

# Can Pakistan make transition to electric vehicles soon?



KARACHI: When you think of electric vehicles, you think of Elon Musk, a noiseless Tesla and luxury more than zero emissions. But today the government wants to use the same technology for the common man – to run bikes, rickshaws and even buses, jeeps and trucks. Will this transition from fossil fuel vehicles to electric vehicles in Pakistan happen anytime soon?

Cities are witnessing the worst ever smog. This was followed by a climate march with youth demanding climate justice.

Thus the Pakistan Tehreek-i-Insaf government could not have chosen a better time than when the UN climate summit COP 25 is taking place to make a strong case against tailpipe emissions from urban transportation, a major contributor to air pollution and climate change.

Little wonder then they quickly got the nod of approval by the cabinet for the first national electric vehicle (EV) policy.

With 43 per cent of the airborne emissions in the country coming from the transport sector, federal Minister for Climate

Change Malik Amin Aslam said that transitioning to EV provided a “huge opportunity” for the country.

“These will have many advantages for Pakistan – it will reduce pollution, will cut the cost of fuel by 70pc thereby [leading to] huge saving for FFV (fossil fuel vehicle) owners, and will cut the country’s import bill tremendously.”

There are three million private cars and 20m motorcycles and motorised rickshaws plying the roads, according to the Pakistan Bureau of Statistics, as cited in the Economic Survey 2018-19, mainly due to the absence of a good public transport system.

Riaz Haq, who has worked in various tech firms for 35 years in the Silicon Valley and is an EV enthusiast, said that with 32m households and 17.5m motorcycles registered in Pakistan, the motorcycle ownership increased from 41pc in 2015 to 53pc in 2018.

The new policy envisions using electricity to get 100,000 cars, 500,000 two- and three-wheelers, 1,000 buses and trucks to ply the roads in the next five years. By 2030 it sees 30pc of all new cars, big and small trucks, vans, and jeeps and 50pc of all two-, three- and four-wheelers to be electric vehicles reducing tailpipe emissions by 65pc. By 2040, if all goes well, 90pc of all vehicles on the roads will be EVs.

“The PM wants all new buses coming on the road to be electric hybrid – run both on electricity and CNG (compressed natural gas),” said the federal minister.

Most experts are lauding the policy as a step in the right direction. “It is a forward-looking step needed to deal with climate concerns from growing transport sector emissions with rapidly rising vehicle ownership,” Mr Haq wrote in his blog.

Another proponent for EVs, Islamabad-based energy expert Vaqar Zakaria, said that “surplus power generation capacity,

building off-peak demand for better utilisation of generation capacity which also brings down generation costs, poor urban air quality, high levels of noise from traffic and safer cars” are some of the reasons to make the move.

The automobile industry remains sceptical though. “I would love to see EV launched in Pakistan, but it means developing a huge set-up anew,” said Juzer Amreliwala, the chief executive officer of a Honda partner in Karachi.

“On the face of it, it looks great. But establishing proper after-sales set-up requires both capital and human investment. Although most dealerships have come quite far in technology development, much training is still needed,” he added.

Aware of the infrastructure that will be needed for EVs, the minister for climate change sees it as an opportunity with a whole new service industry and numerous livelihood options opening up. “Pakistan is thirsting for new business opportunities and markets. If we build our capacity technologically, Pakistan can become a hub for exporting EVs – especially two- and three-wheelers,” Mr Aslam said.

However, a potential problem with the policy is the plethora of government supervisors – nine ministries, the Higher Education Commission, the State Bank of Pakistan and various authorities in energy sectors. “This industry transcends so many domains that all these stakeholders had to be included,” explained Mr Aslam. “Interaction and cooperation between stakeholders are the mark of good governance.”

Vaqar Zakaria warns of the “vested interests” who may not like the transition. “Those that sell low quality fuel and cheat on quantity sold will not like it, the refiners will not like it, the car traders will not like it as the EVs will last longer, the industry as it presently will not like it, the FBR may say the government will lose taxes on imported fuel which are huge at the moment and a significant source of revenue for the

government. But as a consumer I will be delighted... if they only let me import EVs and E-bikes at reasonable cost.”

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## **EU bank takes ‘quantum leap’ to end fossil-fuel financing**



By Ewa Krukowska, Bloomberg

The European Investment Bank adopted an unprecedented strategy to end funding for fossil fuel energy projects, in a move expected to support Europe’s plans to become the first climate-neutral continent.

The board of the Luxembourg-based lending arm of the European Union decided at a meeting on Thursday to approve a new energy policy that includes increased support for clean-energy projects. The bank will not consider new financing of unabated fossil fuels, including natural gas, from the end of 2021.

With more than half a trillion dollars in outstanding loans, the EIB is the biggest multilateral financial institution in the world. Given the EIB's market impact and influence over the lending strategies of investors, its decision could end up depriving polluting projects from other sources of financing as well.

The lender's move to prioritize energy efficiency and renewable-energy projects will reinforce the Green Deal being pushed by Ursula von der Leyen, the incoming president of the European Commission. She wants the institution to become a climate bank and help unlock 1 trillion euros (\$1.1 trillion) to shift the economy toward cleaner forms of energy.

"Climate is the top issue on the political agenda of our time," EIB President Werner Hoyer said in a statement, calling the decision to transition away from financing fossil fuels a "quantum leap in its ambition."

The EIB decision is part of a broader push across the EU's most powerful institutions that's catapulted the bloc to the forefront of global efforts to fight climate change. New European Central Bank President Christine Lagarde has pledged to make climate change more of a focus for the institution, which is considering adding climate-related risks to its stress-test scenarios, in what could potentially make exposure to high-carbon footprint projects a liability for the balance sheets of financial firms in the continent.

The 28-nation EU wants to step up its climate ambition in sync with the landmark 2015 Paris agreement to fight global warming, after the U.S. turned its back on the accord. With EU

leaders considering committing to climate neutrality by 2050, Europe is a step ahead of other major emitters, including China, India and Japan, which haven't so far translated their voluntary Paris pledges into equally ambitious binding national measures.

"For the EIB to stop funding fossil fuel projects is a game-changer that begins to deliver the EU's vision for climate leadership as laid out in the Green Deal," said Eliot Whittington, director of the European Corporate Leaders Group. "We need this to act as an unequivocal signal into the financial system to encourage other multilateral lenders to follow suit."

Von der Leyen, who is due to assume her new job as head of the EU's executive arm in the coming weeks, also wants the bloc to raise its current target of cutting emissions by at least 40 percent by 2030 from 1990 levels. That may involve a reduction in pollution in the order of 50% or even 55% to counter the more frequent heat waves, storms and floods tied to global warming. Fossil fuels such as coal, oil and natural gas are leading contributors to climate change.

The EIB deal resolved a two-month deadlock where Germany and some central European nations sought to soften the proposed rules and make certain natural-gas projects eligible for financing. The strategy adopted on Thursday allows for continued support for projects already in the works that are vital for Europe's energy security as long as they are appraised and approved by the end of 2021.

"Hats off to the European Investment Bank and those countries who fought hard to help it set a global benchmark today," said Sebastien Godinot, economist at the environmental lobby WWF Europe. "All public and private banks must now follow suit and end funding of coal, oil and gas to safeguard investments and tackle the climate crisis."

## **New Standards**

The EIB new policy includes a new Emissions Performance Standard of 250 grams of carbon dioxide per kilowatt-hour, replacing the current 550 grams standard. That means that in order to qualify for financing, new power-generation projects have to be mitigated by various technologies that significantly improve their emissions performance, EIB Vice President Andrew McDowell said in a conference call.

The EIB, which last year invested more than 16 billion euros in climate-action projects, is preparing to play a larger role in spurring low-carbon technologies.

“This is not a last step, there are many more steps to come,” McDowell said. “But this is probably one of the most difficult parts of this journey that we’re having to take.”

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## **Shale Oil Pioneers Say the Boom Times Are Over**



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

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

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

Talk of a shale slowdown reached a fever pitch this year as

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

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

## **Beyond 2020**

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

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

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

## **Crowded Wells**

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

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

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

– *With assistance by Catherine Ngai*

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## اعتماد الاقتصاد "الازرق" للدول الاورومتوسطية



رأى الرئيس التنفيذي لشركة Energy and Environment Holding رودي بارودي والذي وصفته وسائل الاعلام اليونانية بأحد كبار خبراء النفط، ان حكم القانون هو الذي يجب ان يطبع التعاون العابر للحدود.

بارودي تحدث في الجلسة الافتتاحية للقمّة الاورو - عربية المنعقدة في اثينا الى جانب رئيس الوزراء اليوناني كيرياكوس ميتسوتاكيس والرئيس القبرصي نيكوس اناستاسياديس ورئيسي الوزراء السابقين الفرنسي فرنسوا فيون والايطالي ماسيمو داليمان.

جلسة الافتتاح للقمة ركزت على موضوعي ازمة اللجوء ومصالح الدول المتوسطية في فورة استخراج النفط والغاز، وتعمقت الجلسات في اليوم التالي في شرح العنوان الابرز الا وهو اقتصاد الغاز والنفط، اذ شدد نائب وزير الطاقة والبيئة في اليونان، جيراسيموس توماس على العلاقات (الجيوسياسية) بين موارد الغاز تحت البحر، وأنشطة غاز الماء الطبيعي ، وتصدير النفط والغاز من شرق إلى أوروبا، وما يرتبط بها من مخاوف بشأن الآثار البيئية المتوسطة .

ولفت بارودي على هامش القمة الى انه من أجل انجاز التنقيب بشكل آمن عن الثروات البحرية واستغلالها، لا يمكن أن يكون هناك بديل عن القواعد والمعايير المشتركة. "هذا الاقتصاد الأزرق يمكن أن يكون عامل تغيير بالنسبة للبلدان في جميع أنحاء البحر الأبيض المتوسط وحتى أبعد من ذلك، معتبرا ان أفضل وأرخص وأسهل طريقة لضمان التنمية المستدامة في الوقت المناسب لجميع اللاعبين هو الالتزام بموجبات القانون الدولي و ميثاق الأمم المتحدة ،لذا فإن السعي الى حل النزاعات بالطرق السلمية، هو بمثابة اجتياز نصف الطريق. واذا ما تم الارتكاز الى مبادئ الشراكة الأورو- متوسطة في "تقرير السياسات فسيربح الجميع".

واشار الى مصلحة الاتحاد الاوروبي في تعزيز الترسيم البحري الكامل ،وهذا من شأنه تبديد الشكوك لدى الدول الأعضاء في الجنوب، ويجاد فرص جديدة للشراكة الأورو-متوسطة من خلال مواصلة الحوار وتقليل التوترات وتعزيز العلاقات التجارية .

تستحق الازدهار الاقتصادي الذي ورأى ان شعوب البحر المتوسط ستوفره عائدات النفط والغاز الجديدة. إنهم يستحقون المدارس الحديثة والمستشفيات والطرق وغيرها من البنى التحتية الأساسية التي من شأنها تنشيط اقتصاداتها والقضاء على الفقر والحد من عدم المساواة ". وخلص بارودي إلى أنه من الأهمية بمكان زيادة الوعي العام لدى دول البحر المتوسط حول الاقتصاد الأزرق .

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# Blue Economy is Essential for All of the Euro-Mediterranean Nations



ATHENS: (Agencies) No single factor is more important to cross-border cooperation than the rule of law, a leading energy policy expert told this week's EU-Arab World Summit in Athens.



*Greek Prime Minister H.E. Mr. Kyriakos Mitsotakis greeting Energy expert Mr. Roudi Baroudi at the 4th EU Arab-World Summit in Athens, October 2019*

Several high-profile speakers addressed opening-day sessions on Tuesday, including Greek Prime Minister Kyriakos Mitsotakis, Cypriot President Nicos Anastasiades, former French Prime Minister Francois Fillon, and former Italian Prime Minister Massimo D'Alema. Most of these dealt in broad strokes with topics of mutual EU/Arab interest such as economic challenges, the immigration crisis, and shared interests in the Mediterranean's rapidly expanding oil and gas industry.

On Wednesday, speakers delved more deeply into specific issues, among them Greece's Deputy Minister for Energy and the Environment, Gerassimos Thomas, who focused on the geopolitical relationship(s) among undersea gas resources, liquified natural gas (LNG) activities, the delivery of East Med resources to Europe, and associated concerns about

environmental impacts.

This and other in-depth talks prompted Roudi Baroudi, CEO of Doha-based independent consultancy Emergy and Environment Holding, to remark that with such a complex web of factors at play among so many countries, the only logical approach was to ensure that any and all stakeholders willingly submit to the same rules.



*Mr. Roudi Baroudi with H.E. Mr. Massimo D'Alema, former Prime Minister of Italy*

“In order to fully appreciate and safely exploit all of the advantages offered by well-managed maritime resource, there can be no substitute for common rules and standards,” Baroudi told attendees and journalists on the sidelines of the summit. “This blue economy could be a game-changer for countries all around the Mediterranean and even further afield.”

Baroudi, a 40-year veteran of the energy business who has helped shape both public and private policies on several continents, said that “the best, the cheapest, and the easiest way” to ensure timely and sustainable development for all

players to honor their obligations under international law.

“If these countries just do their basic duty under the United Nations Charter, which is to seek the peaceful resolution of disputes, we’ll already be halfway there,” Baroudi said. “If they also make policy decisions based on the principles of Euro-Med partnership, then everyone wins.”

Baroudi also mentioned that the EU, for instance, has a clear interest in promoting full Maritime demarcation, not just because it would remove uncertainties affecting its southern members, but also because it would open up new opportunities for the Euro-Mediterranean Partnership by continuing dialogue, reducing frictions and strengthening business ties.



*Former Prime Minister of France, Francois Fillon and Energy expert Roudi Baroudi in discussions during the 4th EU-Arab World Summit in Athens, October 2019*

“The peoples of the Mediterranean deserve the chance at affluence that new oil and gas revenues would provide. They

deserve the modern schools, hospitals, roads, and other infrastructure that would reinvigorate their economies, eliminate poverty, and reduce inequality .”

Baroudi concluded that it is very important to increase public awareness of the Maritime domain for the blue economy to really take hold all of the Euro Mediterranean Nations enjoy and to integrate fair, diplomatic, political, legal and scientific dimensions/approaches.

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## 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.

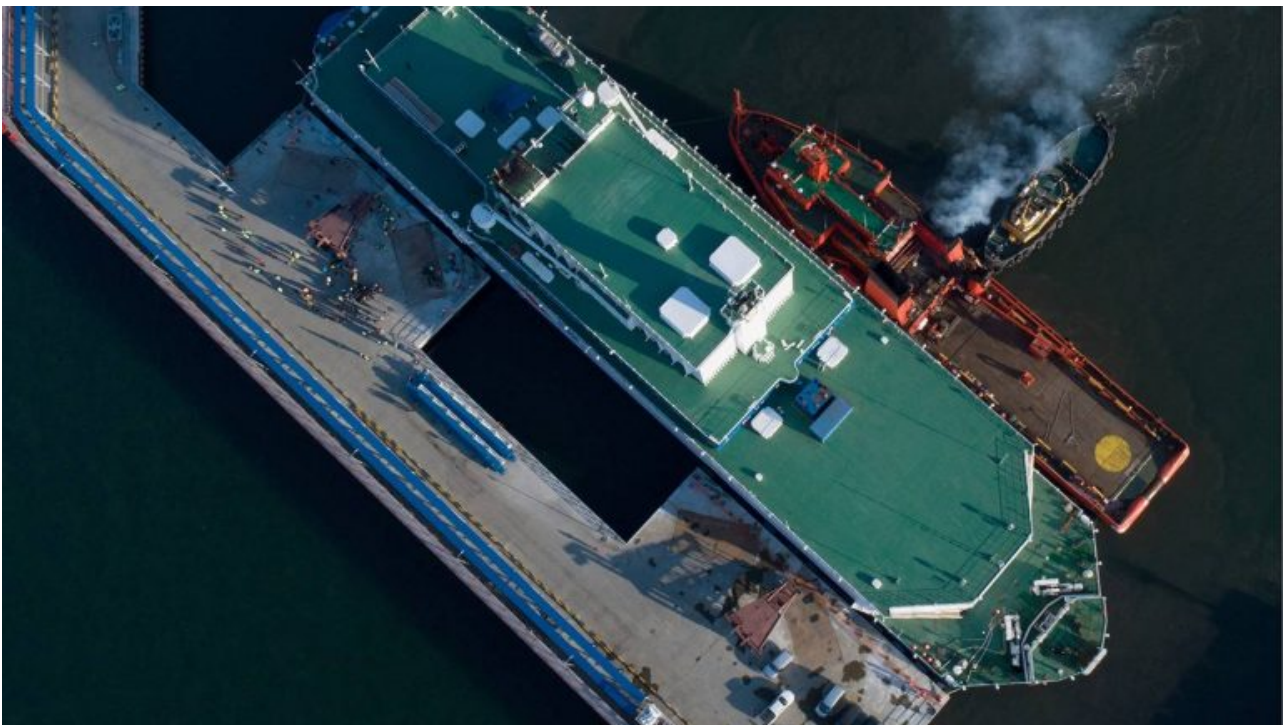
It pledged that palm oil would account for less than half of raw material used, with French rapeseed crops and recycled oil also being used.

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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## Europe needs a serious nuclear-energy debate



Last month, the Akademik Lomonosov, Russia's first floating nuclear power plant, arrived in the remote town of Pevek in

the country's Siberian Arctic region. Russian state-run nuclear energy company Rosatom sees this as a pilot project, and hopes eventually to deploy a fleet of such units in Russia and elsewhere – including in developing countries in Asia and Africa that urgently need affordable electricity.

The Lomonosov builds on a long tradition of nuclear-powered icebreakers in the Arctic Ocean. But, as I explain in my book on energy geopolitics, it also is a cutting-edge example of how small modular reactors can be deployed more easily, flexibly and cost-effectively than traditional nuclear facilities.

SMRs hold out the promise of clean energy production not only in remote areas, but also in developing countries that are not equipped to build bespoke nuclear power plants on land.

Floating SMR technologies also could potentially be used in commercial shipping in the thawing Arctic: nuclear-powered container ships would be far cleaner than those powered by heavy fuel oil, which produces emissions of sulfur and heavy metals. Furthermore, growing economic activity throughout the Arctic makes it increasingly important for remote areas like Pevek to have low-carbon energy sources.

Although the Lomonosov will be the world's smallest and most northerly nuclear plant when it comes online, it may soon have competition. Researchers in the United States, South Korea, Russia, France, China, Argentina, Japan and India are currently working on about 50 different SMR designs. Furthermore, the rapid changes in the Arctic, and the global push to replace fossil fuels with low-carbon energy sources, have led Chinese, French and American researchers to join their Russian counterparts in assessing the prospects for sea-based nuclear power.

Unfortunately, Western media have failed to recognize the importance of the Lomonosov. Instead, inflammatory and

misleading language from Greenpeace and several other environmental groups has led to breathless reporting on the launch of a “nuclear Titanic” and “Chernobyl on ice.”

Greenpeace, which has always opposed nuclear energy because of its supposed risks to the environment and humans, has highlighted the remote location of the Lomonosov and the unpredictable Arctic climate. As with many other nuclear projects in recent decades, the group has again succeeded in framing the terms of debate. But those with actual nuclear expertise have made it clear that Greenpeace’s scare tactics have “no basis in science.”

As industry experts have repeatedly pointed out, seaborne nuclear reactors are hardly a new concept.

The U.S. used an ex-World War II cargo ship equipped with a nuclear reactor to generate power for the Panama Canal from 1968 to 1976, and Russia’s fleet of nuclear-powered icebreakers uses the same type of reactor as the Lomonosov. These reactors already meet International Atomic Energy Agency requirements, with safety measures including double containment and passive reactor vessel cooldown systems.

In fact, offshore nuclear reactors could even be safer than those on land, because cold water facilitates the rapid cooling of the unit in case of emergencies.

Sadly, the primacy of anti-nuclear sentiment over empirical fact has been a consistent feature of Europe’s nuclear-power debate since the ’80s. In 1997, for example, France abandoned its own advanced Superphenix “breeder reactor” project because incoming Prime Minister Lionel Jospin required the support of the Green Party to form a government.

Two decades later, France still has not successfully developed the technology. And just last month, the country’s Alternative Energies and Atomic Energy Commission decided to abandon the fourth-generation advanced sodium technological reactor for

industrial demonstration (ASTRID) that had been launched in 2006 to replace Superphenix.

By succumbing to anti-nuclear pressure from groups such as Greenpeace, Western policymakers have failed to keep pace with Russia and China. Russia's Rosatom, for example, is already a global leader in marketing nuclear energy to emerging economies, and has over a hundred projects in countries including India, China and Belarus.

The alarmist rhetoric surrounding today's emerging nuclear technology is unfortunately par for the course. And it again highlights the contradictory and self-defeating approach of some Western policymakers to the world's largest and most reliable source of low-carbon energy.

According to the United Nations Intergovernmental Panel on Climate Change, nuclear power generation is second only to onshore wind in terms of carbon neutrality, with median carbon dioxide emissions of just 12 grams per kilowatt hour of electricity generation. Those concerned about CO<sub>2</sub> emissions should therefore prefer nuclear energy to fossil fuels such as coal (820 grams/kWh) and natural gas (490 grams/kWh).

Nuclear also outperforms biomass (230 grams/kWh), solar energy (48 grams/kWh), and hydropower (24 grams/kWh). In addition, nuclear power has none of the intermittency problems that plague wind and solar energy, causing ongoing price increases for consumers.

These differences come into sharp focus when we consider the effect of German Chancellor Angela Merkel's Energiewende policy, which aims to increase the country's renewable energy capacity while phasing out nuclear power. The Energiewende is often lauded as one of Europe's leading sustainability initiatives. Yet, in Germany's rush to move away from nuclear power following the 2011 nuclear accident in Fukushima, Japan, the country's energy sector has had to rely on coal for

baseload power.

Pressure from German environmentalists helped drive this decision – but using nuclear energy instead of coal would have resulted in Germany releasing approximately 220 million fewer tons of CO<sub>2</sub> per year. In fact, since 1990, Germany has managed to achieve only a slow, uneven decline in CO<sub>2</sub> emissions, despite a manifold increase in renewable energy capacity.

While Germany continues to phase out its nuclear industry, the Akademik Lomonosov highlights the potential for nuclear-power generation in the Arctic. What Europe in particular needs now is a sensible nuclear-energy debate based on facts rather than fear.

Samuele Furfari is a professor of the geopolitics of energy at Universite libre de Bruxelles, and author of *The Changing World of Energy and the Geopolitical Challenges*.

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## **As Poland Exits Coal, a Billionaire Offers First Nuclear Plant**



Poland's second-richest man may beat the government in building the nation's first nuclear power plant.

Michal Solowow's Synthos SA, the second-largest European maker of synthetic rubber, signed a memorandum with GE Hitachi Nuclear Energy to build a small 300-megawatt reactor next to the company's factory in southern Poland, which could be completed as early as 2027. That's six years earlier than the government expects to build its first plant in a plan to construct at least 6 gigawatts of nuclear and cut the nation's reliance on coal for electricity generation.

"Small modular reactors can play a significant role in addressing Poland's energy challenges," Sololow said Tuesday in a statement. They "will improve our chances to move away from coal and have a positive impact on our industry and nation."

Poland, which gets about 80% of its electricity from burning coal, is slowly coming to terms with the fact that it has no choice but to shed the dirty fuel to meet European Union climate goals. To do so, it's energy policy is counting on gas, offshore wind, solar energy and nuclear, which it sees generating about 20% of its needs by 2040.

Solowow hopes that GE's small modular reactor will be licensed in North America in 2024, which would allow the company to build the unit in 2027, he said by telephone on Tuesday. Katherine Poseidon, a European policy analyst at BloombergNEF, said she doesn't expect the first SMR to be online before 2026.

Solowow, whose energy-intensive businesses also produce ceramic tiles and wood flooring, seeks to produce cheaper and cleaner electricity than coal, which is becoming more expensive in power generation as the EU's climate policy makes carbon-dioxide permits more expensive. The richest Pole, Zygmunt Solorz, earlier this year announced a push to promote green solutions.

The estimated costs of large nuclear projects in France, the U.K. and Finland have repeatedly been increased. Poland's Energy Ministry in the 2040 policy published last year doubted that small reactors could be used any time soon and said investing in them would be "irrational."

GE Hitachi says that small reactors are as much as 60% less expensive to build than regular ones and could compete with gas-fired plants and renewable energy.

"Small modular reactor technology is still a long way from commercialization," BNEF's Poseidon said. "It is definitely a big step for Poland – it shows they're serious about developing zero-carbon power generating capacity."

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## QP commences supply of very

# low sulphur fuel oil at RLIC port



Qatar Petroleum (QP) has commenced the supply of Very Low Sulphur Fuel Oil (VLSFO) at Ras Laffan Industrial City (RLIC) Port. The VLSFO marine fuel offering has been initiated in advance of the International Maritime Organisation (IMO) 2020 regulation for a 0.50% global sulphur limit for marine fuels, which will come into effect from January 1, 2020. "We are proud to be one of the first countries to limit the availability of marine fuels to only grades that are compliant with the IMO's 2020 regulation for a 0.50% global sulphur limit," said HE Saad bin Sherida al-Kaabi, Minister of State for Energy Affairs as well as QP president and chief executive. QP, in conjunction with Woqod, initiated bunkering services in Qatar in June 2017 with the importation of its maiden HFO cargo (RMG 380 CST 3.5% sulphur) in order to cater to the bunkering needs of both Qatargas' LNG fleet and other vessels calling on Ras Laffan and the region. From June 2017 through August 2019, QP has successfully supplied over 1.5mn tonnes of marine fuel to RLIC Port, which allows the further servicing for marine fuel at both RLIC Port and other ports in

Qatar. QP has invited all vessel owners and operators seeking IMO 2020 compliant VLSFO to avail the services available at RLIC Port and other ports in the state whenever their vessels are calling at or passing by any of Qatar's ports. "We hope this (commencement of VLSFO) constitutes a major step towards protecting the regional and global environment in line with environmental objectives of the Qatar National Vision 2030," al-Kaabi said.

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## **Nakilat posts 10.5% surge in nine-month net profit to QR728mn**



Nakilat reported a 10.5% year-on-year increase in net profit to QR728mn in the first nine months of this year.

The company's positive financial performance can be primarily attributed to better operational performance in managing its liquefied natural gas (LNG) and liquefied petroleum gas (LPG) vessels.

It also realised higher revenues on additional income from the acquisition of two additional LNG carriers and one floating storage regasification unit (FSRU) in 2018, as well as higher LPG shipping rates worldwide.

Nakilat has also successfully managed to reduce operational expenses through continuous rationalisation of activities, process enhancements, and cost optimisation initiatives to remain efficient, leading to a significant increase in the share price of the company during this period.

“Nakilat’s strong financial performance bears testament to the company’s ongoing emphasis and continuous improvements to remain competitive within the global energy transportation market, sustaining healthy cash flow and generating steady returns for our shareholders,” said Nakilat chief executive Abdullah Fadhalah al-Sulaiti.

In the coming years, Nakilat expects to take on greater ship management responsibilities following the second phase of LNG fleet management transition from Shell and management transition of FSRU, as well as the addition of four new build LNG carriers to its fleet.

Nakilat’s superior operational excellence in energy transportation and maritime services not only supports Qatar’s vision in developing the LNG market, but also contributes towards developing the country’s shipping and maritime industry, al-Sulaiti said.

“With greater demand for clean energy globally, Nakilat is ambitious in expanding our international outreach and diversifying our portfolio to meet the growing energy transportation needs. Together, we will remain focused on achieving our strategic goals while prudently navigating challenges, propelling Nakilat forward as a global leader and provider of choice for energy transportation and maritime services,” he added.