but it isimpossible to escape the conclusion that increasing supply and peaking demand will lead toconsiderably lower prices. Much coal, gas and oil will be stranded — not because of a carbon tax orany other climatedriven policy initiative but simply because the market is saturated.

If renewables are set to supply 50 per cent of the global power generation market by 2035 (BP in itsown recent long-term projection sees the same trend and predicts a 50 per cent share by 2040), how much could they take by 2050 and where does that leave the hydrocarbons business?Oil — and to some extent natural gas — can find an alternative market in petrochemicals but thelong-term outlook is for steady decline. Tellingly, nuclear — a legacy industry made uncompetitiveby renewables especially as storage technology advances — is barely mentioned. But McKinsey's radical outlook does not suggest that the problem of carbon emissions and therisks of climate change will be easily resolved. Hydrocarbon consumption on this projection is stillhigh enough to keep emissions rising. If the climate models of the Intergovernmental Panel onClimate Change are correct, atmospheric carbon concentrations will continue to grow and the risksof serious climate disruption will remain.

Change is coming too late and too slowly to preventtemperatures rising and extreme weather conditions becoming more common. Over the next 20-30 years the energy business is set for an industrial revolution. The 20th-century energy economy, centred on coal and oil, is giving way to something very different. And this transition has ceased to

be a matter for the distant future or something that can be pushed off byindustry leaders to the next generation of executives. The complacency that smothers hard thinking in most of the major energy companies is outdated. In an industry that thinks on a 20-year horizon, 2035 is within the immediate planning horizon. The revolution is happening now. Establishing a corporate strategy for producing value in verydifferent market conditions should be a priority for all in the sector. We are entering the season when energy companies produce their annual reports and hold their AGMs. Shareholders, large and small, would be well advised to ask the managers and nonexecutives who work for them to set out in detail their plans for the transition. I would be delighted to publish a collection of the answers.

Oil lobby group opposes carbon tax backed by biggest members



Proposals to tax greenhouse gas emissions have been attacked by the head of the US oil refinery trade group even though the idea has support from some of his largest member companies including BP and ExxonMobil. Chet Thompson of American Fuel & Petrochemical Manufacturers said a carbon tax would be "bad public policy" that raised prices at the pump. He called it "fanciful" to describe such a tax as revenue-neutral. A group of large companies, including several oil producers, has embraced a carbon tax as an efficient way to drive down emissions heating the planet. They were joined this year by economists, including 27 Nobel laureates and four former chairs of the Federal Reserve.

The \$3.4m that AFPM spent on federal lobbying in 2018 was the second most of any oil and gas trade group, according to the Center for Responsive Politics. Its opposition points to a rocky path for carbon-tax campaigners even as the climate debate takes on more urgency in Washington. "We have not seen a carbon tax proposal yet that we think comes anywhere close to meaningfully addressing the climate issue," Mr Thompson said. "The only thing we've seen so far are proposals that would raise the price of our products and make it harder for certain segments, particularly less economically viable

segments of our society, to afford them." AFPM's stance is at odds with some of its member companies.

BP, Exxon, Royal Dutch Shell and Total or their subsidiaries are regular members of AFPM. BP has a delegate on its executive committee. They are also founding members of the Climate Leadership Council, a group established in 2017 to advocate for a carbon fee that would fund dividend payments to US households. Investors and environmental activists have chastised energy majors for membership of organisations that undermine efforts to address climate change. A veteran environmental lawyer who served in President George W Bush's administration, Mr Thompson said his association accepted that humans had contributed to climate change. To guard against the higher seas and storms expected to worsen with global warming, he said that coastal refineries had elevated control rooms and electrical transformers, among other measures. The investments paid off when Texas refineries rebounded quickly after Hurricane Harvey in August 2017, he added. AFPM also supports a proposal to raise octane levels in petrol, a shift that Mr Thompson said could reduce carbon emissions equivalent to adding 720,000 electric vehicles to roads each year. "That doesn't mean I'm going to accept bad public policy," Mr Thompson said.

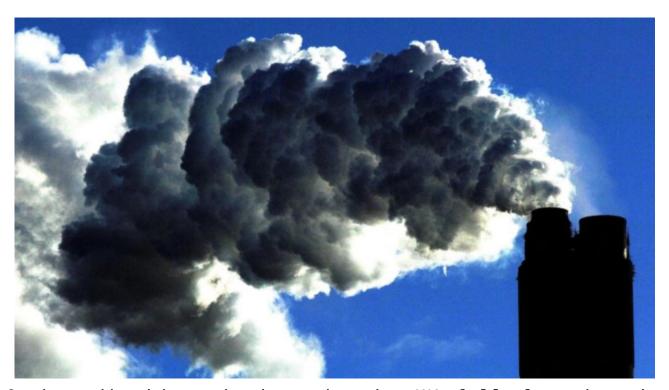
"Can I right now articulate a perfect public policy on this? No. I believe that mankind is going to rise to this challenge just like we've risen to every other challenge and there's going to be breakthroughs that are going to help solve this problem. Do I think the breakthrough is a carbon tax? I do not." Greg Bertelsen, senior vice-president of the Climate Leadership Council, said that a carbon fee would be the "most efficient and effective" type of climate policy. The dividend would pay the average family of four \$2,000 a year, he added. "The amount of dividend they would receive would be greater than any increased cost for energy," Mr Bertelsen said. American Petroleum Institute, the biggest oil and gas trade

group in Washington, said in response to questions that it "will evaluate and respond to specific legislative proposals on carbon taxes, rather than broad policy outlines". While the US electric power sector has cut carbon emissions in recent years, emissions from oil use were on track to reach nearly 2.4bn tonnes in 2018, the highest in a decade, according to data from the Energy Information Administration. Diesel and jet fuel have underpinned the rise, reflecting the strong US economy and more air travel.

Refinery operations alone emitted about 260m tonnes of carbon dioxide equivalent in 2018, EIA estimated. BP said: "We belong to trade associations because they represent their members on a wide range of issues. We do not expect to agree with, nor do we agree with, trade associations on all issues. BP's position on carbon pricing has been public, clear and longstanding: we believe carbon pricing is one of the most significant steps to reduce emissions and meet global climate goals." Shell said: "We have long recognised the importance of government-led carbon pricing systems as an essential tool for reducing emissions. We have also been very clear that the challenge of tackling climate change can only be met through unprecedented collaboration, and we are fully committed to constructive dialogue and input from investors, governments, customers and wider society." Exxon has pledged \$1m to Americans for Carbon Dividends, a lobbying affiliate of the Climate Leadership Council. It said that "membership in an association should not construed as automatic support for all of that organisation's policy positions"

. Mr Thompson also criticised the Green New Deal, a plan by congressional Democrats for the government to rapidly move society away from fossil fuels. "Ridding the world of our products, as suggested by the Green New Deal, is certainly not in the best interests of mankind. The world is such a far better place because of our products. There is no scenario in which I would accept the fact that the world would be better

Carbon emissions fall in UK for sixth consecutive year



Carbon dioxide emissions in the UK fell for the sixth consecutive year in 2018, driven by fallingcoal usage in power generation, according to a new report. Last year, emissions were the lowest on record since 1888, apart from during years affected bymajor industrial action by workers, including 1893 and the 1926 general strike, said Carbon Brief, aclimate research and news website. Emissions dropped 1.5 per cent in 2018 compared to 2017, added Carbon Brief, noting that thesustained period of reductions started in 2013.

"This is the longest stretch of consecutive years with falling emissions," said Simon Evans, authorof the report at Carbon Brief, which based its findings on government data. However, the decline in emissions in 2018 was the smallest fall across the six-year period, raisingconcerns that the recent run of reductions could be coming to an end. "The UK's emissions reductions are being flattered by reductions in the use of coal, but othersectors aren't going in the same direction," said Mr Evans, noting that oil and gas usage werelargely unchanged last year. Carbon emissions were about 361m tonnes in 2018, a reduction of 39 per cent from 1990 levels. The UK is working towards a target of an 80 per cent reduction on 1990 levels by 2050.

As part of its efforts to cut emissions, Britain is aiming to phase out all coal-fired power stations by2025. Coal accounted for less than 5 per cent of UK power generation last year, down from more than 40per cent in 2012. Electricity coming from renewable energy sources, such as wind and solar, rose to a record high of33 per cent in 2018. Power generation from fossil fuels fell to a record low of 46 per cent. Much of the UK's reductions in carbon emissions have come from the power sector, but groups such as the Committee on Climate Change, a government advisory body, have urged more action topromote clean energy in transport and heating. "The closure of coal is within sight and that has been hugely successful for the UK," said ChrisStark, chief executive of the committee.

"What that means is that we're not going to see the same falls [in carbon emissions] in the futureunless policies are extended to other sectors." He added: "We're on a good path now, and we need the government to use the policies they have inplace to substantially increase the amount of renewables we have producing energy."

Kenya recalls ambassador to Somalia over water rights clash

NAIROBI, Kenya (AP) - A top Kenyan official says the country has recalled its ambassador to Somalia and told the Somali ambassador to leave over an alleged land grab by Somalia.

Foreign Affairs Principle Secretary Macharia Kamau said Saturday the recall is a consequence "of a most regretful and egregious decision by the government of Somalia to auction off oil and gas blocks in Kenya's maritime territorial area that borders Somalia."

Kenya and Somalia are embroiled in a legal tussle at the International Court of Justice over their territorial waters in the Indian Ocean.

Kamau said the land grab is tantamount to an act of aggression against the people of Kenya and their resources.

Kenyan troops are part of the African Union force bolstering Somalia's weak government against an extremist insurgency.

Europe Spars Over Its Own Green Deal as Germany Urges Prudence



The opening round of talks over the next green deal in Europe highlighted differences between governments over the means and pace of transforming the continent's economies to avoid catastrophic climate change.

Germany sounded caution as energy ministers from member states debated a proposal to aim for net-zero emissions from the bloc by the middle of the century. Governments differed on issues including the pace of emissions cuts and the energy sources and technologies to rely upon, while many stressed the importance of preserving jobs and competitiveness.

"Germany wants to ensure that Europe remains a pioneer in the future and that we see climate strategy as a major opportunity for all countries," Thomas Bareiss, a deputy economy and energy minister, told his counterparts at their meeting Monday in Brussels.

"Nonetheless, I think it's important that we acknowledge the major challenges that we face and be responsible in that regard," he added. "We must ensure growth and well-being for our citizens at the same time as an environmental transition."

The 28-nation EU, responsible for 10 percent of global

greenhouse-gas emissions, is planning ahead to give direction to national governments, companies and citizens in fighting global temperature increases. In the next step, EU environment ministers will discuss the blueprint for a transition to an emissions-neutral economy on Tuesday.

The strategy, drafted by the European Commission in November, is aimed at showing how determined the bloc is to honor the Paris climate accord's targets, even in the face of President Donald Trump's decision to take the U.S. out of the 2015 agreement signed by almost all other countries.

In his latest comments on climate, Trump said on Saturday that the so-called Green New Deal to phase out fossil fuels, championed by first-term Representative Alexandria Ocasio-Cortez, would "destroy American energy" and boost his 2020 campaign.

Even though Europe has been traditionally a more committed advocate of environmental protection than the U.S., Monday's meeting in Brussels showed that governments don't take the costs of transition lightly. The bloc must ensure that it also provides prosperity in order to be able to convince other partners in the world to follow suit, Bareiss said.

"We must not forget when discussing details that there's an overarching strategy that cannot be forgotten and it's sometimes better to take slower steps forward so that we don't forget the bigger picture," he said.

EU Unveils Plan to Cut

Emissions to Zero, in Bid to Save Planet



The European Union unveiled its long-term vision on combating climate change in a push for more ambitious action on the environment just days after U.S. President Donald Trump rejected his government's warning on the economic costs of global warming.

The 28-nation bloc, responsible for 10 percent of global greenhouse-gas emissions, set a 2050 perspective to help give direction to member states, companies and citizens to anticipate costs in fighting temperature increases. The EU's updated strategy comes a week before representatives from almost 200 countries are due to meet in Poland for an annual conference on addressing climate change.

"With this plan, Europe will be the world's first major economy to go for net-zero emissions by 2050," EU Climate and Energy Commissioner Miguel Arias Canete said. "It is necessary to meet the long-term temperature goals of the Paris Agreement. It is possible with current technologies and those close to deployment," he said.

While the new European strategy doesn't propose changing the bloc's 2030 goal, it sets seven building blocks for the following decades that could be turned into binding targets

later on. These range from energy-efficiency measures, including developing zero-emission buildings and smart infrastructures and greater use of renewable-energy sources.

"Going carbon-neutral will spur investments in European cleanenergy solutions of up to almost 300 billion euros (\$339 billion) a year," Arias Canete said. "And overall, it will help grow our economy up to 2 percent of GDP by 2050."

The steps are aimed at showing how determined the EU is to honor the Paris accord's targets even in the face of Trump's decision to take the U.S. out of the 2015 agreement signed by almost all other countries in the world.

The EU currently has a binding target of cutting emissions by at least 40 percent by the end of the next decade. That's not enough to meet the Paris objective of keeping global temperature growth well below 2 degrees Celsius, a move scientists say is needed to prevent catastrophic effects of global warming.

"There are many challenges on the road. But with climate change, business as usual is not an option and we cannot afford the price of inaction," Arias Canete said. "Going climate-neutral is necessary, possible and in Europe's interest."

For the EU, which wants to lead by example, the long-term strategy is also a political tool to demand more at the next United Nations talks that start next week in Katowice, Poland. Envoys at the meeting will aim to draw up a rule-book to implement the Paris deal and its mechanisms to step up carbon reductions worldwide.

On Wednesday, Arias Canete will discuss the plan with the European Parliament in Brussels. The European Commission, the EU executive, says all relevant national actors should have policy debates in order to prepare heads of state and government for a meeting on the Future of Europe on May 9, 2019, in Sibiu, Romania.

EU member states are to submit by the end of 2018 their own draft national climate and energy plans, which should take into account the bloc's latest strategy. The EU calls for expanding cooperation with global partners over the years so that all nations, rich and poor alike, submit their own national long-term view. That should also include business associations, regions and cities that are already ironing out their own long-term visions.

"If we do not lead, nobody else will," Arias Canete said. "And if nobody else acts, unrestrained climate change will severely impact Europe, as well as everybody else."

Russia's Arctic LNG project aims to tempt fuel-hungry Japan



US shale revolution spurs Moscow to look east for new markets

TOKYO — Russia's push for Japanese participation in an Arctic energy project comes as the world's largest natural gas exporter, faced with the rise of the U.S. as a rival, looks to Asia to diversify.

Russian gas company Novatek's Arctic-2 liquefied natural gas project is located on the Yamal Peninsula, where conditions are remarkably harsh even for the natural gas industry, which is known for plopping down work sites in jungles and deserts.

The peninsula, whose name means "end of the land" in the indigenous Nenets language, boasts rich gas reserves. But with temperatures approaching minus 60 C at times, extracting it requires dealing with permafrost, and icebreaker ships are needed to transport it.

Novatek's first project there began operating in 2017. The company has asked Japanese trading houses Mitsubishi Corp. and Mitsui & Co. to participate in the second — something the Japanese government has welcomed as an opportunity to encourage progress on a long-running territorial dispute with Moscow.

Russia is a relative latecomer to the LNG business, as most of its gas exports travel to Europe by pipeline. Before the Yamal projects, its only LNG plant was Sakhalin-2 in the Russian Far East, which Mitsubishi and Mitsui are also involved in.

A clue as to the reason for Moscow's sudden enthusiasm for LNG lies in a comment by President Vladimir Putin that development in the Far East is pivotal to Russia's advancement.

To maintain its position as a leading energy producer, the country needs to cultivate Asian markets, which are now driving demand. This requires not only pipelines to directly transport gas to China and elsewhere, but also facilities to liquefy gas for shipment to more distant destinations.

×

Two trends have encouraged Moscow to look eastward: concerns in European countries about overdependence on Russian gas, which resurfaced after Moscow's 2014 annexation of Crimea, and the rise of the U.S. as a major oil and gas producer.

Facilities for processing shale gas into LNG and petrochemicals have proliferated along the Gulf of Mexico in the U.S. states of Texas and Louisiana. The surge in production of cheap shale gas has transformed America's energy outlook from the days when Washington forecast that the country would need to import 390 million tons of LNG annually to meet its energy needs in 2030.

For natural gas exporters, this development has not only robbed them of an anticipated source of growing demand, but also — with the start of U.S. LNG exports in 2016 — led to the emergence of a rival supplier. LNG from Africa and the Middle East that had been expected to go to America has flowed into Europe instead, threatening Russia's near-monopoly and prompting it to turn to Asian markets.

Faced with sanctions from Western countries over the Crimea annexation, Moscow is seeking support from Asian natural gas

buyers — particularly Japan, the world's largest LNG importer — to ensure the success of its Arctic development.

Tokyo is pressing Mitsubishi and Mitsui to make a decision, but doing so may prove difficult. While the trading houses understand the potential significance of the Yamal project as a new source of LNG, American LNG shipments are also starting to arrive in Asia.

Mitsui and Mitsubishi must examine whether Arctic LNG can be competitive under these conditions. They also have to consider ramping up production at Sakhalin-2, which already has a 10-year track record, as a potentially quicker alternative.

Complicating matters further is Russia's relationship with Saudi Arabia, the world's largest exporter of crude oil, which has also been hit by the shale revolution. Moscow and Riyadh have teamed up to oppose rising shale oil production and to cut output in an effort to stabilize prices.

Their cooperation may not stop there. Saudi Arabia is looking to become an international energy player, focusing initially on building a "global gas" business, Energy Minister Khalid al-Falih told The Financial Times. The Russian Arctic-2 project is a potential candidate for this effort, and al-Falih has indicated that Riyadh is interested in buying a 30% interest from Novatek.

"If Russia and Saudi Arabia take the lead on the project, Japan will be overshadowed," a Japanese source warned. Tokyo, caught in the middle of the battle among Moscow, Riyadh and Washington for energy dominance, is unlikely to emerge unscathed.