### Ρούντι Μπαρούντι: Να Τερματιστεί η Σύγκρουση Ισραήλ- Ιράν, πριν το Κόστος της Γίνει μη Διαχειρίσμο



Σήμα κινδύνου για τις επιπτώσεις που θα έχει ο πόλεμος μεταξύ Ισραήλ και Ιράν, σε όλο τον κόσμο στέλνει ο ειδικός αναλυτής στα ενεργειακά Ρούντι Μπαρούντι. Σε συνομιλία που είχαμε μαζί του με αφορμή άρθρο του που δημοσιεύτηκε στους Gulf Times. Ο κ. Μπαρούντι εστιάζει στις ενεργειακές επιπτώσεις σημειώνοντας ότι «τα αποθέματα αργού πετρελαίου και φυσικού αερίου του Ιράν

είναι, αντίστοιχα, τα δεύτερα και τρίτα μεγαλύτερα στον κόσμο. Ενώ το Ισραήλ έχει εξηγήσει ότι οι υποτιθέμενες πυρηνικές δραστηριότητες του Ιράν ως τον λόγο.

για τον οποίο ξεκίνησε τον πόλεμο, οι επιθέσεις του έχουν επικεντρωθεί επίσης στις υποδομές πετρελαίου και φυσικού αερίου του Ιράν. Πέντε από τα εννέα μεγάλα διυλιστήρια πετρελαίου του Ιράν είχαν πληγεί και τεθεί εκτός λειτουργίας,

μαζί με αποθήκες και άλλες εγκαταστάσεις, ενώ οι ισραηλινές δυνάμεις προκάλεσαν επίσης μια τεράστια πυρκαγιά στο κοίτασμα φυσικού αερίου South Pars, το οποίο το Ιράν μοιράζεται με το Κατάρ — και το οποίο περιέχει σχεδόν τόσο φυσικό αέριο όσο όλα τα άλλα γνωστά πεδία φυσικού αερίου στη Γη. Επίσης οι ιρανικές επιθέσεις εναντίον του ισραηλινού συγκροτήματος διυλιστηρίων στη Χάιφα οδήγησαν στο κλείσιμο αρκετών υπεράκτιων πλατφορμών, μειώνοντας περαιτέρω την περιφερειακή παραγωγή υδρογονανθράκων».

Ο κ.Μπαρούντι εκτιμά ότι η κατάσταση μπορεί να επιδεινωθεί. «Η καταστροφή ή η διακοπή της ικανότητας του Ιράν να εξάγει, να επεξεργάζεται, να διανέμει και να εξάγει υδρογονάνθρακες θα προκαλούσε τεράστια προβλήματα στο εσωτερικό και θα ασκούσε ανοδική πίεση στις τιμές παντού, αν και ο παγκόσμιος αντίκτυπος θα ήταν πιθανότατα διαχειρίσιμος. Η κατάσταση θα ήταν πολύ πιο ανησυχητική εάν οι ισραηλινές επιθέσεις έπλητταν την περιοχή Μπαντάρ Αμπάς. Αυτό θα μπορούσε να προκαλέσει την εκτόξευση των τιμών του φυσικού αερίου — και άλλων μορφών ενέργειας — στις παγκόσμιες αγορές», τονίζει.

Δίνει μάλιστα μεγάλη έμφαση στα στενά του Ορμούζ καθώς συνδέει αρκετούς άλλους από τους πιο παραγωγικούς παραγωγούς πετρελαίου και LNG στον κόσμο — συμπεριλαμβανομένων του Ιράκ, του Κουβέιτ, του Κατάρ και της Σαουδικής Αραβίας — με τους πελάτες τους στο εξωτερικό.

«Ως αποτέλεσμα, κάθε μέρα, περίπου το ένα τέταρτο των παγκόσμιων αναγκών σε αργό πετρέλαιο και LNG εξέρχεται από τον Κόλπο μέσω του Ορμούζ, καθιστώντας τον το πιο στρατηγικά σημαντικό σημείο συμφόρησης της εποχής μας. Εάν αυτή η ροή σταματήσει ή ακόμη και επιβραδυνθεί σημαντικά, οι συνέπειες θα μπορούσαν να είναι καταστροφικές για μεγάλο μέρος του κόσμου. Αν και οι περισσότερες από αυτές τις εξαγωγές συνήθως προορίζονται για τις αγορές της Ασίας, ακόμη και μια σύντομη μείωση του διαθέσιμου πετρελαίου και φυσικού αερίου θα μπορούσε να εκτινάξει τις τιμές του αργού πετρελαίου, που επί του παρόντος είναι λίγο πάνω από 70 δολάρια το βαρέλι, πάνω

από τα 100 ή ακόμα και τα 120 δολάρια σύντομα. Αν μια τέτοια κρίση εφοδιασμού διαρκούσε για κάποιο χρονικό διάστημα, η παγκόσμια οικονομία θα εισερχόταν σε αχαρτογράφητα εδάφη. Όχι μόνο οι υπερβολικά υψηλές τιμές ενέργειας θα προκαλούσαν αύξηση του πληθωρισμού σε όλους τους τομείς, αλλά οι ελλείψεις καυσίμων θα μπορούσαν επίσης να παραλύσουν επιχειρήσεις κάθε μεγέθους και είδους. Μεταφορές και μεταποίηση, επεξεργασία τροφίμων και ιατρική έρευνα, παραγωγή ενέργειας, θέρμανση και ψύξη οικιακών συσκευών, ακόμη και το ίδιο το Διαδίκτυο: όλα όσα εξαρτώνται από την ενέργεια θα μπορούσαν να επιβραδυνθούν σε μικρό βαθμό. Μια παγκόσμια ύφεση σχεδόν σίγουρα θα ακολουθούσε, και δεδομένου του τρέχοντος εμπορικού περιβάλλοντος, αυτό θα μπορούσε να οδηγήσει σε μια ακόμη Μεγάλη Ύφεση».

Ο κ. Μπαρούντι καταλήγει ότι η πιθανότητα παγκόσμιας οικονομικής καταστροφής — για να μην αναφέρουμε τους οικολογικούς κινδύνους και τους κινδύνους για τη δημόσια υγεία που προκαλούν οι διαρροές πετρελαίου, πυρηνικών υλικών ή και άλλων τοξινών στο περιβάλλον — απλά δεν είναι ένας κίνδυνος που οι περισσότεροι έξυπνοι άνθρωποι θέλουν να βιώσουν. «Επομένως, αρμόζει σε όσους έχουν τη δύναμη να αλλάξουν την κατάσταση να κάνουν ό,τι μπορούν για να τερματίσουν τη σύγκρουση προτού το κόστος της γίνει μεγαλύτερο από όσο μπορεί να αντέξει μια εύθραυστη παγκόσμια οικονομία»

## Israel-Iran war needs to stop before we all get burned



The long-feared war between Israel and Iran is now fully under way, and the repercussions threaten to include significant disruptions — not just for the two belligerents, but also for economies, peoples, and governments around the world.

To understand how and why an armed conflict between two regional powers could have such a widespread impact, start by considering the following:

- 1. Iran's reserves of crude oil and natural gas are, respectively, the second- and third-largest in the world;
- 2. While Israel has posited Iran's alleged nuclear activities as its reason for going to war, its strikes have also focused on Iran's oil and gas infrastructure;
- 3. At the time of this writing, five of Iran's nine major oil refineries had been hit and knocked out of service, along with storage depots and other facilities;
- 4. Israeli forces also started a huge fire at the South Pars gas field, which Iran shares with Qatar and which holds almost as much gas as all of the other known gas fields on Earth.
- 5. For good measure, Iranian strikes against the Israeli refinery complex at Haifa have led to the shutdown of several offshore platforms, further crimping regional hydrocarbon output;

Now consider that it gets worse. The destruction or shutdown of Iran's ability to extract, process, distribute, and export hydrocarbons would cause tremendous problems at home, and put upward pressure on prices everywhere, although the global impact would likely be manageable. The situation would be far more disruptive if Israeli attacks hit Bandar Abbas area. That could cause prices for gas — and other forms of energy — to soar on world markets.

And yet even this is not the greatest peril threatened by this war. That desultory honour goes to the possibility that traffic could be disrupted in the Strait of Hormuz, the relatively narrow channel that connects the Gulf to the open ocean. The passage is only 40 kilometres at its narrowest spot, wending for over 150 kilometres between Oman and the United Arab Emirates, to the west and south, and Iran's Hormozgan Province to the east and north. Hormozgan is also home to the famous port city of Bandar Abbas, which hosts a

giant oil and petrochemical complex that has already been struck at least once by Israeli forces.

What really matters for our purposes is that Hormuz also connects several other of the world's most prolific oil and LNG producers — including Iraq, Kuwait, Qatar, and Saudi Arabia — to their overseas clients. As a result, every day, about a quarter of the world's crude oil and LNG requirements exit the Gulf through Hormuz, making it the most strategically important chokepoint of our times. If this flow were halted or even significantly slowed, the consequences could be disastrous for much of the world. Although most of these exports are typically bound for markets in Asia, even a brief reduction in available oil and gas could send crude prices, currently a little more than \$70 a barrel, shooting past \$100 or even \$120 in short order.

If such a supply crisis lasted any length of time, the global economy would enter uncharted territory. Not only would skyhigh energy prices cause inflation to rise across the board, but fuel shortages could also be expected to cripple businesses of every size and sort. Transport and manufacturing, food processing and medical research, power generation, household heating and cooling, even the Internet itself: everything that depends on energy could slow to a trickle. A global recession would almost certainly ensue, and given the current trade environment, that might lead to another Great Depression.

So what might cause such an interruption? There are several possibilities, including the accidental sinking or crippling of a supertanker or two in just the right (i.e., wrong) place(s). Even if one or more accidents did not make Hormuz physically impassable, they could make insurance rates prohibitively expensive, causing many would-be off-loaders to decide against hazarding their ships amid the crossfire. Alternatively, Iran could decide to close the strait in order to punish the "international community" in general, for not

doing enough to rein in the Israelis.

Whatever the rationale, the potential for global economic ruin — not to mention the ecological and public health risks posed by leaks of oil, nuclear materials, and/or other toxins into the environment — is simply not a risk that most intelligent people want to run. It therefore behooves those with the power to change the situation to do everything they can to end the conflict before its costs become more than a fragile world economy can bear.

Another is how to get Iran to behave itself, and that, too, shapes up as a difficult task. The Islamic Republic has spent most of the past half-century seeking to undermine US and Israeli influence over the region, and its substantial investments in proxy militias abroad and its own military at home may be skewing high-level decision-making. As the saying goes, when all you have is hammer, everything starts to look like a nail.

Despite these obstacles, it remains a fact that war is almost never preferable to negotiation. Iran and Israel agree on very little, their objectives are often in direct opposition to one another, and each views the other as a murderous and illegitimate state. Nonetheless, whether they realise it or not, both sides have a vested interest in ending the current conflict. Given the massive disparities in their respective strengths and weaknesses, this conflict could turn into a long-term bloodletting in which the value of anything achieved will be far outstripped by the cost in blood and treasure.

But who will get the two sides to so much as consider diplomacy when both of them are increasingly committed to confrontation? Although several world leaders have offered to act as mediators, the belligerents don't trust very many of the same people. To my mind, this opens a door for Qatar, which has worked assiduously to maintain relations with all parties — and which already has a highly impressive record as

a peacemaker — to step up in some capacity.

Whether it provides a venue for direct talks, a diplomatic backchannel for exchanging messages, or some other method, Doha has proved before that it can be a stable platform and a powerful advocate for peaceful negotiations. Let us hope it can do so again.

• Roudi Baroudi is a four-decade veteran of the oil and gas industry who currently serves as CEO of Energy and Environment Holding, an independent consultancy based in Doha.

## Trump's move to exit Paris accord to hit harder than last time



This US withdrawal will take effect in one year, faster than

the 3.5-year exit period when Trump first quit the accord.

A second US withdrawal from the world's primary climate pact will have a bigger impact — in the US and globally — than the country's first retreat in 2017, according to analysts and diplomats. One of President Donald Trump's first acts on returning to office on Monday was to quit the Paris Agreement as part of his plans to halt US climate action.

The impact will be to increase the chance of global warming escalating, to slow US climate funding internationally, and leave investors struggling to navigate the divergence between European and US green rules.

This US withdrawal will take effect in one year, faster than the 3.5-year exit period when Trump first quit the Paris accord in 2017.

Since then, climate change has become more extreme. Last year was the planet's hottest on record, and the first in which the average global temperature exceeded 1.5C (2.7F) of warming — the limit the Paris Agreement commits countries to trying to stay below.

"We are looking at overshooting 1.5C — that is becoming very, very likely," said law professor Christina Voigt at the University of Oslo.

"Which, of course, brings to the forefront that much more ambitious global action on climate change is needed," she said.

Today's climate, measured over decades, is 1.3C warmer than in pre-industrial times, and on track for at least 2.7C of warming this century. While perilous, that is less severe than the 4C projected before countries negotiated the 2015 Paris Agreement. Each country's pledge toward the Paris goal is voluntary. Nevertheless, Trump is expected to scrap the US national emissions-cutting plan and potentially also Biden-era tax credits for CO2-cutting projects.

All of this will "further jeopardise the achievement of the Paris Agreement's temperature goals," Michael Gerrard, a legal professor at Columbia Law School, said.

"That has obviously an impact on others. I mean, why should others continue to pick up the pieces if one of the key players once again leaves the room?" said Paul Watkinson, a former French climate negotiator who worked on the 2015 Paris Agreement.

Some US states have said they will continue climate action.

Regardless of politics, favourable economics drove a clean energy boom during Trump's first term — with Republican stronghold Texas leading record-high US solar and wind energy expansion in 2020, US government data show. But Trump has already taken steps to try to prevent a repeat of that, on Monday suspending offshore wind leases and revoking Biden's electric vehicle targets.

The US produces around 13% of global CO2 emissions today but is responsible for most of the CO2 released into the atmosphere since the Industrial Revolution.

As part of the Paris Agreement exit, Trump on Monday ordered an immediate cessation of all US funding pledged under UN climate talks.

That will cost poorer nations at least \$11bn — the US government's record-high financial contribution delivered in 2024 to help them cope with climate change.

Together, all rich countries' governments combined contributed \$116bn in climate funding for developing nations in 2022, the latest available OECD data show.

That does not include the huge climate-friendly government funding Biden rolled out domestically, whose future under Trump is uncertain.

Total US climate spending — counting domestic and international, from private and public sources — jumped to \$175bn annually over 2021-2022, boosted massively by the 2022 Biden-era Inflation Reduction Act, according to non-profit research group the Climate Policy Initiative. The US is also responsible for funding around 21% of the core budget for the UN climate secretariat — the body that runs the world's climate change negotiations, which faces a funding shortfall.

The We Mean Business Coalition, which is backed by Amazon and

Meta, said Trump's disruption of the US business environment could drive green investment elsewhere.

It could "open the door for other major economies to attract greater investment and talent," the non-profit group said.

Three investors told Reuters the transition to green energy, including in the US, will move forward regardless.

One impact of the Paris exit will be to prevent US businesses from selling carbon credits into a UN-backed carbon market that could be valued at more than \$10bn by 2030, according to financial information provider MSCI.

While no longer able to make money from selling any surplus credits, US companies would be able to buy them on a voluntary basis. — Reuters

# Shell dividend hike drives shares higher despite profit miss



By Arunima Kumar

(Reuters) -Shell reported a 16% drop in profit for 2024 on Thursday amid weakness in oil and gas prices and in demand, but shares rose after it raised its dividend by 4% and extended its share buyback programme.

The oil major also announced a \$3.5 billion buyback for the current quarter, making this the 13th consecutive quarter of at least \$3 billion of share repurchases.

Its shares gained over 2% even as the group reported that its 2024 adjusted earnings, its definition of net profit, fell to \$23.72 billion from \$28.25 billion in 2023, dented by narrower liquefied natural gas (LNG) trading margins, lower oil and gas prices, and weaker refining margins.

That fell short of a \$24.64 billion consensus compiled by LSEG and \$24.11 billion forecast by analysts polled by Vara Research.

Shell, the first major energy company to report results, said

fourth-quarter earnings nearly halved from the previous year to \$3.66 billion, also missing analysts' expectations.

"As expected, Shell reported 4Q results this morning which showed relatively soft earnings, but continued strong cash generation," RBC Capital Markets analyst Biraj Borkhataria said in a note, also highlighting the consistency with which the group has been returning cash to shareholders.

In his prepared remarks, CEO Wael Sawan said the share buybacks were "underpinned by the significant progress that we are making as an organisation."

Sawan has been focused on cutting costs and pivoting the company back to its most profitable sectors — oil, gas, and biofuels — while shifting away from renewable power.

"We achieved a (cost) reduction of \$3.1 billion by the end of 2024, one year ahead of our end-2025 target date, and above the range of \$2 to \$3 billion that we set in 2023," he said.

Shell's fourth-quarter earnings included \$2.2 billion in impairments, part of which was a \$1 billion write-off for a U.S. offshore wind project.

CFO Sinead Gorman told reporters that the project did not align with company's capabilities or return goals, and Shell was looking to monetize it.

The world's leading oil and gas companies experienced a decline in profits through 2024, following record earnings in the previous two years, as energy prices stabilised and oil demand weakened.

Shell also expects 2025 capital expenditure to fall below last year's \$21 billion range, with more details to be shared at its capital markets day in March.

The group's refining operations reported an adjusted loss of \$229 million in the chemicals and products unit, compared to a

\$29 million profit last year.

Refining margins weakened globally due to reduced economic activity and new refineries opening in Asia and Africa.

Executives said on a call with analysts that Shell had no plans to get out of refining altogether, but was not looking to expand there either.

The company is trying to sell its stake in a German refinery and intends to shut down a plant in Wesseling, Germany, following the sale of its Singapore refining and chemicals hub last year, one of the largest of its kind in the world.

In the fourth quarter, Shell ran its refineries at 76% capacity, and said it expected to increase that to 80-88% in the first quarter.

Shell also said it did not have a timeline for arbitration over LNG supply from Venture Global's Calcasieu Pass facility.

Venture Global, whose \$58 billion market debut fell short of high expectations last week, began generating proceeds in 2022 with its Calcasieu Pass facility.

However, delays in commercial operations have caused contract disputes with customers, including BP, Shell and Italy's Edison, over missed cargoes.

(Reporting by Arunima Kumar in Bengaluru; editing by Savio D'Souza, Jason Neely, Tomasz Janowski and Bernadette Baum)

### Climate displacement is also a health crisis



By disrupting care services, climate displacement deprives affected communities of access to doctors, hospitals, and pharmacies.

Every year, 21.5mn people are forcibly displaced by floods, droughts, wildfires, and storms. This number is set to rise dramatically over the coming decades, with up to 1.2bn people expected to be driven from their homes by 2050. The unfolding climate crisis is not just a humanitarian disaster but also a global health emergency.

Climate displacement poses both direct and indirect threats to public health. By disrupting care services, it deprives affected communities of access to doctors, hospitals, and pharmacies. Climate-induced migration also exacerbates poverty, overcrowding, and social instability. Food production is often severely affected, while unsanitary living conditions

fuel the spread of infectious diseases.

As the climate crisis threatens to derail global efforts to achieve the UN Sustainable Development Goals, the health and well-being of hundreds of millions of people across the developing world are at risk. High-income countries are not immune: in the US, 3.2mn adults were displaced or evacuated due to natural disasters in 2022 alone.

Pharmaceutical companies must play a pivotal role in bolstering global health resilience. Their involvement is particularly critical in conflict zones at the forefront of the climate-displacement crisis, where life-saving medicines and vaccines are often in short supply.

While the pharmaceutical industry has made strides in reducing carbon dioxide emissions and adopting more sustainable practices, its efforts fall far short of mitigating climaterelated disruptions to supply chains.

Some pharmaceutical companies, such as Novartis and Novo Nordisk, have launched targeted programmes to aid populations displaced by extreme weather events, while others have donated cash or supplies in response to natural disasters. The demand for these donations has risen with increasing climate and humanitarian needs. Hikma, a generic medicine manufacturer founded in Jordan, reported \$4mn in donations in 2020, and \$4.9mn in 2023, mostly serving the needs in the surrounding region.

No company has developed a comprehensive strategy to ensure that displaced communities have sustained access to health products. A more holistic approach is needed. Amid the ongoing climate-displacement crisis, pharmaceutical companies should adopt a four-pronged strategy to strengthen healthcare systems. For starters, they could help deliver medicines to vulnerable communities in remote areas by revamping their supply-chains, from building redundancy into shipping networks to redesigning products to be more stable in hot climates where refrigeration may be unavailable.

Second, pharmaceutical companies must invest in research and development to create vaccines, diagnostics, and therapeutics

targeting climate-sensitive diseases. Rising global temperatures are accelerating the spread of mosquito-borne illnesses such as dengue, malaria, and Zika, as well as waterborne diseases like cholera and shigella, putting displaced populations at even greater risk.

Third, pharmaceutical companies should forge long-term partnerships with humanitarian organisations focused on climate displacement. Public-private collaborations have also proven effective in strengthening health resilience. Since 2010, for example, leading vaccine manufacturers like GSK and Pfizer have supplied Gavi, the Vaccine Alliance, with billions of vaccine doses, protecting vulnerable populations in some of the world's most resource-constrained countries.

Lastly, pharmaceutical companies must boost efforts to cut greenhouse-gas emissions across their value chains. While the climate impact of pharmaceuticals may get less attention than that of traditional manufacturing industries, the sector emits more CO2 per \$1mn of revenue than the automotive industry.

The active support and engagement of shareholders, employees, and other stakeholders is crucial. Investors, in particular, must encourage companies to align their business practices with global health and climate goals.

Climate displacement is not a distant or hypothetical threat; it is a rapidly escalating health emergency. The pharmaceutical industry has a moral responsibility to act. To do so effectively, companies must get ahead of the curve and provide vital, life-saving treatments to those on the front lines of the climate crisis.

### Ensuring Europe's supply of

#### critical minerals



The European Union's plan to achieve net-zero emissions by 2050 has an Achilles' heel: the EU relies on external sources — particularly Chinese companies — for 70-90% of the massive amount of critical raw materials needed to manufacture wind turbines, solar cells, batteries, and other green technologies. This dependency poses a serious risk: China's recent ban on exports of gallium, germanium, antimony, and other dual-use materials to the US suggests that it could take similar action against Europe, especially in light of EU tariffs on Chinese electric vehicles.

The new European Commission has rightly put critical raw materials at the top of its agenda. Fortunately, it will not be starting from scratch. Last year, the EU adopted the Critical Raw Materials Act, which calls for the bloc to extract 10%, process 40%, and recycle 25% of what it consumes annually by 2030, and limits the share of any external supplier to 65%. To meet the CRMA's targets, the Commission

must focus on co-ordinating funding, engaging in resource diplomacy with Africa, and establishing secondary material partnerships.

Mining is a capital-intensive industry, and overseas upstream activities require public support in terms of both equity and debt. The CRMA anticipates mobilising finance from various sources, including the EU's Global Gateway initiative and the European Investment Bank. Some member states have also established their own national funds. Germany launched a €1bn (\$1.04bn) raw-materials fund, while Italy introduced a €1bn "Made in Italy" fund for critical minerals, and France dedicated €500mn under its 2030 investment plan to enhance domestic industry's resilience to disruptions of the metal supply chain.

But while several public-finance streams are available, the funding landscape is scattered and not well aligned, creating confusion. Moreover, there are no explicit rules governing how the Critical Raw Materials Board, which was established to support the CRMA's implementation, designates projects as "strategic" and thus eligible to receive EU funds. The European Commission can address these issues by streamlining existing funding lines, which would ensure that national and EU finance work in tandem to achieve the best results and scale, and by establishing timelines for decision-making, which would provide clarity for corporate investment in upstream, midstream, and downstream assets.

The CRMA must also establish partnerships with resource-rich countries that deliver quick and tangible results. Bolstering ties with African countries, which hold some 30% of the world's mineral resources, will be especially important. But, compared to other regions, investment in mineral exploration on the continent remains low, and China funds most of it. The EU's resource diplomacy should focus on lowering investment barriers while helping African partners move into higher-value-added activities, such as downstream processing, and

invest in industrial upgrading.

AfricaMaVal, an EU-funded project promoting sustainable partnerships and responsible mining on the continent, should become a vehicle for linking European and African firms and addressing extraction needs. Building on comprehensive assessments of mining prospects across Africa, and taking into account the STEM (science, technology, engineering, and mathematics) skills of local workforces, AfricaMaVal can identify new business opportunities along the value chain. This could evolve into a joint investment platform for the sustainable production of critical raw materials. The European Commission would thus be doing what it does best: catalysing private investment toward its policy goals, which, in this case, is building the infrastructure and clean-energy systems required for future mining projects.

Lastly, the Commission should address the CRMA's major blind spot: the lack of domestic feedstock to meet its recycling targets. Global competition for secondary materials is already stiff, as evidenced by businesses' increasing efforts to secure enough steel scrap. Recycling input rates — the share of total demand — are just 3% for light rare-earth elements and zero for battery-grade lithium.

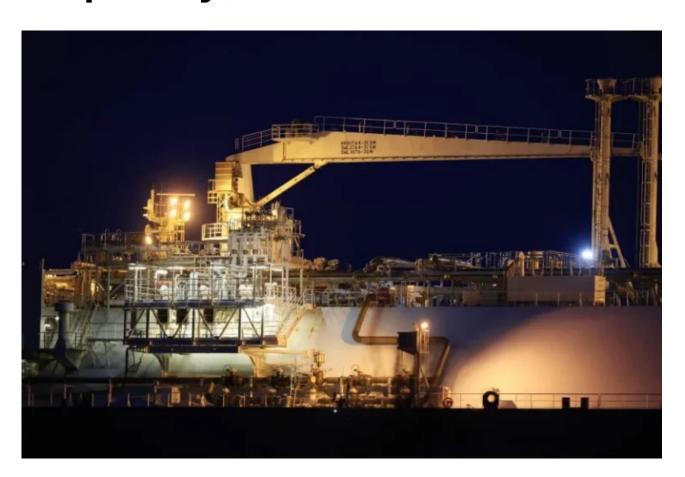
Establishing secondary-materials partnerships with emerging economies, which have rapidly growing markets for cell phones, laptops, and other appliances, would boost the EU's supply of recycled critical raw materials, particularly rare-earth elements. The focus should be on optimising the recycling value chain by providing financing and capacity-building assistance for waste-sorting and collection systems in partner countries, creating mutually beneficial economic and environmental outcomes.

The EU is facing an uphill battle to source and produce the critical raw materials that will define its future. And while the CRMA hardly represents an easy fix for the bloc's import dependency, it can strengthen supply-chain resilience,

contribute to EU sovereignty, and bolster Europe's economic security — in other words, boost the bloc's industrial competitiveness against a worsening geopolitical backdrop. But to realise the CRMA's full potential, the Commission must make it fit for purpose. — Project Syndicate

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## Clean energy progress hinges on policy, science and action



It is tough to be optimistic about the climate these days. While the costs of extreme weather events like the Los Angeles wildfires pile up, the US federal policy pendulum is swinging away from facts, reason, and basic human decency. Nonetheless, even as the US government moves in the wrong direction, trends in science, economics, and increasingly local politics indicate that the pendulum will swing back in due course.

After all, no-one can argue with the physics of today's clean energy technologies. Heat pumps, induction stoves, and electric vehicles (EVs) — to name just three — are fundamentally better technologies than what came before. The best gas furnaces might reach 95% efficiency, meaning they are converting 95% of the energy they use into heat; but most heat pumps easily top 200%, with some reaching 400% or more. Similar comparisons can be made between induction and gas stoves, and between EVs and gasoline- or diesel-powered vehicles. By and large, we know what technologies we should be using to eliminate greenhouse-gas emissions; and in cases where we don't, we know what kinds of things to try.

This knowledge extends well beyond EVs and heat pumps to entire industrial sectors like cement or iron and steel. Here, outgoing US President Joe Biden's administration has made an important contribution with the Department of Energy's Liftoff Reports, which chart pathways to commercialisation for a broad selection of low-carbon technologies.

Consider cement, which accounts for some 8% of annual global greenhouse-gas emissions. Ordinary Portland cement, patented 200 years ago, has dominated the sector for decades. While measures like clinker substitution and efficiency improvements can abate up to 40% of emissions, getting to zero will require additional steps. These generally fall into two categories: cutting emissions from producing Portland cement or switching away from it altogether. Promising US start-ups like Brimstone and Sublime Systems are racing to demonstrate that either path is commercially viable.

One key ingredient is public subsidies to help firms climb the learning curve and slide down the cost curve toward faster

commercialisation. Both Brimstone and Sublime Systems received early research and development funding from the US Advanced Research Projects Agency-Energy (ARPA-E) and have now advanced to the deployment stage, receiving up to \$190mn and \$90mn, respectively, to build their first commercial plants. All told, the Bipartisan Infrastructure Law and the Inflation Reduction Act allocated around \$100bn for such purposes, with public funding contingent on matching private investments.

Moreover, these sums are dwarfed by the Department of Energy's loan programme. With just \$17bn in taxpayer funds, the IRA authorises the department's Loan Programs Office to lend \$350bn for investments in clean energy and domestic EV manufacturing. And those public funds then catalyse multiples more in private investments. While some Republicans and members of Donald Trump's incoming administration want to cut this programme, doing so would only hurt US competitiveness.

Can we restore sanity to our national policies? It might be trite to say that change begins at home, but what is trite is often true. A good place to look is New York. While the city has many problems, its climate policies are not among them. Around 70% of New York's direct emissions come from heating and cooling buildings, while the other 30% comes from cars and trucks. Fortunately, Local Law 97 is already addressing the former. The law is one of the most ambitious decarbonisation measures for buildings anywhere, requiring most to reduce their emissions by 40% this decade, and by 100% by 2050. And while New York can do only so much about vehicle emissions, its long-delayed congestion pricing programme is finally being implemented. That is a good start.

Given that New York used to be the world's most congested city, the quality-of-life improvement from less traffic can already be felt. The same goes for another measure that took an absurdly long time to address: the lack of trash bins. Over the past year, the city has finally issued official trash, recycling, and compost bins, with enforcement for residential buildings beginning this month. Cleaning up our own act — including with mandatory composting and other policies — will

not save the planet. But effective government just might. Physics alone will not push the pendulum all the way back to where it was before. That will require policies based on sound economics. As long as Trump does not break the fulcrum and bring the entire pendulum crashing down, policies pioneered by his predecessor and by local communities will continue to be a force applying pressure in the right direction. — Project Syndicate

# Germany's costly LNG terminals aren't paying off as imports dip

Germany spent big on liquefied natural gas (LNG) terminals to ensure energy security, but the high cost of using them means they're bringing in a tiny fraction of its gas needs.

Only about 8% of Germany's total gas imports last year came via its shipping terminals in Wilhelmshaven, Brunsbüttel, Lubmin and Mukran, according to energy regulator Bundesnetzagentur.

"German terminals are more expensive to deliver to than the rest of northwest Europe," said Qasim Afghan, a commercial analyst at Spark Commodities Pte Ltd. On average, variable regasification costs in Germany for cargo delivery in February are 86% higher than other such facilities in the region, he said.

That's because it's more expensive to operate floating import terminals, especially in the winter. Also, fuel gas losses, associated with power consumption needed for the process of turning LNG back to gas, are higher in Germany than elsewhere, Afghan said.

As a result, Germany has the most regasification prompt slots available for purchase in Europe, "highlighting unused capacity that is likely not economically viable."

When the nation accelerated the construction of these floating facilities in 2022, to help wean off Russian gas, the ambition was to be able to keep energy costs in check. However, the expensive terminals are now adding to the already high gas prices and compounding the pain for Germany's energy-intensive economy. This has led some environmental groups to demand that the expansion of such infrastructure be halted.

Ship-tracking data compiled by Bloomberg show that Europe's biggest economy imported 4.8mn tons of the super-chilled fossil fuel last year. That's a marginal decline year-on-year and far less than what neighbouring nations are importing.

The Economy Ministry says it primarily views the terminals as a way to ensure a sufficient safety buffer.

"Of course, this can mean that there may be lower capacity utilization if demand is not so high, but this cannot be the benchmark for a federal government that has to guarantee security of supply," a ministry spokesperson said.

The total cost estimate for the nation's state-run LNG terminals — including those in the pipeline — is now likely to be around €5bn. That's half of what it was initially pegged at, she added.

State operator Deutsche Energy Terminal said imports via its units in Wilhelmshaven and Brunsbüttel remained steady at 59 terawatt-hours. It also successfully marketed all three slots in December for the two units and aims for a new capacity auction at the end of the month, a spokesperson said.

Deutsche Regas, the operator of the Mukran terminal on the island of Rügen — also Germany's only privately operated one — didn't respond to a request for comment.

More facilities are set to open later this year, including Stade near Hamburg and Wilhelmshaven II.

Planning more units despite the low utilization is "absurd," Sascha Müller-Kraenner, managing director of German Environment Action, said in a statement, calling for an end to the infrastructure expansion.

### Supertanker Rates on China Routes Double Since Sanctions



The cost to hire an oil supertanker on key routes to China has

doubled since the US imposed sanctions on Russia, showing the extent to which the move has upended the global shipping market.

The sanctions have jolted a freight market that was, until recently, dealing with softer demand due to supply curbs, a tepid Chinese economy, and an easing of Middle East tensions. The number of confirmed journeys hasn't changed much, but the pool of available ships has shrunken rapidly, and there's intense competition on certain routes.

Daily rates for very-large crude carriers on the Middle East-to-China route surged 112% to \$57,589 in the week through Friday, according to Baltic Exchange data, after Washington sanctioned nearly 160 tankers hauling Russian crude on Jan. 10. Those on the US Gulf-to-China journey jumped 102%, while West Africa-to-China saw an increase of 90%.

Major Chinese refiners have been been rushing to buy crude from the Middle East, Africa and the Americas in recent days to make up for the loss of Russian oil. A VLCC from the US Gulf to China was hired for \$9.5 million last week, compared to a low-\$7 million range over the last couple of months, shipping fixtures show. Indian Oil Corp. is also snapping up up Middle Eastern barrels, adding to the pressure.

There's concern that tanker rates could remain elevated if President-elect Donald Trump, set to be sworn in later on Monday, takes a tougher line against Tehran.

"Rates could hold at these levels if Trump dials up the pressure on Iranian oil shipments, which is more likely than not," said Junjie Ting, a Singapore-based shipping analyst at Oil Brokerage Ltd.

The rising demand for VLCCs, which can carry around 2 million barrels of oil, is also feeding through to costs for smaller vessels, which tend to be viewed as less cost-efficient on longer routes. Rates for Suezmaxes, that hold about 1 million

barrels, have climbed on increased demand and tight supply, shipbroker SSY said in a report.

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