

# Shippers looking in every corner as pressure to cut CO2 grows



LONDON (Reuters) – From higher-quality paint to state-of-the-art propellers: shipping companies are looking in every corner to reduce their carbon footprint as investor and activist pressure increases.

The move comes as aviation and shipping firms face demands to slash emissions due to their reliance on oil. The two sectors are expected to account for 40% of global CO2 output by 2050 unless action is taken, the European Environment Agency says.

International shipping accounts for 2.2% of global carbon dioxide emissions, according to the International Maritime Organization (IMO), more than aviation's 2% share.

The IMO, a United Nations agency, has said it aims to halve

greenhouse gas emissions from 2008 levels by 2050.

“Ships are long-life assets, typically up to 25 years, and if the industry is to meet the IMO target ... then we need to accelerate the pace of change to greener vessels,” Stephen Fewster, Dutch bank ING’s global head of shipping, told Reuters.

A private initiative launched this year also means leading banks will change how they look at financing modern, more fuel-efficient ships at a time when the sector faces a capital shortfall estimated to be at least \$20 billion.

While questions loom over whether shipping can meet its 2050 target without an overhaul of the types of cleaner fuel available and infrastructure, shipping firms are making individual efforts to change in a shake-up seen costing billions.

U.S. agricultural group Cargill [CARG.UL], one of the world’s biggest charterers of dry-bulk ships, has a target of reducing its CO<sub>2</sub> output per cargo-tonne-mile by 15% by 2020 from 2016 levels and has already cut it by more than 12%.

One measure taken is the use of higher-quality paints that give a smoother hull, meaning less energy is used on a voyage.

“If the industry would move from the standard paints to more sophisticated ones, and used in combination with other initiatives, this could have a real impact on decreasing emissions,” Jan Dieleman, president of Cargill’s ocean transportation business, told Reuters.

Emanuele Grimaldi, president and managing director of Italian shipping company Grimaldi Group, said apart from changing the paint that the firm uses, it has modified propellers for 30 of its ships.

To save fuel, Grimaldi has also introduced slower speeds when

coming into port areas at night and increased the capacity of some of its fleet so each ship can take more cargo.

“These are lots of small things but if put all together they can make a difference,” he said, adding that the whole group had achieved an annual CO2 reduction of 300,000 tonnes.

## **PRESSURE**

The IMO has adopted mandatory rules for new vessels to boost fuel efficiency as a way of cutting CO2 from ship engines, but a final plan on these is not expected until 2023.

In September, an initiative was launched to get zero-carbon ships and fuels on the water by 2030.

In a report this June, CDP (formerly known as the Carbon Disclosure Project) ranked NYK Line, Maersk and Mitsui OSK Lines as the three shipping companies most prepared for a low-carbon transition, out of 18 of the largest publicly listed shipping firms.

Maersk, the world’s biggest container line, aims to be carbon neutral by 2050, and has spent \$1 billion over the last four years retrofitting around 150 vessels.

“Such measures will represent a small fraction of the overall capex expenditure required to meet the IMO’s target,” a spokesman for CDP, a not-for-profit organization, said.

A report by the Energy Transition Commission, a panel of global experts, last year estimated that a fully decarbonised shipping industry could cost less than 0.2% of gross domestic product in 2050, or below \$600 billion a year.

This compares with less than 0.13% of GDP or under \$500 billion per year for a fully decarbonised aviation sector.

“Maersk’s target is a big deal. There isn’t an aviation company in the world close to making that sort of commitment,”

said Ned Harvey, a managing director at the Rocky Mountain Institute think tank.

“We have the financial industry taking climate alignment seriously and that is going to make it real, as well as customers asking for lower-carbon supply chains,” he added.

The second-largest container line, Switzerland’s MSC, achieved a 13% reduction in CO2 emissions per tonne-mile carried during 2015-18.

It has retrofitted more than 250 ships in its fleet with the latest design features including propellers and bulbous bows, as well as better-performing engines.

It is also deploying 11 new mega-ships including the MSC Gulsun – the world’s largest container ship – with the lowest carbon footprint by design.

“When you go beyond 2030 and look across the industry’s container fleet and the broader maritime sector, the future goals around CO2 and other greenhouse gases will not be achievable without some major breakthroughs in fuel and propulsion technologies,” said Bud Darr, executive vice president at MSC Group.

While there have been signs of growing interest in using liquefied natural gas (LNG) as a cleaner fuel, take-up is slow. Other options including hydrogen and ammonia are years away and costly, some experts and shippers say.

“It’s going to get tougher and tougher and we are running out of time. We need to build zero-emission fuel vessels in the next 10 years. We don’t need to mess about with LNG,” Lasse Kristoffersen, president and CEO of Norwegian shipping company Torvald Klaveness, said at a shipping conference last month.

## **POSEIDON PRINCIPLES**

Pressure on the sector is also coming from lenders. Banks are gradually becoming more selective about which ships they include in their lending portfolios due to an initiative launched in June called the "Poseidon Principles".

Eleven banks representing \$100 billion of the global shipping portfolio joined the initiative, which will for the first time integrate efforts to cut CO2 emissions into banks' decision-making when providing loans to shipping companies.

There is around \$450 billion of senior debt that the world's shipping banks and Chinese lenders grant to the sector and about 70,000 commercial vessels, according to Paul Taylor, global head of shipping & offshore with Societe Generale CIB.

ING, which according to market sources has a shipping finance portfolio estimated at \$10 billion, is among the banks that joined the initiative, and finances the most modern and latest-design ships.

"ING and other leading ship-finance banks have a strong preference to finance more environmentally friendly vessels which in turn should encourage shipyards to continue to improve vessel design and efficiency," ING's Fewster said.

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## **Norway new crude a threat to rivals in prized Asia market**



Norway's new oil grade is making inroads in Asia, threatening to undermine sales of similar crudes from Africa and South America.

China's Unipet, at least one of the nation's independent refiners and South Korea's Hyundai Oilbank Co have bought Johan Sverdrup for December delivery, said traders and refinery officials in Asia. The North Sea oil produced by Equinor ASA has been likened to Brazil's Lula and Angola's Saturno crudes.

Oil with low-sulphur content is in demand ahead of stricter ship-fuel rules that take effect January 1, while supply of medium-density crude has been tight due to the attacks on Saudi Arabia and US sanctions on Iran and Venezuela. Johan Sverdrup has both of those qualities, and it's also attractively priced, which may have lured refiners that are typically cautious about new grades.

If Johan Sverdrup continues to gain traction it may jeopardize exports of its rival grades to the world's top crude-consuming region. Angolan and Brazilian oil accounted for 10% and 8%, respectively, of Chinese imports in the first eight months of the year, according to government data. By comparison, Norwegian crude had a minuscule 0.04% share.

"I have no doubt we'll see a trend of more Norwegian flows to

Asia, especially China, in the coming months,” said Sengyick Tee, an oil analyst at SIA Energy in Beijing. “Given the soaring freight rates and high Chinese stockpiles, Equinor will need to price it attractively,” he said, adding that the company has a strong presence among Shandong’s teapots.

Shandong Qingyuan Group, a Chinese teapot, bought about 1mn barrels of Johan Sverdrup at a premium of \$6 to \$6.50 a barrel to Brent crude on a delivered basis, said traders who asked not to be identified as the information isn’t public. That’s around \$1 a barrel cheaper than Lula and 20 to 30 cents less than Saturno, the traders said.

Unipet – the trading arm of Chinese giant Sinopec – has bought two shipments of Johan Sverdrup for October loading, while Hyundai Oilbank took an undisclosed volume of the grade, the traders said. The prices for these deals aren’t available.

Whether or not Equinor can keep offering the grade at lower prices over the longer term remains to be seen.

The Norwegian company may have hedged shipping costs in advance, said one of the traders. Equinor is also giving buyers the option to co-load with other varieties, which may help reduce the cost of shipping to Asia.

Johan Sverdrup has an API gravity reading of 27 degrees with sulphur content of 0.8%. While that’s a slightly higher sulphur reading than most sweet crudes – loosely defined as having 0.5% or less of sulphur – processors looking to produce more IMO 2020-compliant fuel may seek out the grade as part of a lower-sulphur oil feedstock blend.

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## Europe loan market in limbo

# as access woes on Brexit haunt banks



Lenders in the UK loan market are gripped by uncertainty as the failure to move ahead on Brexit this week leaves them with little visibility on how long they'll be able to keep their preferential access to the European market. Banks and loan managers say the lack of clarity on "passporting rights" that allow them to seamlessly market products and services across the European Union is making planning difficult, compelling some of them to insert clauses in their documents to minimise disruption. The passage of the Withdrawal Agreement Bill would have set the end of 2020 as the deadline for a transition but now the focus is on the length of any EU extension beyond October 31. Nicholas Voisey, managing director of the Loan Market Association, said the market is trying to make their deals as "Brexit-proof" as possible, including by adding terms that would permit the transfer of loan commitments to other booking offices. If Brexit were to happen in the immediate



future “Much of the decision-making and discussions will still need to be ironed out – particularly relating to financial services,” he said. A prolonged ambivalence on the Brexit front could force more participants in the €400bn (\$445bn) per year loan market to build safeguards, which could increase their cost of doing business. Some UK lenders, including global banks’ London offices, have already shifted assets to other EU nations to help prepare for the loss of passporting rights. Nicola Wherity, London-based partner at law firm Clifford Chance LLP, said steps taken by lenders to overcome Brexit-related hurdles include setting up new EU hubs, seeking local licences and on-going process of shifting loans to these new branches. The financial markets rely on nine different passports for carrying out core banking activity and non-EU firms face significant regulatory barriers to providing cross-border services to EU clients without these rights, lobby group UK Finance says in its website.

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**US, China ‘close to finalising’ parts of trade pact Phase 1**



US and Chinese trade officials are “close to finalising” some parts of an agreement after high-level telephone discussions yesterday, the US Trade Representative’s office said, adding that deputy-level talks would proceed “continuously.”

In a statement issued after the call, the USTR provided no details on the areas of progress.

“They made headway on specific issues and the two sides are close to finalising some sections of the agreement.

Discussions will go on continuously at the deputy level, and the principals will have another call in the near future,” it said.

The call came as Washington and Beijing are working to agree on the text for a “Phase 1” trade agreement announced by US President Donald Trump on October 11.

Trump has said he hopes to sign the deal with China’s President Xi Jinping next month at a summit in Chile. Beijing was expected to request cancellation of some planned and existing US tariffs on Chinese imports during the phone call, people briefed on the negotiations told Reuters.

In return, China was expected to pledge to step up its purchases of US agricultural products.

The world’s two largest economies are trying to calm a nearly 16-month trade war that is roiling financial markets,

disrupting supply chains and slowing global economic growth. "They want to make a deal very badly," Trump told reporters at the White House. "They're going to be buying much more farm products than anybody thought possible."

So far, Trump has agreed only to cancel an October 15 increase in tariffs on \$250bn in Chinese goods as part of understandings reached on agricultural purchases, increased access to China's financial services markets, improved protections for intellectual property rights and a currency pact.

But to seal the deal, Beijing is expected to ask Washington to drop its plan to impose tariffs on \$156bn worth of Chinese goods, including cell phones, laptop computers and toys, on December 15, two US-based sources told Reuters.

Beijing also is likely to seek removal of 15% tariffs imposed on September 1 on about \$125bn of Chinese goods, one of the sources said.

Trump imposed the tariffs in August after a failed round of talks, effectively setting up punitive duties on nearly all of the \$550bn in US imports from China.

"The Chinese want to get back to tariffs on just the original \$250bn in goods," the source said.

Derek Scissors, a resident scholar and China expert at the American Enterprise Institute in Washington, said the original goal of the early October talks was to finalise a text on intellectual property, agriculture and market access to pave the way for a postponement of the December 15 tariffs.

"It's odd that (the president) was so upbeat with (Chinese Vice-Premier) Liu He and yet we still don't have the December 15 tariffs taken off the table," Scissors said.

US Treasury Secretary Steven Mnuchin last week said no decisions were made about the December 15 tariffs, but added: "We'll address that as we continue to have conversations."

If a text can be sealed, Beijing in return would exempt some US agricultural products from tariffs, including soybeans, wheat and corn, a China-based source told Reuters.

Buyers would be exempt from extra tariffs for future buying

and get returns for tariffs they already paid in previous purchases of the products on the list.

But the ultimate amounts of China's purchases are uncertain. Trump has touted purchases of \$40bn to \$50bn annually – far above China's 2017 purchases of \$19.5bn as measured by the American Farm Bureau.

One of the sources briefed on the talks said China's offer would start at around \$20bn in annual purchases, largely restoring the pre-trade-war status quo, but this could rise over time.

Purchases also would depend on market conditions and pricing. US Trade Representative Robert Lighthizer has emphasised China's agreement to remove some restrictions on US genetically modified crops and other food safety barriers, which the sources said is significant because it could pave the way for much higher US farm exports to China.

The high-level call came a day after US Vice President Mike Pence railed against China's trade practices and what he termed construction of a "surveillance state" in a major policy speech.

But Pence left the door open to a trade deal with China, saying Trump wanted a "constructive" relationship with Beijing.

While the US tariffs on Chinese goods has brought China to the negotiating table to address US grievances over its trade practices and intellectual property practices, they have so far failed to lead to significant change in China's state-led economic model.

The "Phase 1" deal will ease tensions and provide some market stability, but is expected to do little to deal with core US complaints about Chinese theft and forced transfer of American intellectual property and technology.

The intellectual property rights chapter in the agreement largely deals with copyright and trademark issues and pledges to curb technology transfers that Beijing has already put into a new investment law, people familiar with the discussions said.

More difficult issues, including data restrictions, China's cybersecurity regulations and industrial subsidies will be left for later phases of talks.

But some China trade experts said that a completion of a Phase 1 deal could leave little incentive for China to negotiate further, especially with a US election in 2020.

"US-China talks change very quickly from hot to cold but, the longer it takes to nail down the easy phase 1, the harder it is to imagine a phase 2 breakthrough," said Scissors. Pages 2, 3 & 12

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## **Rosneft switches contracts to euros from dollars due to U.S. sanctions**



VERONA/MOSCOW (Reuters) – Russia's largest oil company Rosneft

(ROSN.MM) has fully switched the currency of its contracts to euros from U.S. dollars in a move to shield its transactions from U.S. sanctions, its Chief Executive Igor Sechin said on Thursday.

Rosneft's switch to the euro is seen as part of Russia's wider-scale drive to reduce dependence on the dollar, but it is unlikely to quickly boost the euro's role for Russia given the negative interest rates it carries.

"All our export contracts are already being implemented in euros and the potential for working with the European currency is very high," Sechin told an economic forum in Italy's Verona.

"For now, this is a forced measure in order to limit the company from the impact of the U.S. sanctions."

Reuters reported earlier this month that state-controlled Rosneft set the euro as the default currency for all its new export contracts.

Washington has threatened to impose sanctions on Rosneft over its operations in Venezuela, a move which Rosneft says would be illegal.

Moscow has been hit by a raft of other financial and economic sanctions from Washington over its role in the Ukrainian crisis and alleged meddling in the U.S. elections. Russia denies any wrongdoing.

Last year, Rosneft exported oil and oil products worth 5.7 trillion roubles (\$89 billion), according to its reports.

Russia's largest producer of liquefied natural gas Novatek (NVTK.MM) also said on Thursday it had switched to euros in most of its contracts in order to avoid the impact of U.S. sanctions.

## LIMITED IMPACT FOR NOW

Rosneft's switch to the euro comes amid attempts by Russian companies to work out ways to carry out international transactions without the U.S. dollar.

Russian President Vladimir Putin has called for de-dollarisation that should help limit exposure to the lasting risk of more U.S. sanctions, while the Russian central bank has lowered the amount of U.S. Treasuries in its reserves in 2018.

The switch to the euro has its downside as, under the current policy of the European Central Bank, financial institutions are required to pay interest for parking excess reserves with the bank, known as negative interest rates.

"There is no sense in storing money under negative interest rates," said Alexander Losev, head of Sputnik Asset Management.

Given the negative rates, Rosneft's switch to operations in euros is capable of increasing the amount of euro conversion as Rosneft will seek to ditch the currency for those that are of more use for its operations, market experts say.

The euro's share in Russia's exports has been on the rise since 2015 but Rosneft's adoption of it is unlikely to have an impact on the Russian currency market, said a manager at one of Russia's state-controlled banks.

Other experts agree, saying that Rosneft will still need to convert its euros for tax payments and other needs in Russia.

A senior forex dealer at a state-controlled bank also said the impact of Rosneft's move on the rouble will be negligible.

The Moscow Exchange (MOEX.MM) said Rosneft's move will increase the euro share in its overall trade turnover.



Previously, the share of euro trade on the Moscow Exchange has been increasing only marginally. Over the past year, the euro/rouble share in overall FX turnover on Russia's main bourse stood at 12%, up from 11% in 2017 and 9% in 2016.

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## **Qatar stresses role of natural gas in meeting economic and environmental challenges**



Qatar has stressed the importance of natural gas in meeting the economic and environmental challenges facing energy consumers around the world.

Many countries around the world are searching for the right balance of reliable and secure sources of energy, which can drive their growth, while addressing environmental concerns at the same time, HE the Minister of State for Energy Affairs Saad bin Sherida al-Kaabi told the 21st ministerial meeting of the Gas Exporting Countries Forum (GECF).

“In this effort, many are discovering the versatile, flexible, economic, and environmental qualities of natural gas as a key enabler in the journey to achieve a lower-carbon economy,” he



said.

He stressed on Qatar's commitment to ensuring the continued availability of reliable LNG (liquefied natural gas) supplies to world markets, and to promoting greater growth in the LNG industry, as well as to serving the growing needs of its clients.

"We all have the same objective: To place natural gas at the heart of the energy industry as a fuel of the future to affirm our true belief that natural gas is a cornerstone in the energy transition and a destination fuel, not merely a transition fuel," he said.

Drawing attention to unprecedented recurrent climatic conditions, including mean temperatures, turbulent seasonal cycles and extreme events, al-Kaabi had recently said it is time to take another look at natural gas and the number of advantages it has to make it a pivotal element in any strategy to tackle environmental challenges.

Qatar has highlighted the efforts to reinforce its position as the world's leading LNG producer, which include the North Field expansion to increase the LNG production capacity to 110mn tonnes per annum by 2024, and a major ship-building campaign to build up to 100 LNG carriers over the next decade.

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## **China bid for commodity price power extends to natural gas**



China became the world's biggest natural gas buyer last year. Now it wants to start setting its own price.

That's because importers have been paying rates influenced by events unrelated to China's supply and demand balance from European weather to Middle East conflicts. So like it has for oil, gold and iron ore before, producers, distributors and financial exchanges in the top commodities market are seeking prices that they say better reflect Chinese fundamentals, and in their own currency.

The search for an internationally recognised Chinese natural gas price, including a proposed futures contract, follows the larger pattern of the world's biggest commodities consumer seeking a greater say in how to price the raw materials it consumes.

'We've been taken advantage of by foreign firms, Xu Tong, a deputy general manager of distributor Beijing Gas Group Co, said in an interview. Domestic indexes will 'reduce premiums significantly.

China is also opening its commodities derivatives markets to foreign traders, partly in an effort to broaden the appeal of its currency, the yuan. In March 2018, an exchange in Shanghai introduced an oil futures contract for overseas investors, while Dalian followed two months later by opening up its iron ore trade.

China's natural gas demand has boomed in recent years as the government of President Xi Jinping pushed industrial and residential customers away from coal. But domestic production of the gas hasn't kept pace with consumption. Imports, meanwhile, surged almost 32% last year.

Domestic gas sales follow two different pricing structures: a government-set price for pipeline supplies, which is open to some negotiation between buyers and sellers, and the unregulated market for liquefied natural gas transported on trucks. And for imports, China mostly pays in US dollars at prices based mainly on either global oil or gas benchmarks set in the US or Europe.

The structure can contribute to losses for Chinese companies that resell overseas gas at lower domestic rates. PetroChina Co, the top oil and gas supplier, has chalked up \$34bn of losses since 2011, when it began regularly reporting the figures.

LNG contracts first became tied to oil prices at a time when the fuel competed with petroleum used for home heating and power generation. More importantly, oil provided transparent and liquid price benchmarks that allowed buyers to hedge and sellers to secure bank financing. But prices have begun to uncouple as the global gas market deepens.

'Gas fundamentals can't be reflected by oil they are two separate products, Wu Yifeng, deputy general manager of natural gas at PetroChina's international unit, said in an interview in Beijing.

Europe and the US have natural gas benchmarks that reflect supply and demand in their respective markets and are liquid enough to bank on. Asia doesn't have that yet. A futures contract built around the current spot benchmark in northeast Asia assessed by S & P Global Platts is gaining traction, but remains a far cry from what's seen in the west.

Chinese gas companies are trying to build their own, drawing on the success of the nation's Dalian iron ore futures, which global traders look to for daily price signals because of the sheer size of the market.

The Shanghai Futures Exchange has said it plans to launch natural gas futures, though no timing has been set. The Shanghai Petroleum & Natural Gas Exchange, or SHPGX, hosts auctions for small quantities of domestic gas and publishes daily trucked LNG prices.

Whether China is able to achieve the clout it desires with gas prices may depend on ease-of-use and investor interest. Currently, crude oil, iron ore, rubber and purified terephthalic acid (used to make plastics and polyester) are open to foreigners, and most other commodity futures are isolated to only the domestic market. The gas contract SHFE is mulling will allow offshore entities to trade.

Another key factor for China's pricing ambitions is a long-awaited national pipeline reform. The move to give more suppliers access to the transportation networks, which is now mainly operated by the three state-owned giants, must happen for prices to freely reflect the broader market, said Chen Gang, an assistant to the general manager at SHPGX.

Only then can domestic prices become a benchmark, with support from the derivatives market, according to Chen. The final step may be to link those prices to imported gas, he said.

Source: Gulf Times

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# Oil market bulls regroup, but don't bet on a rally just yet



Calgary: Oil bulls are rebuilding their positions, but it will probably take some major news to shake the market out of its current mood and trigger a sustained rally.

Money managers boosted their net-long position on West Texas Intermediate crude for the first time since mid-September in the week ended Oct. 22, data released Friday show. Those bets are still at half the level they reached last month, though, while short-selling wagers have tripled in that period.

That signals there's still a lot of scepticism in the market, despite crude's 5.4 per cent gain this week. But it also shows there's growing support for a meaningful rally once short-sellers start unwinding their positions. It's just that they

don't seem to have a reason to do that yet.

"We had some events recently that were unusual, including the unprecedented attacks on Saudi Arabia," said Stewart Glickman, an analyst at CFRA Research Inc. "The market saw a quick uptick but then shrugged it off a bit pretty quickly."

This week was marked by news of a decline in US crude stockpiles, a brief shutdown of a critical pipeline and signs of progress on US-China trade talks. The market has seen similar pieces of bullish news over the past few months that weren't enough to dispel uncertainty over demand in the face of growing supplies.



"Every other day, it seems like we get a new statement from the [Trump] administration related to the trade talks," said Gene McGillian, manager of market research at Tradition Energy. "We've gone down this road too many times."

Money managers' WTI net-long position, or the difference between bullish and bearish bets, rose 8.5 per cent to 93,856 futures and options, according to US Commodity Futures Trading Commission data. That compares with more than 200,000 about a month ago.

Long-only bets rose 9.3 per cent, while short positions climbed 10 per cent. Short-selling is near a peak reached in January, before massive short covering through the end of April helped support crude's rally during the first four months of the year.

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# Musk Says Tesla Has Finally Made a Ready-to-Deploy Solar Roof



Almost three years after Tesla Inc. Chief Executive Officer Elon Musk unveiled solar roof shingles as part of his push to buy SolarCity, the automaker says it finally has a version of the tiles that it can mass produce.

“It’s been quite hard,” Musk said on a conference call late Friday. “Roofs need to last a long time. When you add electrification to the roof, it’s a fair bit of complexity.”

The sleek roof is a key part of Tesla’s push to revive its struggling solar business. Musk unveiled the product in 2016, but the company hasn’t been able to bring production up to full scale. The photovoltaic tiles are designed to resemble regular shingles, unlike solar panels atop a roof.

The latest version of the shingles was introduced after Tesla lost its status as the biggest U.S. rooftop solar company. It's also been sued by Walmart Inc. over fires at a half-dozen of the big-box stores that had Tesla solar systems, and the company still faces litigation from shareholders over the controversial SolarCity acquisition.

## **Signs of a Bounce Back**

Tesla's quarterly solar installations increase for first time in a year

Tesla initially said it would have a slow roll-out of the solar roof. But issues with aesthetics, cost and manufacturing process have dogged production. At one point in 2018, Tesla was making enough solar-roof shingles for just three to five homes a week.

Earlier this year, Musk declared 2019 as "the year of the solar roof." In July, he tweeted that Tesla was "spooling up production line rapidly," and that he hoped to manufacture about 1,000 roofs each week by year-end.

On the call Friday to discuss the third version of the roof, he reiterated the goal of getting to 1,000 roofs per week in the next several months but acknowledged that there might be setbacks.

"It's an odd and weird product," he said. "Why would anyone make a solar roof? How strange. But it just is a thing that should be. So we're going to make it."

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# Green Climate Fund attracts higher pledges, open for more



LONDON (Thomson Reuters Foundation) – Wealthier countries on Friday promised nearly \$9.8 billion over the next four years to an international fund to help poorer nations develop cleanly and adapt to climate stresses, with nearly a dozen nations doubling their previous commitments.

The total was slightly higher than the \$9.3 billion committed to the Green Climate Fund (GCF) at its first pledging conference in 2014, and came despite the absence of commitments by previous major donors such as the United States.

Climate finance analysts welcomed the stepped-up pledges – 11 of the 27 donor governments doubled their previous commitments – but said the totals were not rising as fast as the climate-change threats poor nations must deal with.

“It’s quite clear we have governments all over the world declaring climate emergencies, and far more finance from all sources is needed to adequately address the challenge,” said Joe Thwaites, a finance researcher with the U.S.-based World Resources Institute.

In its first five years the fund received total promises of a little over \$10 billion.

But because the United States, under President Donald Trump, reneged on two-thirds of its initial \$3 billion pledge, and currency values changed, it effectively had only \$7.2 billion to spend, said Yannick Glemarec, its executive director.

The new commitments, if fulfilled, will effectively give it 70% more money to spend each year, with additional pledges likely in coming months, he said.

The funding is still a drop in the ocean compared with the estimated \$3 trillion to \$7 trillion a year needed to shift the world’s economy onto a more sustainable and climate-friendly path, Glemarec said.

But if used to show what is possible in developing nations and cut risks for private investors there, it could help spur the much larger investments needed to make that shift, he said.

“We are very excited because we should be able to prevent a lot of climate hurt” with the additional funds, he told the Thomson Reuters Foundation.

The GCF so far has allocated about \$5.2 billion to 111 projects in 99 countries.

They range from green, low-cost housing in Mongolia’s polluted capital and a methane-fuelled rapid-transit bus system in Karachi to restoring climate-threatened ecosystems in Namibia.

The GCF has committed to spend half of its funding on efforts to help poorer countries adapt to climate threats, which

rarely attract significant private or government finance.

## **'GOOD START'**

Most of the donors making fresh contributions came from Europe, though New Zealand, South Korea, Japan and Canada also committed funds, with New Zealand and South Korea pledging to double previous donations.

"This is a good start but in no way adequate to meet the needs on the ground," said Wendel Trio, director of Climate Action Network Europe, saying he hoped more pledges would come.

The fund will remain open for additional contributions throughout its next term, GCF officials said.

Thwaites said Belgium was expected to commit to doubling its previous \$100-million pledge to the fund in coming months, and Mexico had attended this week's pledging conference in Paris too.

Gas-rich Qatar, at the U.N. Secretary-General's climate summit in New York last month, pledged \$100 million to help least-developed countries and struggling small islands cope with climate threats, Thwaites said.

The money was not intended for the GCF but shows issues affecting poorer states "are on their radar", he said.

Stepped-up GCF funding is considered key to encouraging poorer nations to boost the ambition of their national targets to hold the line on emissions and better adapt to climate threats, finance experts said.

Both rich and poor governments are expected to improve their climate action plans – created as part of the 2015 Paris Agreement on Climate Change – by the end of 2020.

Many developing-nation plans rely heavily on external funding to meet their most ambitious goals to put in place everything

from renewable energy to storm early warning systems.

Liane Schalatek, a climate finance specialist with the Heinrich Böll Foundation North America, said the new GCF pledges were positive but “probably not enough to give developing countries the confidence to significantly raise their ambition”.

They were also insufficient to pay for the roughly \$15 billion in projects already waiting in the fund’s pipeline for cash, she said in a statement.

GCF head Glemarec said a key role of the GCF’s spending was to show private investors that good investments are possible in poorer countries, and remove roadblocks to those, by setting an example or helping shift policies.

In developed countries, 98% of investment in renewable energy is private, he said, but in the least-developed countries it is under 1%, he said.

Thwaites said the GCF “comes in with money to do things the private sector isn’t yet comfortable doing. They have a demonstration effect and a de-risking effect and then you see a lot more private finance can flow in those regions”.

This is especially appropriate for projects like establishing feed-in tariffs for solar or wind power that help create a renewable energy market and give investors confidence.

The GCF has so far mobilized \$2.60 in additional financing for each dollar spent, though that figure is held down by its focus on adaptation projects, which struggle to attract private finance, Thwaites said.

He said the mobilization rate was particularly respectable given the fund is working “in really difficult environments”.