How to halt global warming for $300bn

The world needs to spend $50 trillion on five areas of technology by 2050 to slash emissions and meet the Paris Agreement's goal of halting global warming, Morgan Stanley analysts wrote in a report.

To reduce net emissions of carbon to zero, the world would have to eradicate the equivalent of 53.5 billion metric tons of carbon dioxide a year, according to the report, which identified renewable energy, electric vehicles, hydrogen, carbon capture and storage, and biofuels as the key technologies that could help meet the target.

Carbon emissions from fossil fuels hit a record last year, but estimates vary of how much it would cost to meet the Paris target of keeping the global temperature rise to within 2 degrees. The International Renewable Energy Agency says $750 billion a year is needed in renewables over a decade. United

Nations scientists say $300 billion spent on reclaiming degraded land could offset emissions to buy time to deploy zero-carbon technologies.

Here are Morgan Stanley's estimates for the five key technology areas and some of the companies leading the drive.

Renewables

- Renewable power generation will require $14 trillion by 2050, including investments in energy storage.
- Renewables would need to deliver about 80% of global power by then, up from 37% today, meaning an additional 11 000 gigawatts of capacity, excluding hydro-power.
- Solar energy's rapidly falling cost will make it the fastest-growing renewable technology over the coming decade with a 13% compound annual growth rate.
- Stocks that could benefit include: CGN New Energy Holdings Co., China Resources Power Holdings Co. and China Suntien Green Energy Co.

Electric vehicles

- With passenger cars currently pumping out about 7% of greenhouse gas emissions, some $11 trillion will be needed to build factories, expand power capacity and develop the batteries and infrastructure needed to switch to electric vehicles.
- With increased investment, annual EV sales could grow from 1.3 million units in 2018 to 23.2 million in 2030, lifting the total number of electric vehicles to 113 million by 2030 and 924 million by 2050.
- Some of the companies to watch: Beijing Easpring Material Technology Co., Rohm Co. and Panasonic Corp.

Carbon capture and storage

- Almost $2.5 trillion would be needed for technologies that capture carbon and store it.

- While it currently costs about $700 million to capture a million tons of carbon a year, the cost of building CCS plants is expected to drop 30% by 2050.
- With more than 200 000 megawatts of new coal-fired generation capacity under construction, CCS is the only option to offset the emissions of these plants, Morgan Stanley says.
- The bank's top picks include Air Liquide SA and Bloom Energy Corp.

Hydrogen

- About $5.4 trillion is needed for electrolyzers to make the gas, which can help provide clean fuel for power generation, industrial processes, vehicles and heating.
- In addition, $13 trillion would be required to increase renewable energy capacity to power the plants.
- Another $1 trillion would be needed for storage, with additional investment for transportation and distribution.
- Leading players include: Johnson Matthey and Air Liquide.

Biofuels

- Almost $2.7 trillion should go into biofuels like ethanol, which are currently mixed with petroleum products but will spread eventually to areas such as aviation.
- About 4% of global transportation fuel will be biofuel in 2030.
- Ethanol, the most-used biofuel at the moment will grow at about 3% a year, while a type of biodiesel called hydro treated vegetable oil will achieve must faster growth, quadrupling production by 2030.
- Companies invloved include Neste Corporation and Sao Martinho SA.

QP wins exploration rights in three Brazil offshore blocks

SOCHI, Russia—Russian President Vladimir Putin on Thursday promised support to Philippine President Rodrigo Duterte in fighting terrorism.

“Mr. President [Duterte], we are ready to continue to develop our partnership and to share our experience and achievements in the field of counterterrorism,” he said during their bilateral meeting in the resort city of Sochi.

The Philippine government under the Duterte administration, Putin said, was able to reduce terror threats and enhance the capabilities of its security forces.

“I recall how you had to fly back home during your previous visit to Russia in May 2017 because of the terrorist attacks staged by ISIS,” he said.

The Russian government also expressed interest to further expand its cooperation with the Philippines.

“Russian companies are willing to increase the export of energy, aircraft, motor transport and special vehicles to the Philippines. We are interested in promoting industrial cooperation and joint projects in the peaceful use of nuclear energy, space exploration and digital technology,” Putin said.

On his part, Duterte reaffirmed Philippines’ commitment to build a comprehensive partnership with Russia.

“In the past 2 years we have seen a dramatic increase in bilateral activities across many areas of cooperation at various levels of government. We have also made historic firsts in the key strategic areas, from economic defense, security and military technical cooperation,” he said.

Meanwhile, in the Valdai Discussion Club where Duterte delivered a speech, he stressed the need to explore new partnerships with non-traditional allies, such as Russia.

He also used the forum to lash out against countries critical of his administration’s campaign against illegal drugs.

“We want unimpeded freedom guaranteed by our constitution to exercise the right to govern ourselves as a people and as we saw it fit,” he said.

He added, “I want our friends and partners to respect our independence to make sovereign decisions just as we respect theirs.”

With 3 years left before his term ends, Duterte said he would sought engagement in Latin America, Africa and the Middle East.

“I want the Filipino people to broaden their worldwide view, to be enriched by the cultures and intellectual traditions of the old civilizations of the Americas, Africa, Central Asia, and the Middle East," he said.

QP wins exploration rights in three Brazil offshore blocks

Qatar Petroleum (QP), the country's hydrocarbon bellwether, has won exploration rights in three offshore blocks in Brazil, as part of two bidding consortia.

The winning bids were announced by Brazil's National Agency of Petroleum, Natural Gas, and Biofuels (ANP) at a public bidding session held in Rio de Janeiro.

Competing bids were submitted to the ANP and the winners were announced throughout the course of Thursday's public session.

QP won the exploration rights for block [541] in the Campos basin as part of a consortium comprising affiliates of Total (Operator with a 40% interest), QP (40% interest), and Petronas (20%).

It also won the exploration rights for blocks [659 and 713] in the Campos basin as part of a consortium comprising affiliates of Shell (Operator with a 40% interest), Chevron (35% interest), and QP (25% interest).

"This successful result is the fourth of its kind, which further strengthen QP’s footprint in Brazil, marking yet another successful step towards realising our international growth strategy, and turning Brazil into a cornerstone of our international portfolio,” said HE the Minister of State for Energy Affairs as well as QP president and chief executive, Saad bin Sherida al-Kaabi.

QP, an integrated national oil corporation responsible for the sustainable development of the oil and gas industry in Qatar and beyond, covers the entire spectrum of the oil and gas value chain locally, regionally, and internationally, and include the exploration, refining, production, marketing and sales of oil and gas, liquefied natural gas, natural gas liquids, gas to liquids products, refined products, petrochemicals, fertilisers, steel and aluminium.

France upholds law banning palm oil from biofuel scheme

France’s constitutional court yesterday upheld a law excluding palm oil from the country’s biofuel scheme, rejecting an appeal by energy company Total which says the measure puts at risk its production site in southern France.

The legislation will remove palm oil from a list of permitted biofuels from January 2020 and eliminate related tax advantages.

Total invested €300mn to convert its La Mede site from a crude oil refinery into a biofuel plant, starting output in July.

CEO Patrick Pouyanne has warned that if the law were upheld, it could mean losses of up to €80mn ($88mn) for the refinery, forcing the company to rethink its plans.

The constitutional court said in a statement the law was in line with the public interest of environmental protection, “considering the strong growth of palm oil production and the major amount of land used for its production worldwide, and given the deforestation and drying out of peat bogs”.

A spokesman said Total had taken note of the court’s decision and reiterated Pouyanne’s previous comments that the company would not be able to meet an agreement with the government to source some feed stock locally if the law was upheld.

Pouyanne told lawmakers during a hearing in September that Total had no wish to shut down La Mede, which employs around 300 people.

However, he said that the company would not be able to meet commitments such as buying rapeseed oil from French farmers for the refinery.

“We would have to look for an export market, but the refinery will not be competitive,” he said last month.

The European Union also plans to restrict the use of palm oil in biofuel due to the environmental impact, something which has triggered diplomatic tensions with top producers Malaysia and Indonesia.

Under the French government’s 2019 budget, tax exemptions for palm oil will end on January 1, 2020.

The law specifies that palm oil cannot be considered a biofuel unless producers can guarantee it has been produced under conditions that prevent an indirect increase of greenhouse gas emissions.

Tax exemptions for other biofuels remain in place.

Total argues that adding palm oil to fuel is a way of using renewable energy and that the budget law introduced an unjustifiable difference between palm oil and other oilseed crops.

The company won government approval in 2018 to use palm oil to supply La Mede.

It pledged that palm oil would account for less than half of raw material used, with French rapeseed crops and recycled oil also being used.

However, the plans caused uproar among environmental activists and farmers.

Environmental protection group Greenpeace welcomed the court’s decision as “good news for the fight against deforestation” and called in a statement for France to also remove soybeans from the list of crops approved for biofuel.

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* CNOOC seeks to charter ships to replace COSCO-linked tankers

* Japan’s Tohoku buys November-delivery cargo – sources

* China’s LNG imports could slow due to terminal repairs

By Jessica Jaganathan

SINGAPORE, Oct 11 (Reuters) – Asian spot prices for liquefied natural gas (LNG) rose to a three-week high this week ahead of winter demand, while tanker rates nearly doubled on limited availability of vessels.

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Prices for December delivery are estimated to be about $6.45 per mmBtu, they added.

Higher oil prices and shipping rates, which have nearly doubled in a week could boost spot LNG prices further, sources added.

LNG tanker rates rose after China National Offshore Oil and Gas Company (CNOOC) sought tankers to charter looking to replace ships it had previously hired that are linked to a Chinese company sanctioned by the United States for allegedly transporting Iranian oil, they added.

Several industry sources said CNOOC is seeking to replace some of six COSCO-linked LNG tankers – Dapeng Sun, Dapeng Moon, Dapeng Star, Min Rong, Min Lu and Shen Hai.

Still, apart from a few spot cargoes, demand from North Asia is yet to increase for winter, trade sources said.

In the spot cargo market, Japan's Tohoku Electric Power bought a cargo for November delivery from a trader at $5.80 per mmBtu, industry sources said, though this could not immediately be confirmed.

"Demand in Japan is low. I think it is only Tohoku who purchases spot cargoes constantly," a Japan-based trader said.

Essar Steel India is yet to award a tender seeking 12 cargoes for 2020 delivery, a company spokesman told Reuters.

China's LNG imports are expected to slow as repairs to the Rudong LNG import terminal is only likely to be done by mid-November after an accident last month, two company sources said.

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PetroChina's trading unit Chinaoil is diverting some of the LNG meant for the Rudong terminal to its two other receiving terminals in Tangshan and Dalian, one of the company sources said. The company also offered spot cargoes earlier this week, traders said.

BHP Group has offered a cargo for loading in November from the North West Shelf plant in Australia while Angola LNG plant offered two cargoes for delivery in October and November.

Qatar set to host sixth Gas Summit of GECF in 2021

Qatar will host the sixth Gas Summit of the Gas Exporting Countries Forum (GECF) in 2021, offering an opportunity for dialogue at the highest levels on the latest developments and trends related to the global gas industry.

The announcement was made during the conclusion of the 21st GECF ministerial meeting in Moscow. This will be the second summit to be held in Doha after the forum’s first summit on November 15, 2011.

“We look forward to a highly successful meeting that reflects our deep belief in dialogue and co-operation in the effort to meet the world’s growing demand for energy,” said HE Saad bin Sherida al-Kaabi, Minister of State for Energy Affairs, the president and chief executive of Qatar Petroleum.

He said Qatar is committed to the responsibilities it carries as the world’s leading liquefied natural gas producer, foremost of which is encouraging regional and international dialogue as well as promoting natural gas as the cleanest of fossil fuels and the destination fuel in the transition to low carbon economies.

Earlier addressing the ministerial meet in Moscow, al-Kaabi had stressed the importance of natural gas in meeting the economic and environmental challenges facing energy consumers around the world.

Drawing attention to unprecedented recurrent climatic conditions, including mean temperatures, turbulent seasonal cycles and extreme events, he had 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.

The GECF, which is headquartered in Doha, is an international governmental organisation that provides a framework for knowledge sharing among its member countries. It is made up of the world’s leading gas exporting countries and was set up with the objective to increase the level of co-ordination and strengthen the collaboration among its member countries.

Africa May Have 90% of the World’s Poor in Next 10 Years, World Bank Says

Africa could be home to 90% of the world’s poor by 2030 as governments across the continent have little fiscal space to invest in poverty-reduction programs and economic growth remains sluggish, the World Bank said.

That’s up from 55% in 2015 and it will happen unless drastic action is taken, the lender said in its biannual Africa Pulse report released Wednesday, in which it also cut growth forecasts for the region’s key economies.

The rate of poverty reduction in Africa “slowed substantially” after the collapse in commodity prices that started in 2014, resulting in negative gross domestic product growth on a per capita basis, according to the report. “As countries in other regions continue to make progress in poverty reduction, forecasts suggest that poverty will soon become a predominantly African phenomenon.”

While the poverty rate in sub-Saharan Africa, defined as the percentage of people living on less than $1.90 per day, fell between 1990 and 2015, rapid population growth resulted in the number of poor people on the continent increasing to more than 416 million from 278 million over the same period, according to World Bank data.

The lender said pro-poor growth policies are required to accelerate poverty reduction and that fiscal tightening limits governments’ ability to spend on social sectors.

“Given the limited scope for redistribution and transfers to raise the incomes of the poor in most African countries, the focus should be squarely on raising their labor productivity, that is, what it will take to increase their earnings in self-employment or wage employment,” according to the report.

Government debt increased to 55% of GDP in 2018, from 36% in 2013 due to a lack of fiscal consolidation after countries tried to counter the effects of the global financial crisis by boosting spending, the World Bank said. About 46% of African countries were in debt distress or considered at high risk in 2018 compared with 22% five years earlier.

“For many countries it’s not a good idea to borrow non-concessionally because of the risk of the debt distress that they already have,” World Bank Vice President Akihiko Nishio said in an interview Oct. 2 in Ivory Coast’s commercial capital, Abidjan. “They should instead focus on concessional credits and grants.”

The lender lowered its economic growth forecast for sub-Saharan Africa to 2.6%, down from its April projection of 2.8%.

— *With assistance by Katarina Hoije*

Budget realities pressure South Africa to stop policy dithering

South Africa's government has spent months mostly talking about how to save the debt-stricken state power utility Eskom Holdings SOC Ltd, spur economic growth and get its shaky finances back on track. Financial realities may force an end to the dithering.

The government will have to make some decisions by October 30, when Finance Minister Tito Mboweni is due to deliver his mid-term budget policy statement and set out how massive bailouts for Eskom will be funded at a time when growth and tax revenue are falling short of target. That's two days before Moody's Investors Service is scheduled to make a call on the nation's only remaining investment-grade credit rating.

"We are really running out of time," Isaac Matshego, an economist at Nedbank Ltd, said by phone. "The number one priority for the government right now should be to stabilise the key state-owned enterprises, not only because they are failing operationally but also because they are a heavy burden on the fiscus."

President Cyril Ramaphosa's ability to push through unpopular policies is constrained by his tenuous hold on the deeply divided ruling African National Congress and opposition from its labour union and communist allies, who oppose privatisation, fearing job losses. The slow pace of reform has frustrated investors, driven business confidence to the lowest level since 1985 and weighed on the rand – it's slipped 23% against the dollar since Ramaphosa took office in February last year.

Progress has been particularly slow when it comes to fixing Eskom, which supplies about 95% of the nation's power and is seen as the biggest risk to the economy. The utility has been without a permanent chief executive officer since Phakamani Hadebe quit in July, isn't generating enough revenue to cover its costs and has been allocated 128bn rand ($8.4bn) in bailouts over three years to remain solvent.

The government signalled its intent to act decisively in August, as the Treasury asked departments to prepare budget proposals to cut their spending by an average 6% over the next three fiscal years – saving as much as 300bn rand. Eskom's turnaround strategy is now due to be unveiled by the end of this month, as is its new CEO and the energy blueprint.

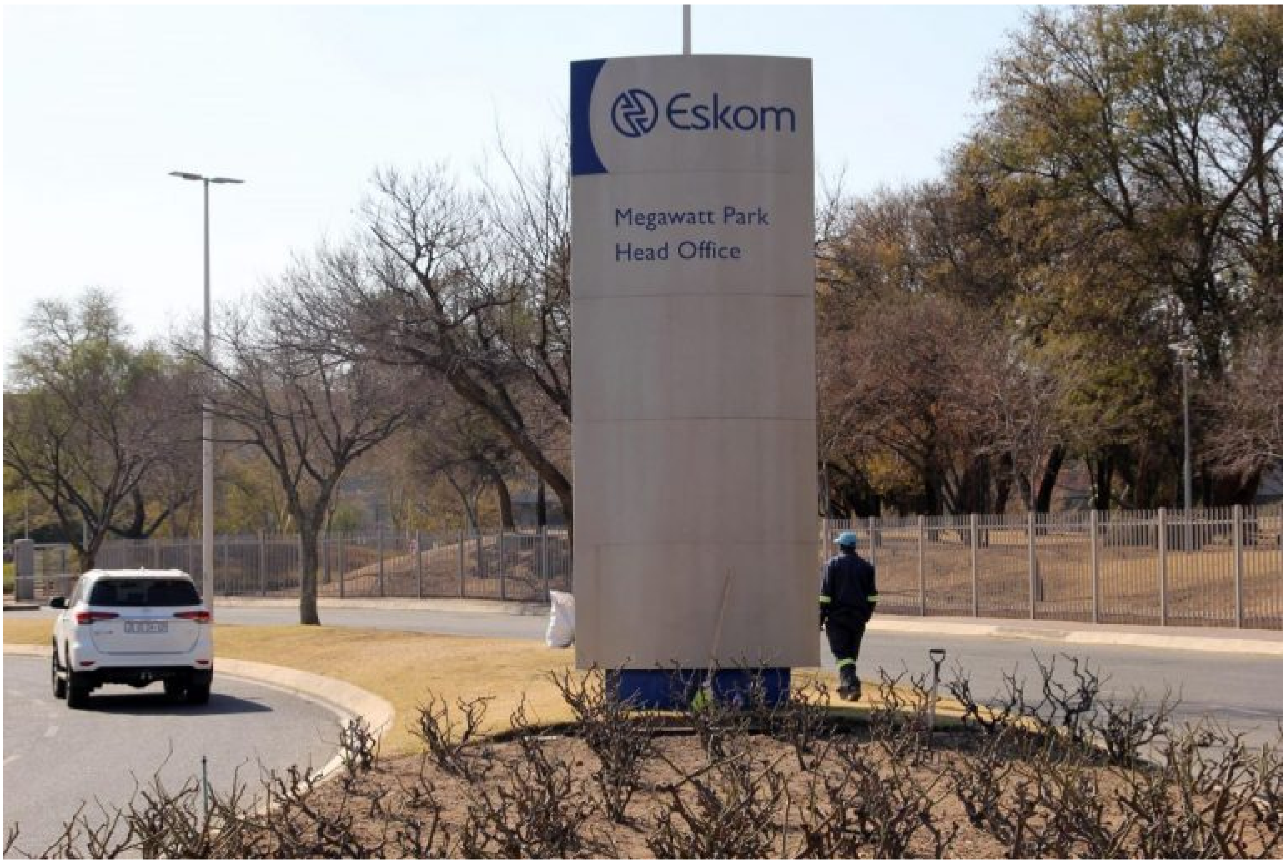
"Ramaphosa is now fully aware that he must be seen to be doing things and taking control and that the time for treading water is over," Susan Booysen, director of research at the Mapungubwe Institute for Strategic Reflection, said by phone. "All those comments that he was a lame duck president and he was unable to control the factions in the ANC must have hit home."

Even so, differences persist within the government and ruling party over how best to revive the economy.

While the Treasury suggested in August that Eskom could sell power plants to settle its 450bn rand of debt and that other assets be privatised, these proposals failed to win public endorsement from the ANC. The party has traditionally sought to build consensus among its widely divergent constituents, which has all too often resulted in policy paralysis.

"The next steps will require political capital expenditure and that's where things will get difficult," said Peter Attard Montalto, head of capital markets research at research firm Intellidex. "Effecting major policy shifts will be both challenging and time-consuming."

Eskom risk premium eases as Treasury off ers bailout conditions



Bloomberg/ Johannesburg

Credit default swaps for Eskom Holdings SOC Ltd, South Africa’s state-owned power company, are trading near the cheapest level in almost three years relative to the sovereign risk after the Treasury published proposed conditions for funds to bail out the utility.

That suggests investors are comfortable a turnaround plan for the debt-ridden company, which President Cyril Ramaphosa says will be presented to cabinet shortly, will include a sustainable framework to deal with its $30bn of debt. The government has said it won’t allow Eskom to fail or bondholders to take a haircut.

“It’s about 10 years too late, but better than nothing,” said Rashaad Tayob, a money manager at Abax Investments Ltd in Cape Town. “It’s positive that there will be oversight on Eskom’s capex, and a requirement that they must work to recover debtors in arrears. But nothing on energy and staff costs, so we must wait for the special paper/white paper to understand the long term plan to fix Eskom.”

Eskom, which supplies about 95% of South Africa’s electricity, has been granted 128bn rand of state bailouts over the next three years to help it remain solvent.

Amounts of 26bn rand and 33bn rand will be allocated in portions to Eskom in the 2020 and 2021 financial years on dates determined by the finance minister, the Treasury said in a presentation on its website Wednesday.

The conditions offered include that Eskom publish separate financial statements for its generation, distribution and transmission units. Treasury will also require daily liquidity position updates and for no incentive bonus payouts to be made to executives in the years where equity support is provided.

“The market is taking comfort from the fact that there is increased government oversight,” said Bronwyn Blood, a fixed-interest portfolio manager at Granate Asset Management Ltd in Cape Town. “Conditions imposed on Eskom will ultimately allow for more certainty around repayment of debt, thus minimising the risk of default.”

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Reporting by Jessica Jaganathan