

# Algeria's Sonatrach renews gas export deal with France's Engie



ALGIERS, Nov 19 (Reuters) – Algerian state energy firm Sonatrach has renewed a gas export contract with France's Engie, it said on Tuesday, a few days after Kamel Eddine Chikhi was appointed as its new chief executive.

Energy sales represent a crucial source of foreign currency for Algeria, but have been declining since oil prices dropped in 2014.

Rising domestic demand and stagnant output have also made it hard for Sonatrach to maintain Algerian export levels. That had raised some doubts over whether the Engie deal would be renewed, an industry source in Algeria said.

Sonatrach said the contract covers the medium and long term, but did not specify how much gas it will deliver to Engie.

The state energy firm has already renewed gas export contracts

this year with Enel, Galp Energia, Eni, Botas, Naturgy, and Edison. Its total gas exports in 2018 were 51.4 billion cubic metres, with Italy and Spain accounting for two-thirds of the volume.

“We will work to renew our oil and gas reserves that have been declining in the past decade,” Kamel Eddine was quoted as saying on Sunday after his appointment.

Algeria’s lower house of parliament has passed a new energy law to boost the country’s attractiveness to international oil companies investing in the sector, but has kept a rule preventing majority foreign ownership of hydrocarbons projects. (Reporting By Lamine Chikhi; Editing by Angus McDowall and Jan Harvey)

---

## **Europe needs robust China strategy**



By Ana Palacio/ Madrid

Two months ago, in his address to the United Nations General Assembly, UN Secretary-General António Guterres expressed his fear that a “Great Fracture” could split the international order into two “separate and competing worlds,” one dominated by the United States and the other by China. His fear is not only justified; the fissure he dreads has already formed, and it is getting wider.

After Deng Xiaoping launched his “reform and opening up” policy in 1978, the conventional wisdom in the West was that China’s integration into the global economy would naturally bring about domestic social and political change. The end of the Cold War – an apparent victory for the US-led liberal international order – reinforced this belief, and the West largely pursued a policy of engagement with China. After China became a member of the World Trade Organisation in 2001, this process accelerated, with Western companies and investment pouring into the country, and cheap manufactured products flowing out of it.

As China’s role in global value chains grew, its problematic trade practices – from dumping excessively low-cost goods in Western markets to failing to protect intellectual-property rights – were increasingly distortionary. Yet few so much as batted an eye. No one, it seemed, wanted to jeopardise the profits brought by cheap Chinese manufacturing, or the promise of access to the massive Chinese market. In any case, the thinking went, the problems would resolve themselves, because economic engagement and growth would soon produce a flourishing Chinese middle class that would propel domestic liberalisation.

This was, it is now clear, magical thinking. In fact, China has changed the international system much more than the system has changed China.

Today, the Communist Party of China is more powerful than ever, bolstered by a far-reaching artificial intelligence-driven surveillance apparatus and the enduring dominance of

state-owned enterprises. President Xi Jinping is set for a protracted – even lifelong – tenure. And, as US President Donald Trump has learned during his ill-fated trade war, wringing concessions out of China is more difficult than ever. Meanwhile, the rules-based international order limps along, without vitality or purpose. Emerging and developing economies are frustrated by the lack of effort to bring institutional arrangements in line with new economic realities. The advanced economies, for their part, are grappling with a backlash against globalisation that has not only weakened their support for trade liberalisation and international cooperation, but also shaken their democracies. The US has gradually withdrawn from global leadership.

As a result, international relations have become largely transactional, with ad hoc deals replacing holistic co-operative solutions. Institutions and agreements are becoming shallower and more informal. Values, rules, and norms are increasingly regarded as quaint and impractical.

This has produced a golden opportunity for China to begin constructing a parallel system, centred on itself. To that end, it has created institutions like the Asian Infrastructure Investment Bank and the New Development Bank, both of which mimic existing international structures. And it has pursued the sprawling Belt and Road Initiative – an obvious attempt to position itself as a new Middle Kingdom.

Yet many, including in Europe, are not particularly concerned about the emergence of this parallel system. So long as it brings ready access to project finance, it's fine with them. As Europe becomes increasingly alienated from the US, many Europeans also believe that they can improve their strategic position by situating themselves on the frontier between the two emerging worlds.

That strategy may offer some advantages, including opportunities for arbitrage. But as anyone who lives on a fault line knows, there are also formidable risks: friction between the two sides is bound to shake the foundations of whatever is positioned atop the boundary.

This is especially true for the European Union, which is built on a commitment to co-operation, shared values, and the rule of law. If the EU aids in building a parallel structure that contradicts its core values, particularly the centrality of individual rights, it risks severing its meta-political moorings – the beliefs to which its worldview is tethered. A Europe adrift will eventually sink.

The solution is not for Europe simply to take America's "side," and turn its back on China. (That, too, would run counter to European values.) Rather, the EU must heed Guterres's call to "do everything possible to maintain a universal system" in which all actors, including China and the US, follow the same rules.

In this sense, the recent joint statement by Xi and French President Emmanuel Macron reaffirming their strong support for the Paris climate agreement is promising, as is Europe's growing recognition that China is not only a partner or economic competitor, but also a "systemic rival." But this is only a start. Europe needs a robust China strategy that recognises the profound, often subtle challenges that the country's rise poses, mitigates the associated risks, and seizes relevant opportunities.

Achieving this will require perspective and discipline, neither of which comes naturally to the EU. But there is no other choice. As soon as Europe stops defending the rule of law and democratic values, its identity – and its future – will begin to crumble. – Project Syndicate

\* Ana Palacio is former Minister of Foreign Affairs of Spain and former Senior Vice-President and General Counsel of the World Bank Group. She is a visiting lecturer at Georgetown University.

---

# Opec's flaring crises add new risk for oil supply



Bloomberg/London

Opec may have no appetite to cut oil production deeper when it meets next month, but flaring political crises across the group are once again threatening supply.

Unrest erupted in Iraq and Iran this month – two of the Middle East's biggest producers – as people took to the streets protesting financial hardship and bad governance. That's adding to the range of supply threats already afflicting the Organization of Petroleum Exporting Countries, from economic collapse in Venezuela to simmering discontent in Algeria.

"We kind of had a second Arab Spring, but it's been under the radar," said Helima Croft, chief commodities strategist at RBC Capital Markets. "The real question is what is going to happen in Iraq."

Iraq, Opec's second-biggest producer, has cracked down on demonstrations against corruption in recent weeks that have spread to the southern oil hub of Basra. Iran has seen its oil exports slashed by US sanctions and is suppressing protests

spurred by the resulting economic stagnation.

Opec and its allies – who together pump about half the world's oil – will meet in Vienna in early December to consider production levels for 2020, having cut output this year to prevent a global surplus. Despite signs that fragile demand and surging US shale supply will unleash a new glut, they've signalled no desire to reduce output further.

They may not have a choice.

In recent years, unplanned supply disruptions within Opec nations have done as much to keep markets balanced as the group's deliberate cutbacks. Iran and Venezuela have lost a combined 1.7mn barrels a day since last October, more than all 24 nations in the Opec+ coalition agreed to cut this year.

As turmoil intensifies across the group, next year could see more accidental losses: oil prices of about \$60 a barrel are already below levels most Opec nations need to cover government spending, and a further slump would only deepen the strain.

"There is no better way to put it: the geopolitical risk is rising in the Middle East again," said Tamas Varga, an analyst at PVM Oil Associates Ltd in London.

Algeria is struggling to placate a mass youth-led movement seeking change after ousting long-term President Abdelaziz Bouteflika earlier this year, and Libya remains split by armed factions. Ecuador, which will leave Opec in January, suffered a 20% slump in oil production last month amid riots and looting.

In Iran protests were triggered by an increase in gasoline prices.

The biggest risk is posed by Iraq, according to RBC's Croft. While the country's oil sector has proven robust during recent turbulence, even boosting output when Islamic State militants captured swathes of territory five years ago, the latest demonstrations reflect a new level of popular discontent.

"If you had attacks on infrastructure, oil workers going on strike – Iraq is the place that could surprise the market," she said.





By Laurie Goering/London

Population growth and climate change are putting increasingly intense pressure on the planet's limited water supplies, with worsening shortages emerging from the Middle East to Asia and Latin America, researchers and bankers said on Monday.

"All the local crises around the world are building up to a global crisis," Torgny Holmgren, executive director of the Stockholm International Water Institute, told a conference on the issue at London-based think-tank Chatham House.

But easing the threat and ensuring more people have access to a stable, safe water supply will be hugely challenging because water access and distribution are tied up in politics, cultural views and entrenched systems, conference speakers said.

In Jordan, the third most water-scarce country, raising water prices to reflect the shortage would make economic sense – but not when nearly 1.5mn Syrian refugees, on top of 9mn citizens, depend on it, said Craig Davies of the European Bank for Reconstruction and Development (EBRD).



“It’s potentially a powder keg,” said Davies, who heads climate resilience investments for the bank. “From a political point of view, it’s imperative to keep water tariffs very low.”

Uzbekistan, meanwhile, has built its economy on exports of thirsty cotton, something that might not make sense as water becomes more scarce.

But “you can’t adjust that very easily” without upsetting farmers and the economy, Davies added.

In North Africa, newly available solar-powered water pumps are giving drought-hit farmers crucial access to irrigation – but also removing incentives to use water sparingly as farmers no longer have to buy fuel for diesel-powered irrigation pumps.

“There is literally no control,” said Annabelle Houdret, a senior researcher at the German Development Institute who works in the region.

Aquifers there could be depleted, she warned.

In many Islamic countries, water is seen as a human right and a gift from God, so asking governments to charge people for better water services can be complicated, Davies said.

In most places the EBRD works, the price users pay for water is far below the actual cost of bringing it to them, he said, meaning there is often too little money to invest in treating and delivering water, and maintaining and expanding networks.

“If you’re not paying a rational price for the water, the incentive is to use the water irrationally,” he added.

Getting water use right in an increasingly parched world is crucial, said Olcay Unver, vice-chair of UN-Water, a co-ordinating agency on water issues for the United Nations.

Three out of every four jobs globally depend on water in some way, including small-scale farmers who produce 80% of the world’s food, said Unver, who is also a water advisor for the United Nations Food and Agriculture Organisation (FAO).

By 2050, FAO estimates food demand globally will rise by 50% but “we don’t have 50% more water to allocate to agriculture”, he noted, adding it is already the dominant water user.

Demand for water is also surging in fast-growing cities, where

more than half of people live now and over two-thirds are expected to live by 2050, Unver said.

Getting enough water to everyone is particularly difficult as climate change brings more erratic rainfall, with many places hit by floods and droughts in turn, conference speakers said.

But some countries are coming up with innovative ways to protect or expand supplies.

In India's Gujarat state, for instance, much of the year's rain comes in monsoon season – and then rapidly evaporates, said Gareth Price, a Chatham House senior research fellow who works on South Asia.

But some farmers have begun gathering leftover straw after harvest and piling it in low-lying spots in their fields to absorb and hold excess rain, allowing it to slowly filter into the groundwater, he said.

The innovation – which also helps cut down on burning of field stubble, a major source of air pollution in the region – has won World Bank funding for its expansion, he said.

In Brazil, meanwhile, farmers and ranchers who preserve and plant more forests along rivers to protect water supplies are paid by downstream users under a “water producers” programme, said Paulo Salles, director of a Brazilian water regulatory agency.

Daanish Mustafa, a geography professor at King's College London, said growing water scarcity would unlikely drive a surge in wars, but instead lead to more “unjust co-operation” – cross-border sharing pacts where the stronger party gets the better deal.

Water access is already hugely unequal, speakers said, with US residents using 700-900 litres a day, Europeans about 200 litres and many of the world's poorest just 10-15 litres.

Reliable access to water is crucial to achieving many of the global sustainable development goals (SDGs) – from ending poverty and hunger, to reducing inequality – they added.

Yet climate change threatens to put secure water access ever further out of reach.

“With the SDGs, we can see the light at the end of the tunnel

– but the problem is it’s almost certainly a climate change train coming,” said Christopher Hurst, director general of projects for the European Investment Bank. – Thomson Reuters Foundation

---

## France to end tax breaks for palm oil in biofuel



PARIS – France’s parliament on Friday voted to remove tax breaks for the use of palm oil as a biofuel, a day after a ruling in favour of maintaining the advantage led to howls of protests from environmentalists.

A large majority of members present voted against a government-backed proposal to delay until 2026 the end of palm oil’s tax advantages, giving companies like oil major Total more time to phase out the use of palm oil in biofuels.

Late on Thursday, the National Assembly, France’s lower house

of parliament, had agreed to extend the tax breaks, but following strong pushback from environmentalist MPs within President Emmanuel Macron's ruling LREM party, the government agreed on a second vote.

"This is an important issue that warrants debate," Environment Minister Elisabeth Borne told MPs.

She proposed maintaining the tax breaks while a committee reconsidered the issue, but the extension of tax breaks for palm oil was rejected by 58 votes to two.

"Senators considering the text in coming days and MPs who will have to consider it again before year-end will have to remain extremely vigilant to make sure that the scrapping of this tax break is not somehow again put into question during the legislative process," Greenpeace said in a statement.

Greenpeace added that it is "shocking that the government... continues to defend the interests of multinational companies which jeopardise the climate and the environment".

Critics say that using palm oil in biofuel adds to deforestation in tropical countries and contributes to the destruction of habitat for endangered species such as orangutans.

Moves in Europe to restrict palm oil use have also created tensions with Malaysia and Indonesia, which dominate global production of the oil.

The debate was part of 2020 budget discussions, and the bid to extend the tax breaks was another attempt to overturn 2019 budget provisions to end them.

The 2019 budget specified that palm oil would be removed from a list of permitted biofuels from January 2020.

Total had tried to overturn the ban through an appeal to France's constitutional court, which was rejected in October.

The firm argued that removing the tax breaks would put at risk its biofuel production site in La Mede, southern France.

Total has invested 300 million euros to convert the site from a crude oil refinery. It started production in July, using palm oil as part of the feed stock to produce biofuel.

– **Reuters**

---

## Energy stocks are pushing Canada equities to record



Bloomberg /Toronto

Investors are finally warming up to Canadian energy stocks. There's no shortage of superlatives to describe market optimism as the price of oil climbed and corporate profitability concerns eased. The S&P/TSX Energy Index is on pace for its biggest monthly gain since January. It also has the No 1 spot among sectors on the S&P/TSX Composite Index on

Friday. And the iShares S&P/TSX Capped Energy ETF saw its largest inflows since June last month.

Energy stocks have been mired in negative headlines for years with a strained pipeline network pushing Canadian crude prices lower and the exodus of multinational energy companies.

Now, investors are flooding back in as third-quarter results came in better than expected, and companies bought back shares, raised dividends and divested assets to shore up cash. "They're being very good to the shareholder," John Kinsey, portfolio manager at Caldwell Securities Ltd, said by phone.

Earnings results "highlighted strong free cash-flow generation and active debt repayment," Eight Capital analyst Phil Skolnick said in a November 12 report.

Suncor Energy Inc approved a boost to its share buyback program this week, pleasing analysts as the company checks the box on providing shareholder returns. Crescent Point Energy Corp's latest gas infrastructure asset sale for C\$500mn (\$378mn) topped analyst expectations.

With oil and gas stocks making up more than 16% of the Canadian benchmark index, that's given the TSX a boost this month – up every single trading session in November, hitting all-time highs for most of this week. The key stock gauge crossed the 17,000 mark on Friday.

Still, energy stocks are the third-worst performing sector this year. To bulls, the share price discount may mean investors should buy the dip. For bears, perhaps it brings home the point that investors should still stay out of the sector. Saudi Aramco's IPO prospectus that flagged a peak in global oil demand in the next two decades might also give investors the jitters.

"They're just very good value. The world still runs on energy. They may try to change it to solar and electric and all this other kind of stuff, but it's going to take a long time," Kinsey said.

Canada's stock index climbed for an eleventh day on Friday, its longest streak since January 21. The benchmark index breached the 17,000 level for the first time ever and posted



11 records this year. Foreigners bought C\$1.08bn worth of stocks in September, according to Statistics Canada.

The Canadian two-year yield rose to 1.54% on Friday, staying below its US counterpart. [Click here](#) for our weekly bond wrap. Foreigners sold C\$2.81bn worth of government bonds in September. The loonie was little changed against the greenback this week, but was still one of the worst performers among its G-10 peers.

Prime Minister Justin Trudeau will reconvene parliament on Dec. 5 to elect a Speaker of the House of Commons followed by a so-called Throne Speech that sets out the government's agenda. The leader of Canada's left-leaning New Democratic Party said he's confident he can work together with Trudeau, suggesting the prime minister will be able to successfully govern in a minority parliament.

Economists will focus on October inflation data and September retail sales figures next week.

---

## **The Climate Crisis in terms Trump can understand**



“President Trump made good on his promise this week to withdraw from the Paris Climate Agreement. This wasn’t a surprise. But it still baffles us. Try as we might, we cannot see how America’s interests are served by this decision.

Our climate emergency does not respect borders. California’s forest fires will not burn less fiercely, and rising sea levels will not spare Miami or Mar-a-Lago, just because Mr. Trump has chosen to opt out of a treaty of nearly 200 nations that represents our best and only chance of saving humanity from the catastrophic effects of rising temperatures.

Let us put it in language Mr. Trump might understand. If average global temperatures rise by the end of the century by another one degree Celsius, or 1.8 degrees Fahrenheit, there will be no winners on this planet. Only losers.

And those immigrants the president rails against? Expect the trickle to become a flood. Climate change could force 1.4 million people to abandon their homes in Mexico and Central America, according to the World Bank. That is because one-third of all jobs in the region remain linked to agriculture and climate change is making those livelihoods more precarious. The best way to keep climate refugees from the United States’

doorstep is to support a vigorous and effective climate agreement that helps protect America's neighbors from the ravages of drought and erratic weather patterns. But Mr. Trump is turning his back on this opportunity.

### **Not a trade agreement**

The Paris Agreement is not a trade agreement. There is no trade-off between Detroit, Youngstown and Pittsburgh, on the one side, and Paris on the other. Tariffs and sanctions will not make this problem go away.

Instead, the Paris Agreement is more like a collective insurance policy, into which we all invest to protect our futures. And like most insurance policies, it makes sound business sense. The best investments we can make right now are those that will protect our food, water and energy sources, our transportation, homes and cities, and our businesses and finances from the worst impacts of climate change.

We must invest to adapt to higher temperatures, rising seas, fiercer storms, water scarcity, wildfires – conditions that are now inevitable. The Global Commission on Adaptation estimates that investing just \$1.8 trillion to build climate resilience over the next decade would yield more than \$7 trillion in net benefits. That is a great return on investment.

In other words, we can either plan now and prosper – or do nothing and pay for the consequences later. It seems to us that Mr. Trump is choosing to do nothing and let the country pay later. How is this smart?

The Paris Agreement is a collaborative project, perhaps the greatest collective undertaking ever attempted by mankind. Is it perfect? No. Is it worth keeping? Definitely. Put bluntly, it is the only weapon we have to fight our climate emergency.

Bear in mind that the Paris Agreement is a work in progress.

There are standards and targets to be set, compliance measures to be agreed on, budgets to be allocated.

One of the best things about the agreement is that nations have pledged to share the fruits of innovation in low-carbon technologies – for clean energy, zero-emissions transportation, greater food security and sustainable businesses and homes. The United States is a great innovator and the Paris Agreement will undoubtedly be the poorer without its participation. But equally, the country had much to gain by joining in this collective endeavor. Why miss out on the greatest technological and economic transformation of our era?

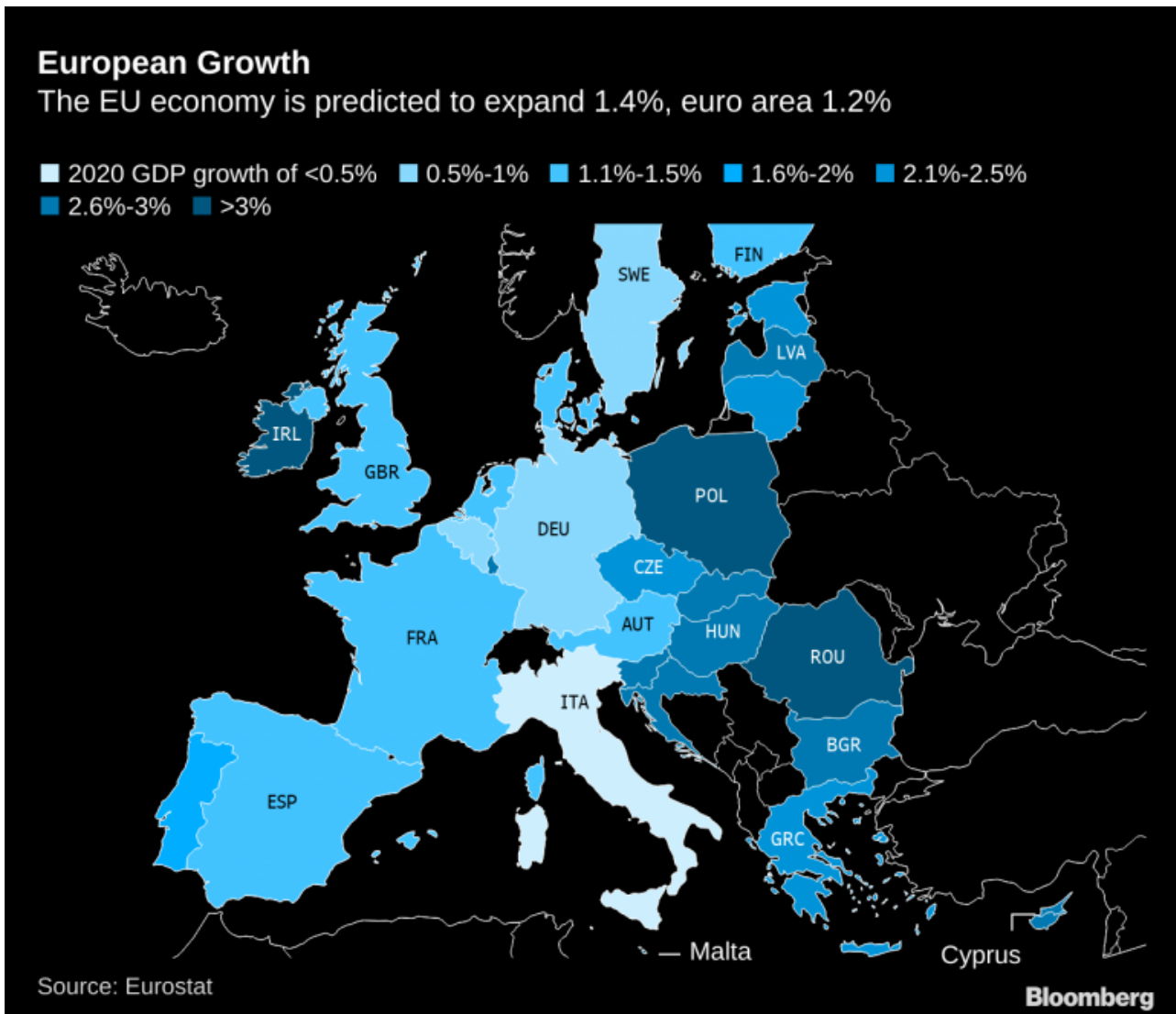
### **Missing out**

Above all, the world will miss America's talent, leadership and ideas as we map out a low-carbon future. We know American voices will still be heard – notably, the thousands of local and state governments and businesses in the United States that have made pledges to reduce greenhouse gas emissions under a movement called We Are Still In. They are proof that millions of Americans still support the Paris Agreement, even if the current administration does not.

It is not too late for Mr. Trump to reconsider his decision. Staying in the Paris Agreement is the right thing to do, for America's sake and for the rest of the world. Winston Churchill is said to have once remarked that you could always count on Americans to do the right thing, after they'd tried everything else. We hope Mr. Trump proves him wrong and stays in the Paris Climate Agreement – that he does the right thing from the beginning.”

---

# EU Warns Worst May Be Ahead as Euro-Area Resilience Wanes



The European Commission cut its euro-area growth and inflation outlook amid global trade tensions and policy uncertainty, warning that the bloc's economic resilience won't last forever.

The EU's executive arm sees economic momentum remaining muted through 2021, forecasting an expansion of 1.2% for that year. At 1.3%, inflation is projected to remain well below the European Central Bank goal of just below 2% over the medium term.

The updated projections, which put the Commission broadly in

line with the consensus view among economists, reflect more pronounced weakness in the region, which has stumbled along with the world economy as tariffs disputes hit manufacturers and dent broader confidence. The institution warned that risks, which include the possibility of a disorderly Brexit, remain “decidedly to the downside.”

## **European Growth**

The EU economy is predicted to expand 1.4%, euro area 1.2%

“Adding to domestic economic shocks and policy uncertainty, the slowdown in global demand and weak trade has hit the European economy hard,” EU chief economist Marco Buti wrote in the report.

While the strength of the labor market and the resilience of the services sector have so far prevented a more broad-based deterioration of momentum, Buti warned that “this resilience cannot endure indefinitely.”

“Economic activity now looks set to slow down in a number of member states, which at first appeared immune,” he added.

Manufacturers across the region have lowered their outlooks in recent weeks. Rheinmetall cut its full-year forecast citing a downturn in global automotive production, Siemens said weakness in the car and factory-equipment industries will lead to a decline in some business volumes next year, and Volkswagen’s finance chief warned of two tough years ahead for industry.

The EU’s latest warning comes despite recent economic data suggesting the region’s manufacturing slump may be bottoming out. Progress in U.S.-China trade talks has also sparked cautious optimism that economic prospects would stop deteriorating.



## ***What Bloomberg's Economists Say***

*“Uncertainty has been a key factor in pushing growth below potential and forcing the ECB into a fresh round of easing. A return of uncertainty toward the pre-trade war level would help stabilize the 2020 outlook.”*

*–David Powell and Dan Hanson. Read the EURO-AREA INSIGHT*

Momentum in France proved more resilient than expected in the third quarter, and the Spanish economy maintained its pace of robust growth.

At the same time, Germany probably slipped into a technical recession, with the Commission predicting only “muted growth” through 2021. Italy “still shows no signs of a meaningful recovery.”

The Commission’s projections come with a call on countries including Germany to spend more.

“Using available fiscal space actively would allow member states not only to provide a fiscal stimulus amid the sharp slowdown in manufacturing that threatens to spill over to the labor market, but also to refresh and modernize the public capital stock, thereby boosting potential growth,” the report said.

That echoes demands by the ECB, which deployed fresh monetary stimulus in September in a package aimed at bolstering the economy in the face of global trade tensions. Outgoing chief Mario Draghi warned that euro-area governments should do more to support the central bank’s efforts with fiscal spending – a message his successor Christine Lagarde has also pushed.

So far, the message has fallen on deaf ears. German Finance Minister Olaf Scholz argued Thursday the country is in a “stable economic situation.”

“We will have more growth in the next years,” he told reporters in Brussels. “If the trade tensions worldwide will be reduced, this will have a real impact on better growth.”

– *With assistance by Nikos Chrysoloras, and Zoe Schneeweiss*

---

## Shale Oil Pioneers Say the Boom Times Are Over



The days of relentless production growth from U.S. shale oil fields are ending, potentially aiding OPEC’s years-long effort to drain a worldwide supply glut, according to industry pioneers Scott Sheffield and Mark Papa.

Investor calls for shale producers to shut down rigs and stop burning through cash are being heeded, Sheffield, Pioneer Natural Resources Co.'s chief executive officer, said on Tuesday. Across the American shale industry, output growth will slow next year, providing a boost for crude prices through the early 2020s, he said.

"I don't think OPEC has to worry that much more about U.S. shale growth long term," Sheffield said during a conference call with analysts. He's "definitely becoming more optimistic that we're probably at the bottom end of the cycle regarding oil prices."

Talk of a shale slowdown reached a fever pitch this year as investors crushed drillers' stocks and demanded spending discipline. As if on cue, Occidental Petroleum Corp., Apache Corp., Cimarex Energy Co. and Pioneer are all signaling plans to trim budgets. Explorers' capital spending in 2020 will be 17% lower than this year, according to Cowen & Co., citing guidance from 14 third-quarter earnings reports.

Mark Papa, who built Enron Corp. castoff EOG Resources Inc. into one of the world's biggest independent oil explorers and now runs Centennial Resource Development Inc., has been sounding the alarm on shale growth since at least February. In reiterating that warning on Tuesday, he said the slowdown will be more dramatic than he predicted as recently as nine weeks ago.

## **Beyond 2020**

Papa downgraded his 2020 shale growth forecast to 400,000 barrels a day compared from the 700,000 estimate he discussed in early September.

"This is likely not just a 2020 event," Papa said during Centennial's third-quarter results call. "I believe U.S. shale production on a year-over-year growth basis will be considerably less powerful in 2021 and later years than most

people currently expect.”

Sheffield sees about 700,000 barrels a day being added next year while the Energy Information Administration predicts that next year’s daily production will expand by 910,000 barrels. Even that would be half of last year’s increase.

## **Crowded Wells**

For Papa, there’s a more fundamental reason driving the downturn in shale than investor sentiment. Many producers have drilled their best locations and are now turning to lower-quality sites. Some also have been drilling wells too close together, resulting in a loss of overall performance.

The counterpoint to Sheffield and Papa’s gloomy outlook is the supermajors Exxon Mobil Corp. and Chevron Corp., which are ramping up Permian Basin drilling. Each plan to produce about one million barrels a day from the basin by the early 2020s. That may provide a silver lining for independent producers: an opportunity to get bought, Sheffield said.

The majors will have “to decide whether or not to bulk up their inventory over the next two to three years and decide whether or not to acquire any independents,” he said.

– *With assistance by Catherine Ngai*

---

# **HIA concludes participation at Qitcom**



Hamad International Airport (HIA) has concluded its participation at Qitcom 2019 by demonstrating key elements of its innovative Smart Airport programme.

In line with Qitcom's theme this year, 'Safe, Smart Cities', HIA's exhibition booth showcased the airport's paperless air travel experience, whereby passenger verification is performed seamlessly across check-in, bag drop, security check, and aircraft boarding using facial biometric identification.

Passengers checking in at HIA will be able to use a biometric enabled check-in kiosk to create a digital ID by taking their photo.

In future, travellers would also create a secure and reusable digital ID on their smart phones, making their experience swifter and more convenient. Underlining its vision for the airport-of-the-future, HIA also unveiled its new 'Wayfinding and Information' system, where passengers can simply walk up to an information screen, be recognised by their face, and instantly provided with personalised flight and gate information.

The five-star airport also demonstrated its mobile app 'HIAQatar' featuring real-time airport navigation using bluetooth beacon technology; flight and gate information notifications; easily searchable information about services,

amenities, shops, cafes, and restaurants for passengers to enjoy their experience.

Recognising the highly-intuitive, relevant features and content of the HIA mobile app, the airport has been awarded 'Mobile App of the Year'.

The award was received by engineer Badr Mohamed al-Meer, chief operating officer at HIA, from HE the Minister of Transport and Communications Jassim Seif Ahmed al-Sulaiti during Qitcom's gala dinner and Qatar Digital Business Awards 2019 ceremony.

The airport also exhibited its 'Digital Twin' prototype, which is designed to provide visual 3D situational awareness in real-time on what is working well and what needs attention to maintain operational excellence or world-class passenger experience that HIA is renowned for. Visitors, particularly student groups from schools in Qatar, were also mesmerised by HIA's high-tech, high-touch robot concept for assisting passengers.

HIA was recognised as the fourth-best airport in the world and the best airport in the Middle East at the Skytrax World Airport Awards 2019.

HIA is currently a candidate for 'World Best Airport' for the Skytrax World Airport Awards 2020. The results will be announced in March 2020 at the Skytrax World Airport Awards. Passengers can vote for HIA by visiting the Official Skytrax World Airport Survey website at [http://www.worldairportsurvey.com/Surveys/favorite\\_airport.html](http://www.worldairportsurvey.com/Surveys/favorite_airport.html).