

# Overcoming climate challenge to human development



By Kanni Wignaraja/New York

In his autobiography, Singapore's founding father, Lee Kuan Yew, told the story of how leadership and grit transformed a tiny nation on a sandbar into an open, competitive, and prosperous metropolis.

In the decades since, Singapore has been governed by a famously efficient and graft-free political class, and it now boasts a highly skilled workforce. In the United Nations Development Programme's latest Human Development Index (HDI) – first conceived 30 years ago by the Indian Nobel laureate Amartya Sen and the Pakistani economist Mahbub ul Haq – the country ranks eleventh out of 189 overall.

But when the HDI is adjusted to consider carbon dioxide emissions and so-called material footprint (which measures the share of global extraction of raw materials in a country's final demand), Singapore's rank drops by 92 positions. No country has ever managed to reach a high level of human development with low resource use, and Singapore, having

virtually no natural resources of its own, imports almost all of the commodities it needs. There is nothing unusual about this; Singapore is emblematic of growth across the planet. But the natural environment cannot sustain this form of growth and development.

The intense pressure that our current development models are putting on local ecosystems is perhaps most clearly illustrated by the Covid-19 pandemic. A tiny pathogen has laid bare massive vulnerabilities and gross inequalities in even the strongest and most prosperous societies, with economic and social imbalances reinforcing the damage inflicted by the pandemic. As the disease spread, we learned that the collective action needed to confront such a challenge becomes far more difficult when domestic divisions and international rivalries prevail over global solidarity.

But while Singapore-style development is not sustainable, nor is it feasible to reframe development as a trade-off between people's livelihoods and saving trees. That is a central argument in the UNDP's new Human Development Report (HDR), which examines new or underused pathways to achieving human and environmental well-being. In the future, we must encourage countries to pursue prosperity while minimising their carbon footprint by applying the knowledge, science, and technology now at our disposal.

The report reimagines the future role of governments, but it is clear that they will not bear sole responsibility for the vital choices that must be made in the coming years. The HDR also calls for a socially and environmentally responsible private sector that regards embracing nature as being in its own interest and helps to reshape norms and incentives for climate action.

Four important areas for action stand out. First, cities – which account for 85% of energy output and 75% of CO2 emissions (estimates vary) – now need to pave the way for green renewal. The HDR highlights a role for cities as theatres for green action: pricing the true social cost of carbon, protecting green spaces and planting trees, and

cleaning waterways and seas of the plastic garbage that is devastating marine life.

Second, in addition to action by cities and national pledges – including in the Asia-Pacific region – to become carbon-neutral over the next few decades, ordinary citizens must adapt their ways of life. The HDR urges people to reconsider what they value highly, and to change what they consume and how they produce, commute, and invest. This is not impossible. Throughout history, we have seen that social norms and behaviour can change. Tobacco use, for example, has become socially stigmatised, leading to a decline in smoking, and mask-wearing has become the norm in many places during the Covid-19 pandemic.

Third, while behavioural change can stem from hard incentives (say, higher tobacco taxes) and regulations, it can also be inspired by collective calls to action, such as those urging large and small institutional investors to finance new green technologies.

Private money must match public funding, reinforced by plugging local and international tax loopholes and withdrawing unnecessary subsidies. The subsidy on fossil fuels alone costs the world economy \$5 trillion a year. In the Asia-Pacific region, such subsidies can equal more than 50% of a country's health or education budget. The right taxes on carbon, financial transactions, and extreme wealth can raise an additional \$200 billion annually for green investments, according to the Sustainable Development Solutions Network's report on SDG costing and financing for low-income countries. Financial constraints clearly need not impede the transition to a green economy.

Finally, we must understand that nature is not our adversary. The HDR documents 20 cost-effective actions related to forests, wetlands, and grasslands that can lead to 37% of the mitigation needed to keep global temperatures within 2°C of pre-industrial levels. Reforestation alone accounts for two-thirds of this potential. Recognising and protecting the local communities that are nature's stewards will be key. The

contribution of the Amazon's indigenous peoples to preserving forest storage capacity, for example, now equals the per capita greenhouse-gas emissions of the top 1% of global emitters.

Sen and Haq's original index of human progress introduced a new way to measure how well societies manage to reach their potential. When adjusted for planetary stress today, however, the index shows how their choices are being radically constricted. Instead of passively awaiting our fate, we must use our knowledge, reason, and agency to establish new development models and shape our collective fortunes. – Project Syndicate

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**Solar Stocks Have Been  
Thriving—Here's Why That  
Could Continue**



The solar industry has been on a tear. Several stocks in the sector hit all-time highs last month. Investors seem eager for more solar companies to go public. But is this surge more sustainable than prior booms?

Earlier boom times ended painfully. Several renewables companies went public in 2014 and 2015—or spun off their operating power-plant units—amid a clean-tech wave. But the collapse of SunEdison Inc.—the world’s largest renewables company before its 2016 bankruptcy—stung the solar industry. Some investors began prioritizing profitability over growth. No solar companies went public in the U.S. between late 2016 and early 2019, according to Bloomberg data.

Now, clean-tech companies are going public at a dizzying pace. Since October, at least two solar companies have gone public via initial offerings and another agreed last month to do so through a merger with a blank-check company. They join several electric-vehicle and battery companies that have also gone public with special purpose acquisition companies. There have been 32 clean-tech SPAC deals over the past 12 months, according to Pavel Molchanov, an equity analyst at Raymond James.

One big reason: It became clear early in the pandemic that solar wouldn't just weather this difficult time, but possibly thrive during it. By mid-December, the U.S. was projected to install a record 19 gigawatts of new solar capacity last year, according to Wood Mackenzie and the Solar Energy Industries Association. Meanwhile, a sustainability-focused index that includes some solar companies, the WilderHill Clean Energy Index, last year surged more than 200%, topping the 58% gain in 2019. California-based SunPower Corp. rose as much as 14% on Friday, and is up about 70% this year. And the underlying drivers propelling clean tech look sturdy in the near-term: supportive policies in Europe and the U.S., a push to green electric grids as well as trillions of dollars in funds focused on the energy transition.

"It's a mega-trend that's essential for the future of this world," says Jeff McDermott, head of Nomura Greentech.

But the success and future promise of the industry doesn't mean that solar has become an easy business for executives—or for investors. Active Solar, for instance, was the best-performing stock-picker in Europe last year with a 183% return, but did so after twice losing most of its investors' money. Guinness Atkinson Asset Management, an investment management firm, found that the total rate of return of the median stock among solar-equipment companies was 98% last year, but -32% in 2018. In fact, among all of the clean-tech sub-sectors it studied, the total rate of return for solar equipment was the lowest between 2010 and 2020 at 65%.

Installation "volumes are going through the roof, but profitability can be quite different," Molchanov says. "We have seen countless companies that have grown revenue rapidly over the years but profitability has been pressured." There remains "relentless commoditization including margin compression" that affects multiple solar segments, including modules, inverters and power-supply agreements.

The overlapping trends of decarbonization and electrification—plus the struggles of oil—attracted many investors to solar last year. That’s a far cry from 2016, when the experience of SunEdison soured many on the industry. The company had fueled its ascent on financial engineering and cheap debt before its 2016 bankruptcy.

Nearly five years later, the price of solar power has fallen markedly, such that the resource is now the cheapest in many markets. (This is obviously a plus for solar’s competitiveness, but not necessarily the best development for manufacturers). Solar companies are increasingly confident that investors will reward them for focusing on just a few things—power-plant ownership, installations, panel-making, or components—rather than feeling the need to be vertically integrated like once before.

One major change is how clean power and other climate-forward businesses are now seen outside the industry. More than ever before, these companies are seen as a financial opportunity—not just good public relations.

*– With assistance by Drew Singer, and Will Wade*

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## **Green Energy Firms to Help Power Spanish IPO Revival in 2021**



Spain's national stock market, home to a solitary listing in 2020, is gearing up to host a flurry of green energy providers in the coming months.

At least four companies including Repsol SA are working on possible initial public offerings of renewable assets in Madrid, according to people familiar with the matter. Driving the trend is an increasingly environmentally-conscious investor base and a national government intent on generating power from sustainable sources.

"The public market is paying more than the private sector for these types of assets now. This is in stark contrast to 18 months ago," said Inigo Gaytan de Ayala, global head of equity capital markets at Banco Santander SA. "Time is of the essence and first-mover advantage is critical. Companies want to move swiftly and make the most of this favorable window."

Companies that produce renewable energy have raised \$336 million via IPOs on European exchanges over the last 12 months, according to data compiled by Bloomberg. By far the largest listing came from Soltec Power Holdings SA, a green power generator and manufacturer of certain devices for solar panels.



Soltec's was the only IPO on a Spanish exchange in 2020, when the coronavirus crisis kept many companies and investors away from public markets. The deal pipeline is looking decidedly healthier this year, with Capital Energy, Opdenenergy SA and Ecoener Emisiones all weighing plans to list in the country in the spring, the people said, asking not to be identified discussing confidential information. Two other privately-owned renewables firms are also considering IPOs, one of the people said.

Representatives for Capital Energy and Ecoener said the companies were analyzing possible IPOs, though no final decisions have been taken. Spokespeople for Opdenenergy and Repsol declined to comment.

## **Political Push**

"The strong level of activity Spain is currently enjoying in the renewable segment is probably a combination of different factors," said Angel Arevalo, global head of advisory at Banco Bilbao Vizcaya Argentaria SA. Among these, he said, are the country's large renewable resources, falling generation costs and "strong local political commitment to alternative energy."

Spain's government has been working to boost renewable power in its generation mix from around 50% today to 70% by 2030, and 100% before 2050. Last month, Spain held its first power auction in four years and awarded 3 gigawatts of new wind and solar capacity. The country is set to become a recipient of European rescue funds to help rebuild its economy in the wake of the Covid-19 pandemic and a large allocation of these could go to clean energy projects.

"Spain is structurally a great base for renewable companies, particularly for firms that focus on solar energy given climate," said Jerome Renard, head of European equity capital markets at Bank of America Corp. "The country saw investments in that industry very early on, and therefore benefits from a

whole ecosystem of expertise.”

So far in Spain, stock performance from the sector has been stellar.

Shares in Soltec have risen 137% since it went public. Greenergy Renovables has also more than doubled from when the Spanish power producer moved from the country’s alternative market to main exchange in late 2019. BBVA’s Arevalo said renewables in Spain were offering “better returns for investors compared to other geographies.”

## **Mainstream Asset**

Investment banks are also preparing to pick up more mandates tied to sustainable energy initiatives. Gonzalo Garcia, co-head of investment banking at Goldman Sachs Group Inc. in Europe, the Middle East and Africa, said in a January interview that the shift toward renewables would be one of the key market themes for banks this year.

Capital Energy is working with Goldman Sachs and UBS Group AG to gauge investor interest ahead of its potential share sale, a person familiar with the matter said. Repsol is working with JPMorgan Chase & Co. on its renewables IPO plan, people said.

Representatives for Goldman Sachs, JPMorgan and UBS declined to comment.

“In the past, renewables used to attract specialist investors with a focus on the energy sector,” said Renard at Bank of America. “It has now become completely mainstream, reaching a much wider base of investors.”

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# Qatari ministries to hold joint press conference at 9pm on Wednesday



وزارة التجارة والصناعة  
Ministry of Commerce and Industry

Doha

The Ministry of Public Health (MoPH), Ministry of Interior and Ministry of Commerce and Industry will hold a joint press conference at 9pm on Wednesday during the 'Social Distance' programme, Qatar Television announced on Tuesday through a tweet.

The press conference comes in the wake of a sharp increase in Covid-19 cases in Qatar and calls by the authorities concerned to follow precautionary measures to prevent a second wave of the virus.

Last week, senior health officials addressed a press conference on the rise in new Covid-19 cases and hospitalisations. They urged the public to comply with the measures laid down by the MoPH in this regard.

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# Turkey wealth fund ready to spend after year of M&A



A Turkish flag flies on a passenger ferry with the Bosphorus in the background in Istanbul. Turkey's sovereign wealth fund plans to invest \$15bn in industries including energy, petrochemicals and gold mining as part of a programme designed to reduce the economy's vulnerabilities.

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# Carbon-Neutral Or Green LNG: A Pathway Towards Energy

# Transition



**LNG producers have started to look for ways to minimise or counterbalance their carbon footprints, says Dr Hussein Moghaddam, Senior Energy Forecast Analyst, Energy Economics and Forecasting Department**

According to the latest, 2020 edition of the GECF Global Gas Outlook 2050, the demand for natural gas is expected to rise by 50% from 3,950 billion cubic metres (bcm) in 2019 to 5,920 bcm in 2050, as gas remains the cleanest-burning hydrocarbon. In spite of that, meeting global targets for climate change mitigation is one of the biggest challenges. Significant emissions are released through the combustion of gas to drive the liquefaction process, while any carbon dioxide (CO<sup>2</sup>) detached before entering the plant is frequently emitted into the atmosphere.

Subsequently, investors, regulators, and customers exert

mounting pressure on the gas industry, as it needs to do more to accomplish climate objectives and focus on reducing emissions.

More than 120 countries have already developed a climate risk strategy that sets target to reduce greenhouse gas (GHG) emissions to net-zero by 2050. As natural gas has a central role to play in mitigating carbon emissions, LNG producers have started to look for ways to minimise or counterbalance their carbon footprints, thus ongoing LNG decarbonisation efforts are likely to expedite. Accordingly, top LNG producers, traders, and consumers have indicated their plans in order to decarbonise the LNG supply chain. This is being done in two ways: by offsetting emissions from individual cargoes retrospectively, as well as by building low-emission liquefaction terminals. As a result, the “Green LNG” term has appeared as a new product within the LNG industry.

The carbon-neutral or Green LNG market is an emerging prospect whereby “Green” indicates either the reduction of GHG, or the offset of GHG emissions, linked to some, or all elements of the LNG value chain – from production of upstream gas and pipeline transportation, to liquefaction, transportation, regasification, and downstream utilisation of natural gas.

Companies in the LNG value-chain can diminish GHG emissions in numerous ways. For instance, by using biogas as feedstock; by decreasing emissions from upstream, pipeline, and liquefaction facilities; by applying renewable energy to power their liquefaction plants; respectively, by using carbon capture, and storage (CCS), or carbon capture, utilisation and storage (CCUS) technologies by reinjection of CO<sup>2</sup> into the subsurface after it had been detained during the processing of the feed gas before liquefaction.

Therefore, it should be taken into account that carbon-neutral does not mean that the LNG cargo generates zero emissions, rather that LNG sellers can counterbalance their GHG emissions

by obtaining offsets to compensate for all or part of their GHG emissions or the utilisation of carbon credits, which reinforce reforestation, afforestation or other green projects.

It is worth noting that last year the leaders of the G20 endorsed the concept of the circular carbon economy (CCE) and the GECF is the part of this process. The CCE aims to include a wide range of technologies such as CCS/CCUS as a way to promote economic growth and to manage emissions in all sectors.

In contrast, Qatar Petroleum (QP) is the company that applies a combination of strategies to reduce its emissions. Its future LNG production will be low-carbon based, as the company is building a CCS facility alongside its 126 mtpa liquefaction capacity expansion by 2027.

As part of its new sustainability strategy, QP has announced that its aim is to reduce the emissions intensity of its LNG facilities by 25% by 2030. The capture and storage of CO<sup>2</sup> from its LNG facilities of about 7 mtpa by 2027 is another goal. Furthermore, QP aims to drop emissions at its upstream facilities by at least 15%, as well as cut flaring intensity by over 75% by the end of this decade. Additionally, by 2030, QP is attempting to abolish routine flaring, and by 2025, the company would like to minimise fugitive methane emissions along the gas value-chain by establishing a methane intensity target of 0.2% over all of its facilities.

In certain supply contracts of the company, environmental considerations are incorporated as well. In November 2020, QP signed the first long-term deal with “specific environmental criteria and requirements”, which was designed to minimise the carbon footprint of the LNG supplies with Singapore’s Pavilion Energy, and to provide 1.8 mtpa of LNG over a 10-year period.

In order to fulfil the objectives of decreasing GHG emissions,

CCS also helped the case in Australia. Chevron is the operator of the 15.6 mtpa Gorgon LNG offshore Western Australia and has injected more than 4 million tonnes of CO<sub>2</sub> in the CCS facility since its commissioning in August 2019.

Meanwhile, NOVATEK has embraced a long-term methane emissions reduction target by 2030 in Russia, mainly to diminish methane emissions per unit of production by 4% in the production, processing and LNG segments. Moreover, the company aims to decrease GHG emissions per tonne of LNG produced by 5% [5]. In this regard, NOVATEK and Baker Hughes, which provides engineering and turbomachinery at Yamal LNG, signed an agreement to introduce hydrogen blends rather than solely running methane from feed gas into the main process for natural gas liquefaction to reduce CO<sub>2</sub> emissions from NOVATEK's LNG facilities.

Bio-LNG will have a significant role in the coming years to form the heavy road and water transport in the Netherlands. The construction of the first Dutch bio-LNG installation was launched in Amsterdam last November. Renewi (the waste management company), the Nordsol (for processes the biogas into bio-LNG) and Shell (to sell this bio-LNG at its LNG filling stations) have developed this project. Biogas is made up of roughly 60% methane and 40% CO<sub>2</sub>. An additional CO<sub>2</sub> cutback takes place due to the recycling of the CO<sub>2</sub> by-product in the market, which results in a 100% CO<sub>2</sub> neutral fuel [7].

Inpex, which is Japan's biggest oil and gas producer, has recently disclosed its strategy to become a CO<sub>2</sub> net-zero company by 2050 by developing its renewable and hydrogen energy together with the utilisation of carbon capture technologies. Japan has also stated in October 2020 that the country would become carbon-neutral by 2050.

Two major LNG importer regions, namely Asia-Pacific and Europe, have already set policies regarding long-term decarbonisation targets. It is worth noting that most of the



carbon-neutral LNG cargoes have been supplied by companies are in Asia to a certain extent, where carbon policies and investor pressure are fairly fragile.

According to the 2020 Edition of the GECF Global Gas Outlook 2050, it is forecasted that LNG imports to Asia will increase to about 800 bcm (585 mt) by 2050, and with 71% of global LNG imports, the region is set to be the driving engine for global LNG demand growth. As concerns with air quality rise in numerous Asian countries, the most realistic solution to attain a decarbonised society in the future by minimising the level of CO<sub>2</sub> on a global scale, is the combination of natural gas and renewable energy. Thus, emissions and cleaner-burning fuels are going to be the centre of attention.

Europe could be the predecessor for carbon-neutral LNG in the long-term, by sticking to its new methane strategy, which was revealed by the European Commission (EC), and in accordance with their 2050 carbon-neutral goal. Importantly, the EC suggested LNG producers to engage with their international partners to explore possible standards, targets, or incentives for energy supplies to the EU.

### **Which part of the LNG value-chain should take responsibility?**

An LNG seller will probably need to diminish and offset GHGs, which emphasises the need for robust offset markets in order to be completely carbon-neutral through the entire LNG value-chain.

Accordingly, this highlights challenges for legacy LNG projects with limited means to decrease carbon, making them dependant on expensive market mechanisms. LNG producers have to keep the balance between the competitive fuel pricing and the expensive emissions reduction initiatives. Therefore, the question of who pays the additional costs to produce Green LNG is yet to be decided.

As noted, the balance of carbon emission is feasible for any

LNG facility and can lead to carbon-neutral LNG cargoes. Although, this is probably not a sustainable long-term process and does not directly cope with the project's emissions, it is a good transformation for general LNG decarbonisation.

However, the GECF proposes that both sellers and buyers have to contribute to achieving emission targets. The discussions with respect to these issues should involve all LNG industry players, such as sellers, buyers, traders and policymakers, respectively. A more focused perspective that targets minimising emissions in upstream and liquefaction might be more feasible for LNG producers. This will also associate with the already ongoing efforts from them, as they have to control their carbon footprints under more pressure from the public and investors.

In conclusion, as LNG demand keeps expanding, the demand for Green LNG will grow as well. Green LNG can help ensure that natural gas preserves its role as a crucial part of the energy mix, supporting climate goals over the energy transition period. As stated in the 2019 Malabo Declaration, at the 5<sup>th</sup> GECF Summit of Heads of State and Government in Equatorial Guinea [10], the GECF Member Countries, reiterate the strategic role of the development, deployment and transfer of advanced technologies for more effective production, and the utilisation of natural gas to enhance its economic and environmental benefits.

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**QP sees LNG bunkering a**

# promising solution for shipping industry



Qatar Petroleum is actively pursuing to replace its existing bunker fuel for ships with LNG in a phased manner, which will significantly reduce QP's total shipping emissions in the LNG value chain by around 28%. Once the fleet is converted to LNG, the total CO<sub>2</sub> reduction through this initiative will amount to approximately 1.9mn tonnes of CO<sub>2</sub> equivalent per year, QP said in its Sustainability Report.

With a growing population, the demand for transport is anticipated to expand. More emissions also cause poor air quality, causing adverse effects on the environment and human health.

Meeting the increasing demand for transport while reducing emissions will only be achieved with a variety of solutions and technologies, such as lower-emissions liquid fuels, biofuels, and natural gas.

"More than ever, we are committed to decarbonise the transport sector by shipping LNG to destinations in a cost-effective, efficient and environmentally friendly way," QP said.

In 2019, QP and Shell entered into an agreement to establish

an LNG bunkering venture. The creation of a joint venture company, owned equally by both parties, demonstrates QP's firm commitment to curbing emissions from the transport segment.

On the role of natural gas in power generation, the report said the electricity share of total energy demand is around 19% but is responsible for 40% of the overall energy sector's GHG emissions. When generated from lower-carbon energy sources, increased use of electricity will support emission reduction in the power sector, as well as in end-use industries through indirect emissions.

In addition, the combustion of fossil fuels and coal releases several pollutants that negatively affect air quality. QP monitors pollutants at affiliated power plants via a continuous emissions monitoring system (CEMS).

As of 2019, natural gas remains the only fuel to be burnt in gas turbines in Qatar, where pollutant levels are significantly lower than from oil or coal, making natural gas the key to maintaining good air quality.

"We strive to further enhance the environmental benefits of gas-fired plants, eg through lowering NOx emission," the report noted.

"We consider the industrial sector to be crucial for providing vital products for daily lives, from aluminium, steel, and cement to food packaging, paints, and others. However, metals, cement, chemicals and transport industries are also significant consumers of energy and hence emitters of GHG emissions.

"In 2019, the industrial sector accounted for 52% of domestic gas consumption and 19% of total CO2 emissions in Qatar (metals and petrochemicals only). Reducing energy demand and emissions from the industrial sector over the long term, without impacting economic and social development goals, will require effective implementation of energy efficiency strategies, switching to lower carbon fuels and raw materials, and leveraging the best available technologies for GHG reduction.

"Our use of cleaner gas in these industries offers an

unrivalled advantage to operate at significantly lower GHG emission and pollutant levels compared to those in coal or oil-based industries. Besides, the use of natural gas in industry has other significant benefits: gas almost completely combusts, while coal produces large volumes of ash and slag, which require costly handling and disposal and gas boilers supplied by pipelines do not require on-site fuel storage, loading, or waste disposal,” QP said.

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## **Biden’s green push gives Detroit the cover to go electric**



General Motors CEO Mary Barra just stomped on the electric-vehicle accelerator pedal. Call it the Biden effect.

Six months ago the automaker backed the Trump administration

in a legal battle that could have neutered California's longstanding right to set its own tougher carbon-emission rules. About two weeks after Trump lost, **GM withdrew from that fight** and two weeks after he left office, it pledged to match the state's mandate to **sell only electric vehicles starting in 2035** – and do that all across the U.S.

Why the 180? Barra is getting a jump on President Joe Biden's policies, which are expected to help GM and its rivals build and sell more EVs in the U.S. He wants to restore the \$7,500 tax incentives that companies including GM and Tesla Inc. exhausted under Trump's watch, and Biden plans to build 500,000 charging stations across the country. That could make EVs more affordable and ease concerns of would-be buyers about battery-powered cars' driving range.

Some see GM's about-face on the politics of clean cars as less a calculated policy move than a recognition of longer-term global forces at work.

"They would not make an announcement this substantial just for political purposes," said Joe Britton, executive director of the Zero Emission Transportation Association, a Washington-based lobby group pushing for full adoption of EVs by 2030. "This is a clear sign that electric vehicles are going to be the future and that we're in a bull market for innovation right now."

Believe it or not, Biden's position has been met with a collective sigh of relief in some quarters of Detroit. The rest of the world is moving toward electric vehicles, and the Trump administration had no interest in easing that transition in the U.S.

While Trump was trying to prolong the era of combustion engines by watering down clean-air rules and resisting efforts to expand the EV tax credit, China's government has adopted rules and incentives that boosted EV sales in the world's

largest car market. Almost all of the European Union's 27 member states have purchase or tax incentives for consumers who buy electric vehicles, and it's rapidly ratcheting up emission restrictions to penalize automakers that don't sell enough EVs in Europe.

As a result, China and the EU have jumped way ahead of the U.S. in EV adoption rates. Last year, of the 3.2 million EVs sold globally, 1.3 million were in China and 1.2 million were in the European Union and UK. The U.S. accounted for just 328,000 sales, according to Swedish researcher EV Volumes.com.

That put Detroit's carmakers in a spot. They get most of their revenue and profits at home in the U.S., where EV sales have been minimal. And they need help with economies of scale sufficient to drive down battery costs and create profit margins.

Barra had been heading in this direction since 2017, when GM announced plans to build 20 different EVs by 2023, but most of them were bound for the Chinese market. GM accelerated that shift in November, promising **30 models by 2025 and an investment of \$27 billion** in electric and self-driving cars with more models planned for the U.S. Ford Motor Co. has been stepping up its efforts as well, budgeting \$11 billion for EVs and more fuel-efficient vehicles.

Biden's victory put some wind at the auto industry's back and makes the commitment to electric powertrains more palatable for their risk-averse corporate cultures.

### **Political convenience**

Even so, there also is a hefty dose of political convenience involved in the decision to go all-in on EVs. GM, Toyota Motor Corp. and Fiat Chrysler Automobiles – now a part of Stellantis – went along with Trump in his legal fight with California, throwing a bone to a temperamental president and thereby extending their ability to churn out cash-cow gasoline-powered

vehicles.

Officially, GM said it always wanted one national standard instead of different rules from Washington and Sacramento. It just so happens that the company picked Trump's watered-down option.

Critics of government subsidies were quick to see GM's move as a sign the market for EVs is maturing fast enough that no additional incentives are needed.

"GM is a publicly traded business and is making a strategic, calculated market decision," Tom Pyle, a former Trump adviser and current president of American Energy Alliance, a free-market advocacy group, said in a statement. "In no way should any taxpayer be responsible for GM's ability to achieve – or fail to achieve – their corporate goal of an all-electric light duty fleet by 2035."

Big companies have long sought to position themselves in the most favorable light in Washington, regardless of which party's candidate is in the Oval Office. Automakers are no exception. Former Ford CEO Mark Fields warned then-President Trump that overly tough mileage rules would put a million jobs at risk, a prelude to Trump's rollback. And GM broadly touted its Chevrolet Volt plug-in after its 2009 rescue by the Obama administration, which later set a goal of putting a million electric vehicles on the road by 2015.

### **Carrot and stick**

Trump and his Twitter account are now silenced. With Democrats running the White House and having a majority in both chambers of Congress, the prevailing wind is definitely blowing against Detroit's status quo dependency on big sport-utility vehicles and trucks.

Biden's plan also comes with a stick. Earlier this week, he vowed to reinstate vehicle emissions standards gutted by the



Trump administration and set “new, ambitious ones that our workers are ready to meet.”

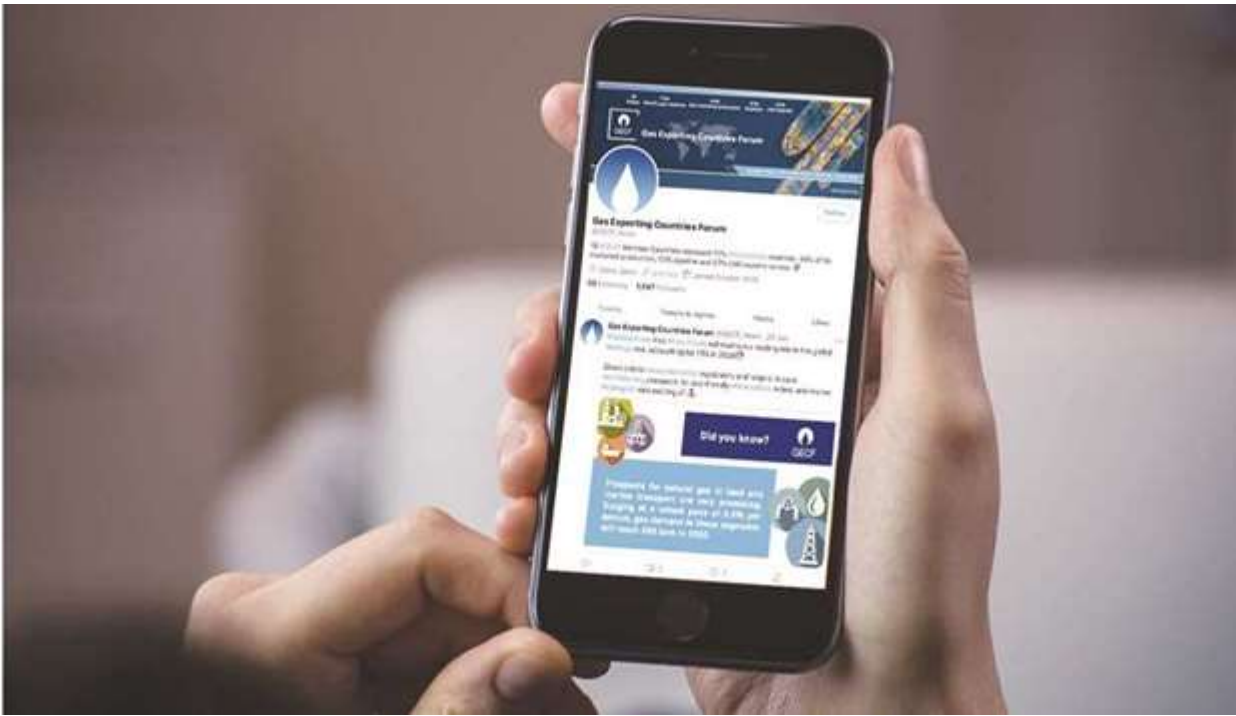
Doing so would aid GM’s electrification push and could encourage competitors to follow suit, said Joshua Linn, a senior fellow at Resources for the Future, a Washington think tank that focuses on environmental policy and economics.

“Companies don’t want to get out too far ahead of the market,” he said. “Having more ambitious policies, greenhouse-gas standards and maybe a national zero-emission vehicle program will help support the entire market moving in that direction.”

GM’s worst nightmare is a scenario in which its commitment to EVs isn’t met with higher consumer demand, allowing rivals with less ambitious electrification plans to steal away business. Biden may be giving GM some of the cover it needs to proceed.

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**GECF commences educational campaign on benefits of natural gas**



The Gas Exporting Countries Forum (GECF) has activated a new communication campaign on its social media channels that raises awareness about the benefits of natural gas as well as simplifies the facts of an industry often perceived as data heavy.

Being run on GECF's Twitter and LinkedIn channels, the 'Did You Know...?' series of posts provide easy-to-understand facts, figures, and data on an energy source that likely powers the batteries of the phones users will read the information on. It also calls to attention any misconception around this important source of energy found in abundance in pockets around the world.

"In the midst of an 'infodemic' it is increasingly hard to differentiate facts from the noise. Further, due to the complexity of energy systems, end-users rarely get to glimpse at the processes that eventually power most aspects of their daily lives, such as electricity at home, prospects for front-running technologies, fuelling of vehicles and so on," said GECF secretary general Yury Sentyurin.

Scientifically-grounded data and insights are championed at the GECF, which was established to bring a better understanding about technology that underpins the full spectrum of energy areas, to promote natural gas as the fuel

of choice, as well as to promote cooperation at all levels of global energy system.

The forum recently entered a landmark MoU with Unesco to further enhance its role in environmental protection and to cultivate a “culture of energy responsible behaviour”.

“Our campaign’s goal is to de-mystify the world of energy and, really, democratise it for every one’s understanding. Today, as we live in times of rising appetite for energy, ever-increasing struggle for climate protection and better future for all, social media has become a tool in global geopolitics. The ‘Did You Know...?’ campaign aims to empower the community around the world with a new appreciation and understanding about an element that holds such a powerful impact on people’s quality of life,” the forum’s representative noted.

According to the latest available projections, quantified through the use of unique and highly granular GECF Global Gas Model, fossil fuels will maintain a leading role in the global energy mix, accounting for at least 71% in 2050 (against 81% in 2019) of the world’s energy need.

Meanwhile, natural gas will be the only hydrocarbon resource to increase its share from 23% today to 28% in 2050.

“Natural gas is often lumped together with other traditional fuels due to its origins as a hydrocarbon fuel without recognising the attributes that distinguish it for its low-emissions and dynamic flexibility. As a platform dedicated to promoting the use of this cleanest of the fossil fuels, we felt it is important to broaden people’s understanding of its economic and environmental advantages,” Sentryurin emphasised. To follow the ‘Did You Know...?’ campaign, visit the GECF website [www.gecf.org](http://www.gecf.org), Twitter @GECF\_News, and GECF LinkedIn page.

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# Worsening pandemic poses 'serious risks', says Lagarde

European Central Bank chief Christine Lagarde warned yesterday that the pandemic still poses "serious risks" to the eurozone economy as concerns grow about new virus variants and sluggish vaccination campaigns.

The Frankfurt institution's governing council held back from tweaking its ultra-loose monetary policy at its first meeting of the year, having already topped up support in December. Lagarde stressed that "ample monetary stimulus" remained essential to steer the 19-nation currency club through the Covid-19 upheaval, and that the ECB stood ready to do more as needed.

"The pandemic continues to pose serious risks to public health and to the euro area and global economies," Lagarde told an online press conference.

The start of mass vaccination drives in the European Union was "an important milestone", she said, but the rollout has got off to a bumpy start in many nations.

The emergence of more contagious virus variants, first discovered in Britain and South Africa, has added to nervousness at a time when many countries are already struggling to bring down infection numbers.

Europe's top economy Germany this week extended its partial lockdown until February 14, and Chancellor Angela Merkel has not ruled out border checks to slow the spread of the new strains.

France and Spain have tightened their evening curfews, while non-essential shops and leisure facilities are closed across much of the continent.

The latest virus setbacks "are disrupting economic activity," Lagarde said, noting that the services sector was hit especially hard.

"The intensification of pandemic poses some downside risks to

the short-term economic outlook," she added.

The ECB in December forecast 3.9% growth for 2021, after an estimated contraction of 7.3% in 2020.

Lagarde said the ECB's forecasts "remain valid" for now, as they took into account lockdowns persisting through the first quarter coupled with a gradual start to vaccinations.

The former French finance minister also reiterated her plea for European governments to support the ECB's efforts through fiscal policy.

She urged European Union members to speed up the ratification of a recently agreed €750bn recovery fund, saying it had a "key role" to play in financing the region's bounce-back.

Under Lagarde, the ECB took unprecedented steps last year to cushion the impact of Covid-19 on the euro economy.

Its biggest weapon is a pandemic emergency bond-buying scheme, known as PEPP, that was in December topped up by €500bn to reach a total envelope of €1.85tn.

The scheme was also extended to March 2022.

The bank has also offered ultra-cheap bank loans and held interest rates at historic lows.

The goal of the measures is to keep borrowing costs low to encourage spending and investment in the 19-nation currency club, in a bid to boost growth and inflation.

But eurozone inflation has stayed stubbornly low for years and even turned negative in 2020.

By the ECB's own estimates, price growth will gradually inch up to 1.4% by 2023, still far off the bank's target of just under 2%.

In December, inflation stood at minus 0.3%.

Analysts say inflation could bound higher later this year, powered by pent-up consumer demand once lockdowns start easing.

But any boost is expected to be short-lived, they caution.

Lagarde agreed that inflation was "likely to increase in the coming months", partly also due to the end of a temporary sales tax cut in Germany from January.

But she said "underlying price pressures are expected to

remain subdued due to low demand in tourism and travel sectors, and the appreciation of the euro against the dollar.” The euro has risen by more than 10% against the greenback since late February, complicating ECB efforts to push up inflation.

A stronger euro makes imports cheaper, keeping a lid on consumer prices, while exports become less competitive, hurting growth prospects.

Lagarde said the governing council was monitoring exchange rates “very carefully”. For now, the ECB “remains happy at the sidelines and has kept all options open,” said ING bank economist Carsten Brzeski.

“In the absence of any severe economic accident, the ECB is likely to stick to this line at least until late summer,” he added.