In the dock: Pivotal climate change testimonies in US

From Mexicans left homeless by rising seas to Colombians affected by coral bleaching, hundreds of people are telling the top human rights court in the Americas what climate change means to them in an historic case that could shape international law.

Environmental lawyers also hope the hearings at the Inter-American Court of Human Rights (IACHR), which were requested by Colombia and Chile, will define the duties of states to confront the climate crisis and stop it infringing on human rights.

As well as receiving submissions from climate victims, the Costa Rica-based court, which started its inquiry in Barbados in April, will hear from UN agencies, legal experts, grassroots environmental campaign groups, and youth groups.

The next sessions are due to be held in Brasilia and then Manaus, Brazil at the end of May, and an advisory opinion is expected by May 2025.

“We’re hoping that the court’s legal opinion is a guide and

reference for Mexico, and other states, to develop public policies from a climate justice perspective," said Nora Cabrera, a lawyer and head of Our Future, a Mexico-based youth climate justice campaign group.

"And that it includes loss and damage compensation for affected communities, and adaptation policies for those not yet directly affected by climate change," said Cabrera, who will be speaking at the next hearing in Manaus.

In January, Colombia and Chile asked the IACHR to issue the advisory opinion, saying that they were experiencing the "daily challenge of dealing with the consequences of the climate emergency," including fires, landslides, droughts and floods.

"These events reveal the need for an urgent response based on the principles of equity, justice, co-operation and sustainability, with a human rights-based approach," they said in their petition.

"There is a close relationship between the climate emergency and the violation of human rights," they added.

It is this link between climate change and human rights that the IACHR will seek to define, while also examining how climate change affects migration and looking at the disproportionate effect on children, women and Indigenous people.

Chile and Colombia also asked the court for clarification on a state's duties to protect environmental activists.

Latin America is the most dangerous place in the world for environmental and land defenders, according to advocacy group Global Witness. Around 90% of the 177 killings of environmental activists recorded in 2022 took place in the region.

"The hearing aims to ask for clarity about human rights obligations and the climate crisis," said Jacob Kopas, senior attorney at the Earthjustice environmental group, one of a group of lawyers who spoke at the Barbados hearing on April 26.

"It will help to create a more concise framework to guide

state behaviour and policy to confront the climate crisis and protect human rights," said Kopas.

Among those submitting testimonies will be the residents of the El Bosque fishing community in Tabasco, Mexico, where rising sea levels caused by climate change have swept away about 200 meters of coastline.

Since 2019, the school and more than 50 homes have been destroyed, forcing about 200 people to leave.

El Bosque community leader, Guadalupe Cobos, said she and 10 neighbours will probably have to leave within a year and resettle in an area about 12km away, where new homes are being built by the government.

"We depend on the sea but coastal erosion has affected our way of life. It's important for the court to know that we're living climate change now and that this isn't something that will happen in the future in 20 or 50 years' time," said Cobos.

"We want the court to hear our experiences and to know that our rights have been violated, that we have been forced to migrate," Cobos told the Thomson Reuters Foundation.

The court's advisory opinion could have important implications for climate litigation across Latin America and the Caribbean and make it easier for communities living with the effects of global warming to take legal action.

The opinion will apply to all signatories of the American Convention on Human Rights, most of whom are members of the Organization of American States. The United States and Canada have not ratified the treaty however.

The advisory opinion will help shape the region's legal systems as many countries incorporate its jurisprudence into their laws and constitutions.

"We're hoping that the court makes the link between the climate crisis and human rights violations and that it recognises climate displacement," said Cabrera, whose organisation has been supporting the El Bosque community.

The IACHR is known for its progressive stance on climate justice and human rights.

In March, it recognised that citizens in Peru have the right to a healthy environment when it ruled in favor of people living in the Andean mining town of La Oroya, who had suffered from decades of environmental pollution.
Other courts are also breaking new ground in this sphere.
In Colombia in April, in response to a lawsuit filed by a farming couple who were driven out of their home by flooding caused by heavy rains, the country's constitutional court recognised the links between environmental disasters and climate change and people being forcibly displaced.
Across the world, other top courts are also examining the connection between human rights and climate change. On April 9, the European Court of Human Rights (ECHR) ruled that the Swiss government had violated the human rights of its citizens by failing to do enough to combat climate change.
Two other courts – the International Court of Justice (ICJ) and the International Tribunal for the Law of the Seas (ITLOS) – are also expected to give advisory opinions on international legal obligations of states regarding climate change.
Kopas said the IACHR ruling could lead the way by delivering a "forward-reaching and progressive" advisory opinion.
"It's historic because of the climate crisis we are in. This is the crisis of our lifetime and of all future generations." – Thomson Reuters Foundation

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Asia continues to be 'principal market' for Qatar LNG; accounts for 72% of

total supplies in 2022, says GECF

Principal market for Qatari LNG continues to be Asia, accounting for 72% of its total supplies in 2022, Doha-based Gas Exporting Countries Forum (GECF) said in a report.

Qatar accounted for 16% of European LNG imports in 2022, GECF said in its 'Global Gas Outlook 2050'.

In 2022, net gas exports from the Middle East amounted to 139 bcm. Projections indicate a significant surge in overall net exports to 292 bcm by 2050.

In 2022, the Middle East contributed 96mn tonnes to global LNG exports, representing 25% of the total global LNG exports.

Qatar secured the top position as the leading global LNG exporter, shipping 79mn tonnes, while Oman and the UAE exported 11mn tonnes and 5.5mn tonnes respectively.

"Notably, Qatar supplied 16% of European LNG imports. However, Europe only represented 24% of Qatar's overall LNG exports, while the principal market for Qatari LNG continued to be

Asia, accounting for 72% of the total," GECF said.

According to the forum, the "primary force propelling natural gas exports" from the Middle East is set to be growth in LNG supplies, notably led by Qatar.

The upward trajectory of Qatar's position as a leading global LNG exporter in 2022 indicates a growing momentum towards additional expansions or advancements post-2030s and 2040s following the North Field expansion projects.

With ambitions to increase its current capacity of 77mn tonnes per year by 64%, Qatar aims to reach 126mn tonnes per year through the North Field expansion by 2028.

By 2050, LNG exports from the Middle East will reach 205mn tonnes, largely due to the expansion efforts in Qatar. Anticipated long-term LNG imports are predicted to reach 16mn tonnes by 2050.

Consequently, the long-term outlook suggests an expansion of LNG net exports to reach 189mn tonnes. Primary destination for Middle Eastern LNG is expected to continue being Asia, with that region set to have an even more significant role in the long run.

By 2050, GECF noted, the Asia Pacific region is poised to receive 186mn tonnes of LNG sourced from the Middle East, constituting over 90% of all LNG exported from that region.

The region possesses 101mn tonnes per year of liquefaction capacity, primarily dominated by Qatar's 77mn tonnes per year. Plans are in progress from 2022 to 2050 to add approximately 130mn tonnes per year of extra LNG liquefaction capacity to the region, with Qatar leading expansion efforts.

The utilisation rate of this increased LNG liquefaction capacity is projected to be high, surpassing 90% by 2050, GECF said.

The Case for a European Public-Goods Fund

Mar 4, 2024AGE BAKKER, ROEL BEETSMA, and MARCO BUTI
With the European Union's pandemic recovery fund set to end in 2026, there is an urgent need for more durable financial mechanisms to support its long-term objectives. Fortunately, a new investment fund could both enhance the EU's growth potential and ensure compliance with its new fiscal rules and shared values.

AMSTERDAM – Following weeks of intense negotiations, the European Union has agreed to revise its fiscal rules. The new rulebook will replace the Stability and Growth Pact (SGP) – which has been suspended since the start of the COVID-19 pandemic – and modernize the bloc's 25-year-old fiscal framework.

While the SGP featured a one-size-fits-all model that ultimately undermined its credibility, the updated fiscal rules allow for a differentiated approach. The goal is to maintain the existing deficit and public debt limits while still encouraging member states to invest in green and digital technologies. Member states will be granted extended

adjustment periods of up to seven years to reduce their debts to sustainable levels, provided they commit to reforms and investments that support this double (green/digital) transition.

But while the EU's efforts to strike a balance between fiscal discipline and growth incentives are commendable, national budgets alone will not be enough to finance the EU's ambitious double transition. The European Commission estimates that an annual investment of roughly €650 billion ($700 billion) is needed to meet the 2030 targets of producing at least 42.5% of the bloc's energy from renewable sources and reducing greenhouse-gas emissions by 55%.

Under the new fiscal rules, funding for digital and green investments can be sourced from the €800 billion NextGenerationEU fund, which was established in 2020 to help European economies recover from the COVID-19 shock. But since the NGEU is scheduled to end in 2026, there is an urgent need for more durable financial mechanisms to support the EU's long-term objectives.

As matters stand, the NGEU's focus on national investments has left transnational projects such as high-speed railways and hydrogen infrastructure severely underfunded. Moreover, the US Inflation Reduction Act has widened the investment gap between Europe and the United States. To restore its strategic autonomy, European leaders should build on the success of the NGEU.

In a forthcoming paper, we propose the establishment of a $750 billion EU public-goods fund aimed at bridging funding gaps in crucial areas like renewable energy and digital infrastructure. The primary focus of this fund would be to catalyze cross-border investments and support projects that struggle to secure funding without EU-level financial support. By making access to this fund contingent on compliance with the new fiscal rules, the EU could maintain fiscal discipline

among member states.

The public-goods fund, which would cover the 2026-30 period, is intended to align seamlessly with the EU's climate goals. Building on the successful precedents established by previous EU borrowing initiatives, it would be financed by issuing EU bonds, backed by pooled national guarantees, the EU's budget (bolstered by sufficient revenue streams), or both. Its proposed size represents roughly one-fifth of the bloc's total investment needs through 2030, and the remaining investments would be financed through contributions from member states and the private sector.

By focusing on cross-border investments, the fund would underscore the EU's unified approach to tackling European challenges. At the same time, the requirement to comply with the new fiscal rules would broaden the conditional framework established by the NGEU program, which linked fund access to the rule of law in recipient countries.

Similarly, the proposed conditionality regime would tie access to the new fund to domestic fiscal discipline, thus aligning with the EU's revised fiscal guidelines. Rather than facing penalties for non-compliance, as was the case under the previous SGP, countries would be incentivized to demonstrate fiscal responsibility.

Thus, the conditionality regime would simultaneously boost the EU's growth potential, uphold the integrity of the new fiscal rulebook, and encourage fiscal sustainability among member states. Moreover, increased debt issuance at the European level could be offset by reduced debt issuance at the national level.

Once the fund is established, countries would be encouraged to submit comprehensive investment proposals for transnational projects. The European Investment Bank would determine whether they are eligible to access the fund's resources based on

their alignment with the EU’s double-transition targets and the potential for positive cross-border spillovers. Meanwhile, the European Commission would ascertain that the countries proposing these projects comply with fiscal rules.

The fund’s proposed design aligns with the trend of using EU funds to achieve broader policy objectives. By relying on the successful model of the pandemic recovery fund and the bloc’s current conditionality regime, it would empower the EU to meet crucial climate targets while upholding its shared values.

Climate Leadership from the Global South

Mar 14, 2024OMAR ANDRÉS CAMACHO and SOIPAN TUYA
With vast solar, wind, hydro, and geothermal resources, Africa and Latin America have a central role to play in the clean-energy transition. But while countries like Colombia and Kenya have made impressive progress, additional financing – and thus reforms to the international financial system – is sorely needed.

BOGOTÁ/NAIROBI – Last month, the International Energy Agency’s ministerial gathering took place in Paris, while the African Union, which recently joined the G20, held its annual summit in Addis Ababa. Both fora recognized the urgent need to

fulfill the commitments made at last December's United Nations Climate Change Conference (COP28) in Dubai, not least to triple installed renewable-energy capacity by 2030. But the challenges ahead are substantial.

COP28 identified many actions that are crucial to achieving net-zero emissions by 2050. Beyond the sharp increase in renewable-energy capacity, these include doubling the rate of energy-efficiency improvements by 2030, phasing down the "unabated" use of fossil fuels, and providing financial support to developing countries as they work to expand energy access and advance economic development.

Africa and Latin America have a central role to play in fulfilling the world's net-zero ambitions. Both regions boast abundant renewable-energy potential, thanks to vast solar, wind, hydro, and geothermal resources. By leveraging these, Africa and Latin America can make rapid progress in reducing their carbon emissions, enhancing energy access, and stimulating sustainable economic growth.

Our countries, Colombia and Kenya, are already making significant strides toward a cleaner energy mix. Though Colombia has massive oil and gas reserves, hydropower generation accounts for nearly 70% of its electricity production. And the government is committed to increasing the share of renewables in the energy mix further by 2030. By harnessing wind, solar, biomass, and geothermal, Colombia can diversify its renewable-energy portfolio and further reduce its reliance on fossil fuels.

Colombia is also taking direct action to accelerate the phaseout of fossil fuels. The government recently announced a ban on the issuance of new licenses for oil and gas exploration, and has signaled its intention to address the negative effects of fossil-fuel extraction. These measures will not only curb carbon emissions, but also help protect the country's vulnerable ecosystems and rich biodiversity.

As for Kenya, it is emerging as a renewable-energy success story in Africa. Using its vast geothermal, wind, solar, and hydroelectric resources, Kenya has raised the share of renewables in its electricity generation to a whopping 94%. Its geothermal sector has achieved remarkable growth, making it Africa's leading producer of geothermal power. And now, Kenya is helping its neighbors, Ethiopia and Djibouti, to harness their own geothermal resources as well.

Underpinning Kenya's progress are government efforts to implement supportive policies and create an enabling environment for private investment. The Kenyan government's forward-thinking approach has not only resulted in expanded energy access for its people; it has also created jobs and local industries, thereby advancing economic development and opening up opportunities to collaborate with others. Kenya is a founding member of Accelerated Partnerships for Renewables in Africa, an initiative that aims to bolster the energy transition in African countries, with support from Denmark, Germany, and the United Arab Emirates.

Colombia and Kenya's achievements should be highlighted and celebrated to motivate and guide other countries in their own clean-energy transitions. Those with fossil-fuel resources, for example, must follow Colombia's example in limiting oil and gas exploration.

But Colombia and Kenya are not only passive models for others to follow; they are also active global leaders. If their clean-energy transitions didn't already make their commitments apparent, their recent decision to join the Beyond Oil & Gas Alliance – an international coalition of governments and partners working to facilitate the fossil-fuel phaseout – should make them so.

Still, financing is key if the world is to realize its clean-energy ambitions. Low investment in Africa is a major challenge. A recent BloombergNEF report shows that in 2021,

just 0.6% ($2.6 billion) of the $434 billion invested in renewable-energy projects went to African countries. A sharp increase in funding flows from rich countries to clean-energy sectors in both Africa and Latin America is urgently needed.

Beyond direct financial support from rich countries, the global financial system – including the International Monetary Fund and multilateral development banks – must urgently be reformed, so that it is fairer and more efficient. Only then can this system deliver enough financing to meet the growing needs of developing economies. Coordinated action to ease the debt burdens on developing economies is also vital.

At COP28, the Global South demonstrated solidarity and a commitment to cooperation. By sharing knowledge and best practices, developing economies can drastically accelerate the clean-energy transition. But, if the world is to succeed at combating climate change and safeguarding our collective future, bold action to ensure adequate financing is essential.

What’s next after new Energean gas discovery in Israel’s Karish North Field? Expert underlines need for Lebanon to lay groundwork for maritime boundary deals with

Cyprus and Syria

DOHA/BEIRUT – By Myriam Balaa: Israel's latest undersea gas find further demonstrates that Lebanon should be doing everything it can to pave the way for its own offshore oil and gas industry, specifically by settling its maritime boundaries with Cyprus and Syria, one of the region's foremost authorities on energy development says.

In an interview following Greek/Israeli-owned Energean's announcement of a second discovery in the Karish North Field adjacent to Lebanese waters, energy consultant Roudi Baroudi

said the news was actually good for Lebanon.

“It’s no surprise that they found more. It just underscores what we’ve known for several years: we haven’t located all the resources tucked away beneath the seabed of the East Med, including deposits awaiting discovery off Lebanon’s coast,” said Baroudi, who has more than four decades of experience in the energy business. “The problem is that Lebanon’s ongoing political quagmire has caused significant delays in the development of the country’s nascent offshore hydrocarbon sector.”

Baroudi, who currently serves as CEO of Energy and Environment Holding, an independent consultancy based in Doha, Qatar, confirmed that the new find seemed to be located very close to the maritime boundary line (MBL) agreed to by Lebanon and Israel in October 2022. That agreement, reached after years-long mediation by the United States, was a “necessary step”, he explained, but “it alone has not been sufficient to fully activate Lebanon’s oil and gas industry.”

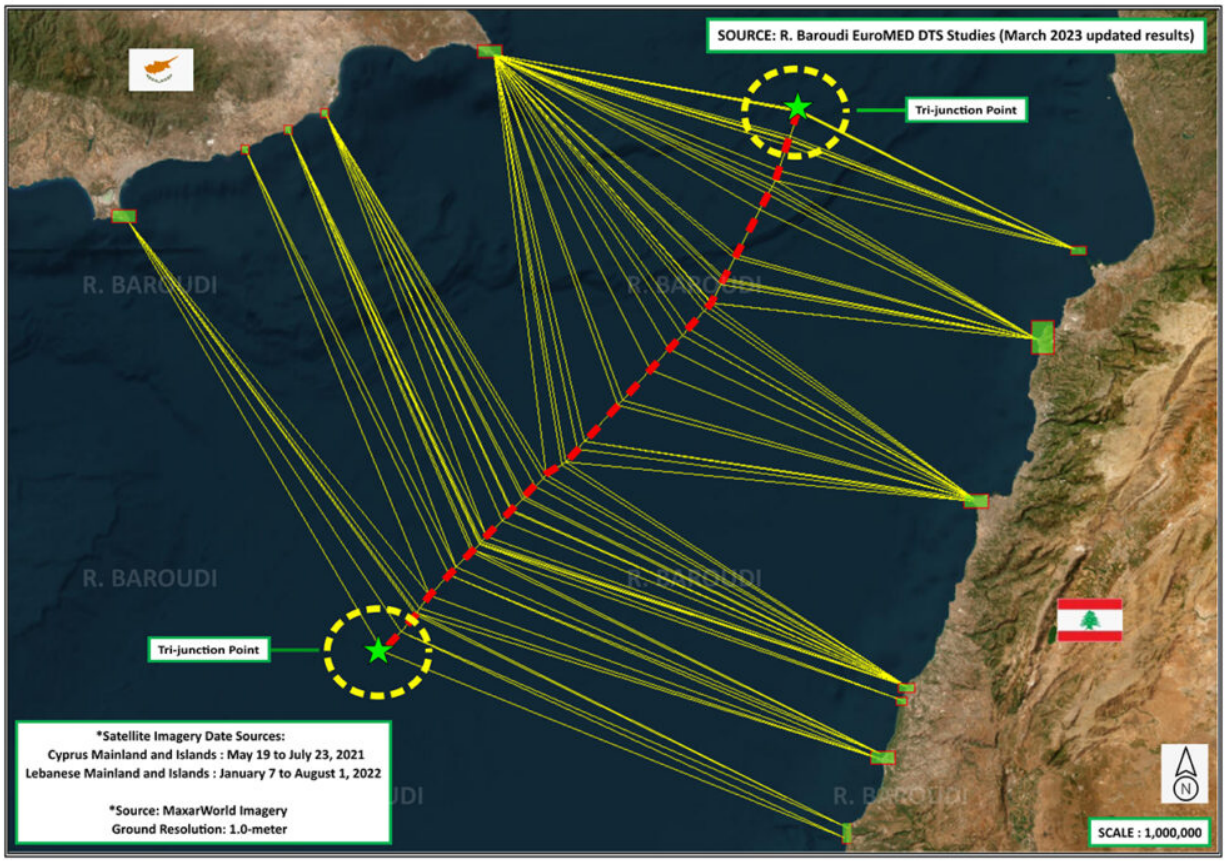
Asked how Beirut should proceed at this juncture, he stressed the importance of moving ahead with efforts to finalize Lebanon’s MBLs with Cyprus and Syria, “which would achieve full international recognition of Lebanon’s Excusive Economic Zone, thereby reducing the risk for the big energy companies whose assistance we need in order to fully explore and exploit our offshore resources.”

“We’ve already negotiated the different equidistance points for a completed MBL agreement with Cyprus, we just haven’t ratified it,” Baroudi explained. “That means we just have to adjust a few coordinates in order to set a trijunction point where the Lebanese, Cypriot, and Israeli MBLs intersect at sea. And setting that trijunction in the south will automatically simplify the process of setting another in the north for Lebanon-Cyprus-Syria”.

CYPRUS - LEBANON MBL

Cyprus vs. Lebanon *Strict Equidistance Maritime Boundary Line (MBL)

100% *Full Effect Line (red dashed line), using all relevant Cyprus coastlines and offshore Islands (see close-up inset example), plus also all relevant Lebanese mainland coastlines and all offshore Islands (see closeup inset example). This MBL begins at the northern computed Cyprus-Syria-Lebanon Trijunction point (TRJ ~ green star) and terminates at the southern modified computed Cyprus-Lebanon-Israel Trijunction point (TRJ ~ green star). See the report for specific details on the Trijunction Points and MBL Line Latitude and Longitude geographic coordinates, along with methodology on how the Trijunction Points and this MBL was produced.



He also played down claims in some circles that a significant gap exists between the Lebanon-Cyprus line and the Cyprus-Israel line, making it more difficult to set a trijunction.

“There is a gap, of course, but it’s really quite small,” Baroudi told the reporters “The proof of this is in the delineation of the offshore blocks issued by both Lebanon and Cyprus about a decade ago. On all the international blocks maps of the area, even including the ones issued by the oil and gas companies, which focus on accurate portrayals of acreage, there is no overlap. In fact, virtually all of the line between Lebanese and Cypriot blocks precisely tracks almost a MBL line agreed which Nicosia and Beirut agreed to in the unratified agreement. The difference at the southern end of the trijunction point is very, very small.”

The smaller the gap, he explained, the easier it should be to finish defining Lebanon’s EEZ.

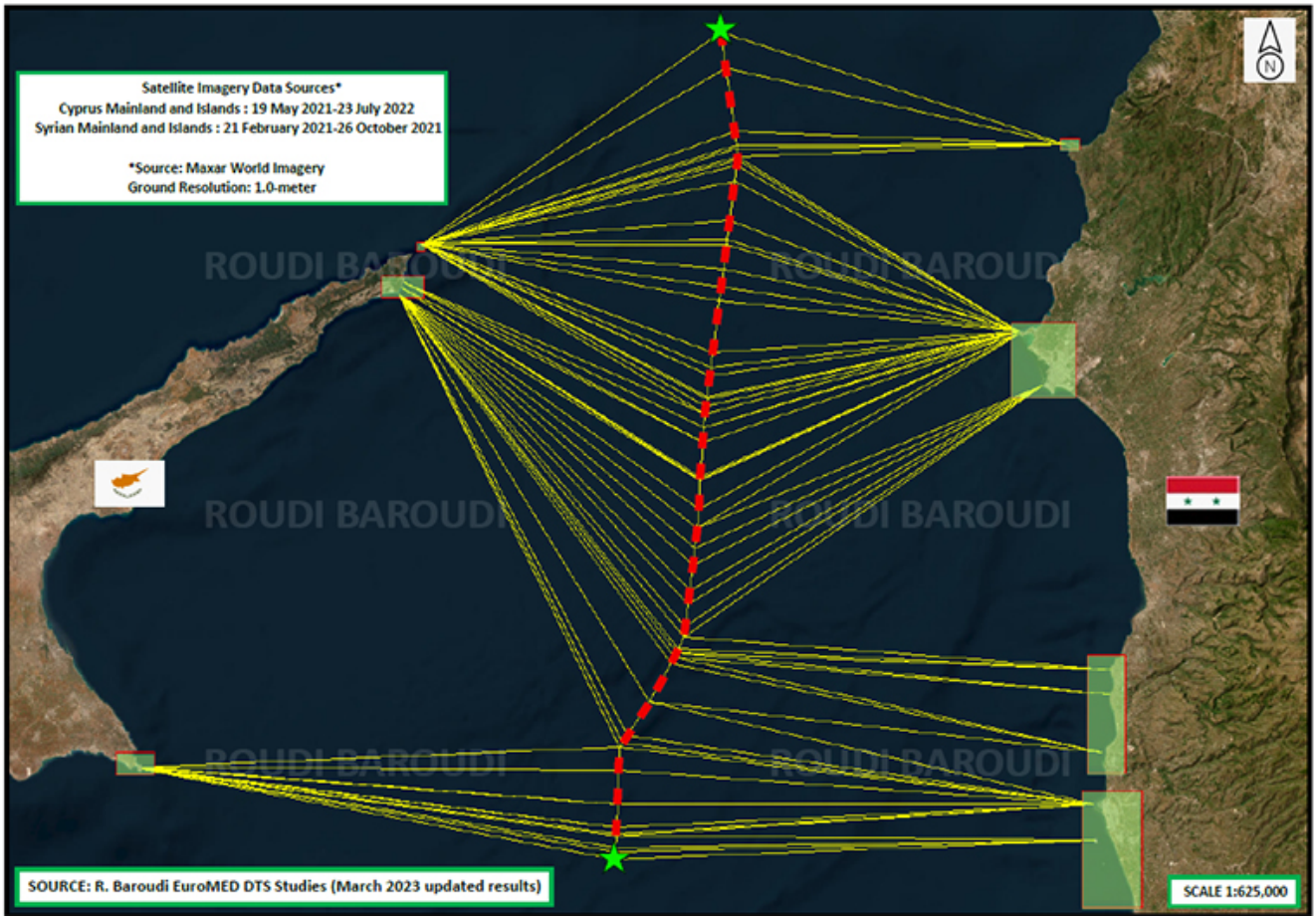
“Since the lines are so close, setting a trijunction – the point where the Lebanese, Cypriot, and Israeli boundaries intersect – should be relatively easy,” he said. “In addition, agreeing that trijunction in the south would automatically simplify the process of setting one in the north for Lebanon-Cyprus-Syria. And keep in mind: Lebanon has strong & friendly relations with both Cyprus and Syria, so these negotiations will be a lot friendlier than the ones with Israel, which had to be pursued indirectly via American mediation.”

When asked about how any new diplomatic efforts might be affected by the long-running political paralysis in Beirut, where the presidency has been vacant since late 2022 because rival parties in Parliament can’t agree on a successor to former President Michel Aoun, Baroudi said the quagmire only accentuated the need for action.

CYPRUS-SYRIA MARITIME BOUNDARY LINE

Cyprus vs. Syria Strict Equidistance MBL*

***100% Full Effect Line (red dashed line), using all relevant Cypriot coastlines and offshore islands (see close-up inset example), plus all relevant Syrian mainland coastlines and offshore islands (see close-up inset example). This MBL begins at the northern computed Cyprus-Türkiye-Syria Trijunction Point (upper green star) and terminates at the southern computed Cyprus-Syria-Lebanon Trijunction Point (lower green star). See the report for specific details on the geographic (longitude and latitude) coordinates of the MBL and Trijunctions, along with an explanation of the methodology used to produce the MBL and Trijunctions.**



“Right now, Lebanon can’t officially ratify into a new MBL agreement with either Cyprus or Syria because it requires a presidential signature, but that doesn’t stop us from carrying out the necessary talks,” he said. “In fact, we should be rushing to get all of this settled now so that when we finally fill the vacancy at Baabda Palace, we’ll have everything ready for the new president’s signature.”

In addition to settling its maritime boundaries, Baroudi said Lebanon also had another reason to re-engage with neighboring countries.

“It’s been almost ten years since Cyprus proposed a

unitization agreement (joint development agreement) with Lebanon for joint production from any deposits that straddle their shared MBL," he recalled, "and the Lebanese paralysis has kept it from happening. We need to revive this process and get a deal in place. That way, again, once we have a president in office, we'll be ready to hit the ground running, with no further delays, and start collecting the badly needed gas revenues".

US gas pipeline accidents posebig, unreported climate threat

Last October, an Idaho farmer using a backhoe punched a hole into a 22-inch pipeline buried under a field, sending more

than 51mn cubic feet of natural gas hissing into the air.
While the incident on Williams Companies' Northwest Pipeline was big, it was no anomaly along the roughly 3mn miles of natural gas pipelines crisscrossing the US.
Accidental pipeline leaks – caused by things like punctures, corrosion, severe weather and faulty equipment – happen routinely and are a climate menace that is not currently counted in the official US tally of greenhouse gas emissions, according to a Reuters examination of public data and regulatory documents.
Pipeline mishaps unintentionally released nearly 9.7bn cubic feet of gas into the atmosphere between 2019 and late 2023, according to a Reuters examination of incident report data maintained by the US Pipeline and Hazardous Materials Safety Administration (PHMSA).
That is the climate equivalent of running four average-sized coal-fired power plants for a year, according to an Environmental Defence Fund (EDF) online calculator.
Those emissions are currently not included in the nation's official greenhouse gas count because federal rules exempt large, unexpected leaks, and mainly only capture emissions from regular operations, according to the US Environmental Protection Agency (EPA).
The Biden administration aims to change that as early as next year under a set of rules proposed by the EPA to crack down on methane emissions from the oil and gas sector, and which would punish emitters with fees of $900 to $1,500 per metric tonne when they exceed a certain threshold.
Reuters relied on PHMSA data and interviews with researchers, company officials and regulators to provide new detail on the scale of greenhouse gas emissions from accidental pipeline leaks that could soon be added to the official greenhouse gas tally, as well as the potential cost to companies under the looming fees.
"I don't think the public or regulators have realised just how much methane has been lost from pipeline infrastructure," said Kenneth Clarkson, a spokesperson for the Pipeline Safety

Trust, a non-profit watchdog. “Newer studies have come closer to capturing the true amount of emissions and this has started catching the attention of policymakers.”

Accidental leaks reported from PHMSA by the five biggest US pipelines between 2018 and 2022 showed that those incidents could have significantly increased the facilities’ overall reported emissions, potentially resulting in fees of up to $40mn under the proposal.

The operators of the five biggest pipelines include Berkshire Hathaway, TC Energy and Kinder Morgan.

Berkshire Hathaway’s 14,000-mile Northern Natural Gas pipeline, for instance, reported unintended releases of natural gas to PHMSA during the five year period that were the equivalent of about 30% of the methane the facility reported to EPA during the period.

Williams, the owner of the pipeline that leaked in Idaho in October, reported unintended gas releases that amounted to about 15% of the methane it reported to EPA.

Berkshire Hathaway and Williams did not respond to requests for comment on Reuters’ analysis or the EPA proposal.

TC Energy said reducing its methane emissions was a critical part of its business, but did not comment directly on the EPA proposal or Reuters’ analysis.

Kinder Morgan said it does not exclude unintended emissions from its reports to EPA, even though it is not required to include them.

The Biden administration unveiled its batch of final rules aimed at cracking down on US oil and gas industry releases of methane at the United Nations COP28 climate change conference in Dubai in December, part of international efforts to curb releases of the gas.

Piped natural gas is typically around 90% methane, a greenhouse gas which is several times more potent in warming the planet than carbon dioxide during the relatively short time it remains in the atmosphere.

The new policies would ban routine flaring of natural gas produced by newly drilled oil wells, require oil companies to

monitor for leaks from well sites and compressor stations and establishes a program to use third party remote sensing to detect large methane releases.

The new reporting requirements for large leaks, meanwhile, are likely to be finalised later this year and take effect in 2025, the EPA told Reuters.

Under the proposal, companies will be required to report abnormal leaks of about 500,000 cubic feet of pipeline gas or more starting next year, a threshold significantly lower than what PHMSA requires.

The new reporting rules would also apply to big, unplanned emissions from other parts of the oil and gas industry, such as drilling operations, EPA said.

The fact that some large methane leaks have never been accounted for in US greenhouse gas inventories underscore concerns among environmental groups and scientific researchers that emissions from the fossil fuel sector have been vastly understated.

An Environmental Defense Fund analysis last year, for instance, estimated US pipelines leak between 1.2mn and 2.6mn tons of methane per year, or 3.75 to 8 times more than EPA estimates.

The EDF figure includes not just large mishaps but also pervasive smaller leaks on tiny distribution lines.

“The failure of EPA to account for these large events is a big driver of that discrepancy,” Edwin LaMair, an EDF attorney who focuses on oil and gas regulations, said in an interview.

The Interstate Natural Gas Association of America, a pipeline industry trade group, said most incidents reported to PHMSA relate to safety systems operating as intended.

The group also pointed to an EPA analysis showing that most transmission and storage facilities may not meet the 25,000 metric tonnes of carbon dioxide equivalent per year emissions threshold required to pay the methane fee.

The EPA analysis said, however, that it was not yet possible to accurately estimate “the magnitude of emissions that will be reported and which facilities will report those emissions.”

The pipeline industry has also said in public comments to the EPA about the new reporting rules that they could lead to double-counting of some emissions. – Reuters

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Greece Spearheads a Dynamic Energy Transition

Countries have different energy priorities due to factors like the availability of energy resources, geopolitics, the population size, environmental considerations and excessive use of energy, the needs of industry, and the availability of technology.

The most representative energy priorities among countries, including Greece, revolve around energy security, reduction of greenhouse gas emissions, affordability, and avoidance of

deforestation. Construction of additional energy infrastructure and charging energy consumers with more taxes for excessive energy use constitute additional energy priorities. According to a market survey conducted by IPSOS in late 2022 that engaged 24 thousand people in 28 countries, the top energy priority was that of energy security followed by the development of cleaner energy sources, like wind and solar, and the affordability of energy.

The war on Ukraine brought energy security to the forefront of concerns for many regions, particularly Europe. Directly impacted countries, like Germany, have had to reactivate coal production and extend the operational lives of nuclear power plants to ensure efficient supply of energy to consumers.

Electricity Generation from Renewables

Despite challenges associated with the war on Ukraine, Greece has emerged more resilient by enhancing reform of its energy market and accelerating deployment of renewables in accordance with the National Climate Law of 2022. The Climate Law signals concrete milestones for Greece's energy transition with most prevalent the reduction of greenhouse gas emissions by 55 percent by 2030 and, achievement of net zero emissions by 2050.

The Climate Law also foresees a total phase-out of lignite generated electricity by 2028. Notably, Greece ranks 2nd out of the 27 EU member states in the reduction of electricity generation from certain solid fossil fuels; lignite generated electricity decreased by 57,7 percent in the first 8 months of 2023 compared to the same period of 2019 according to the Greek Independent Power Transmission Operator (IPTO).

The reduction of the use of solid fossil fuels has been offset by the accelerated development of renewable sources of energy, construction of critical energy infrastructure, and promotion of plans for Greece to position itself as key hydrogen hub in

Europe. It is only in four years that Greece enhanced the installed capacity of renewable energy plants, accounting for 50 percent of electricity generation, with a clear target for electricity generation from renewables to reach 80 percent by 2030. The Greek solar photovoltaic market has gained most traction with 1.4 GW of new photovoltaic projects connected to the grid in 2022 and with anticipation of 10.9 GW to be added during the period of 2024-2027 according to the latest report by industry association Solar Power Europe.

The Offshore Wind Challenge

Wind energy in Greece has been surpassed by photovoltaics in new and total installations primarily due to delays in the licensing process. The largest onshore wind power plants include the 336 MW onshore Evia Wind Farm of Ellaktor located in Evia, Central Greece; the 330 MW Kafireas wind farm of Terna Energy on the island of Evia; and the 153MW Imathia Kozani Wind Farm under development by 547 Energy LLC, located in West Macedonia. Greece's revised National Energy and Climate Plan (NECP) sets a clear target of 2 GW for onshore wind capacity and 2.7 GW for offshore wind capacity by 2030.

Greece swiftly moves forward to tap for the first time ever its offshore wind potential in pursuance of the national offshore wind farms development program that incorporates 25 eligible development areas in the Ionian, Aegean, and the East Mediterranean Seas.

An environmental impact assessment that has been completed by the Hellenic Hydrocarbons and Energy Resources Management Company includes maritime zones of over 2,712 square km where floating technology will be employed for the offshore wind farms in full compliance with environmental safeguards striking a balance between offshore wind energy, national security, and tourism.

Offshore wind energy falls under the creation and development

of new markets along with carbon dioxide CO2 capture and green hydrogen production.

Unlocking the CO2 Storage Potential

Clean hydrogen can prove to be commercially viable due to the use of CO2. CO2 can be transported from where it is produced, via ship, truck or in a pipeline, and be used in commercial applications such as food and beverage production, metal fabrication, and cooling.

The majority of commercial applications center on the direct use of CO2 by turning it into chemicals and construction materials. Liquid CO2 can also be transported to an underground site where it can be permanently stored under strict environmental standards. The capture and storage of CO2 contribute to the decarbonization of heavy industries and the development of clean hydrogen.

It is in this context that Greece swiftly moves to identify potential areas for CO2 storage, with the most mature option being that of Prinos basin. Specifically, under Greek and European legal contexts, an exploration permit has been awarded to medium-sized Energean Oil & Gas for CO2 storage in the depleted Prinos field evaluated as the best option because of its depth and structure.

Prinos is scheduled to be operational from the fourth Quarter of 2025 as small-scale project with capacity of up to 1 million tons (MT) of CO2 annually and with plans to increase capacity from the fourth Quarter of 2027 up to 3 MT of CO2 annually. Areas with saline aquifers, mafic rocks and oil and gas fields throughout Greek territory are evaluated as potential storage sites.

Prospects of a Hydrogen Hub for Europe

Green hydrogen production and transportation falls within the priorities of the Greek National Energy and Climate Plan. It

is estimated that little investment is required, primarily in the form of developing compression stations, for the conversion of the existing national network to transport hydrogen. Extensive cross-border pipelines like Interconnector Greece-Bulgaria (IGB) and Trans Adriatic Pipeline (TAP) have the potential to transport hydrogen.

Proper energy infrastructure can guarantee that massive imports of hydrogen from the Middle East and North Africa are directed to Europe via Greece. The European Union has declared that as the Ukraine war goes on it will have to import 10 MT of renewable hydrogen annually until 2030.

The first major hydrogen project that meets demands of industrial production has been launched in the north-west of Saudi Arabia, in a region called NEOM, that has been declared an exclusive renewable and hydrogen zone. The Neom Green Hydrogen Company project constitutes an 8.4-billion-dollar green hydrogen and green ammonia production facility that will integrate 4 GW of wind and solar energy to produce 600 tons of carbon-free hydrogen per day. Large-scale production of renewable hydrogen from the NEOM region is expected to begin in 2026, and green hydrogen will be exported in the form of green ammonia.

Overall, Greece fosters an effective energy transition with a blend of renewable energy pathways and a match of CO2 storage and hydrogen transportation. It is with no doubt that important targets and deliverables are on the horizon.

Antonia Dimou

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Opec sticks to oil demand view, nudges up economic growth

LONDON, March 12 (Reuters) – OPEC on Tuesday stuck to its forecast for relatively strong growth in global oil demand in 2024 and 2025, and further raised its economic growth forecast for this year saying there was more room for improvement.

The Organization of the Petroleum Exporting Countries said in a monthly report that world oil demand will rise by 2.25 million barrels per day (bpd) in 2024 and by 1.85 million bpd in 2025. Both forecasts were unchanged from last month.

A further boost to economic growth could give additional tailwind to oil demand. OPEC's 2024 growth forecast is already higher than that of the International Energy Agency (IEA), and the two are further apart than they have been for at least 16 years in their demand views.

In the report, OPEC said a "robust dynamic" for economic growth towards the end of 2023 was expected to extend into the first half of 2024 and raised its 2024 economic growth

forecast by 0.1 percentage points, following a hike last month.
“While some downside risks persist, a continuation of the expected momentum from the beginning of the year could result in additional upside potential for global economic growth in 2024.” OPEC said in the report.
“The 2024 and 2025 growth trajectories of India, China, as well as the United States, could exceed current expectations.”
OPEC has stuck to the same demand growth figure since making its first 2024 prediction last July.
Conflict in the Middle East and supply outages have supported oil prices in 2024, although concerns about continued high interest rates have weighed. Brent crude on Tuesday was trading around $82 a barrel.
A rise in prices in February took place as oil market fundamentals continued to strengthen, OPEC said in the report, adding that geopolitical tensions also supported prices.
OPEC now sees world economic growth of 2.8% in 2024, supported by the expectation of a continued easing in general inflation throughout this year. It kept next year’s forecast steady at 2.9%.
“It is anticipated that domestic political and geopolitical developments will likely not significantly impact the growth momentum,” OPEC said.

BULLISH OPEC, CAUTIOUS IEA

For this year, OPEC’s expectation of oil demand growth is much more than the expansion of 1.22 million bpd so far forecast by the IEA. The IEA, which represents industrialised countries, is scheduled to update its forecasts on Thursday.
OPEC believes oil use will keep rising for the next two decades, while the IEA predicts it will peak by 2030 as the world shifts to cleaner energy. The two have clashed over this and related issues such as the need for more oil industry investment.
According to a Reuters analysis of IEA and OPEC monthly reports dating back to 2008, the 1.03 million bpd gap in their February demand growth forecasts was the biggest in per-barrel terms for this point in the year.
OPEC and the wider OPEC+ alliance have implemented a series of

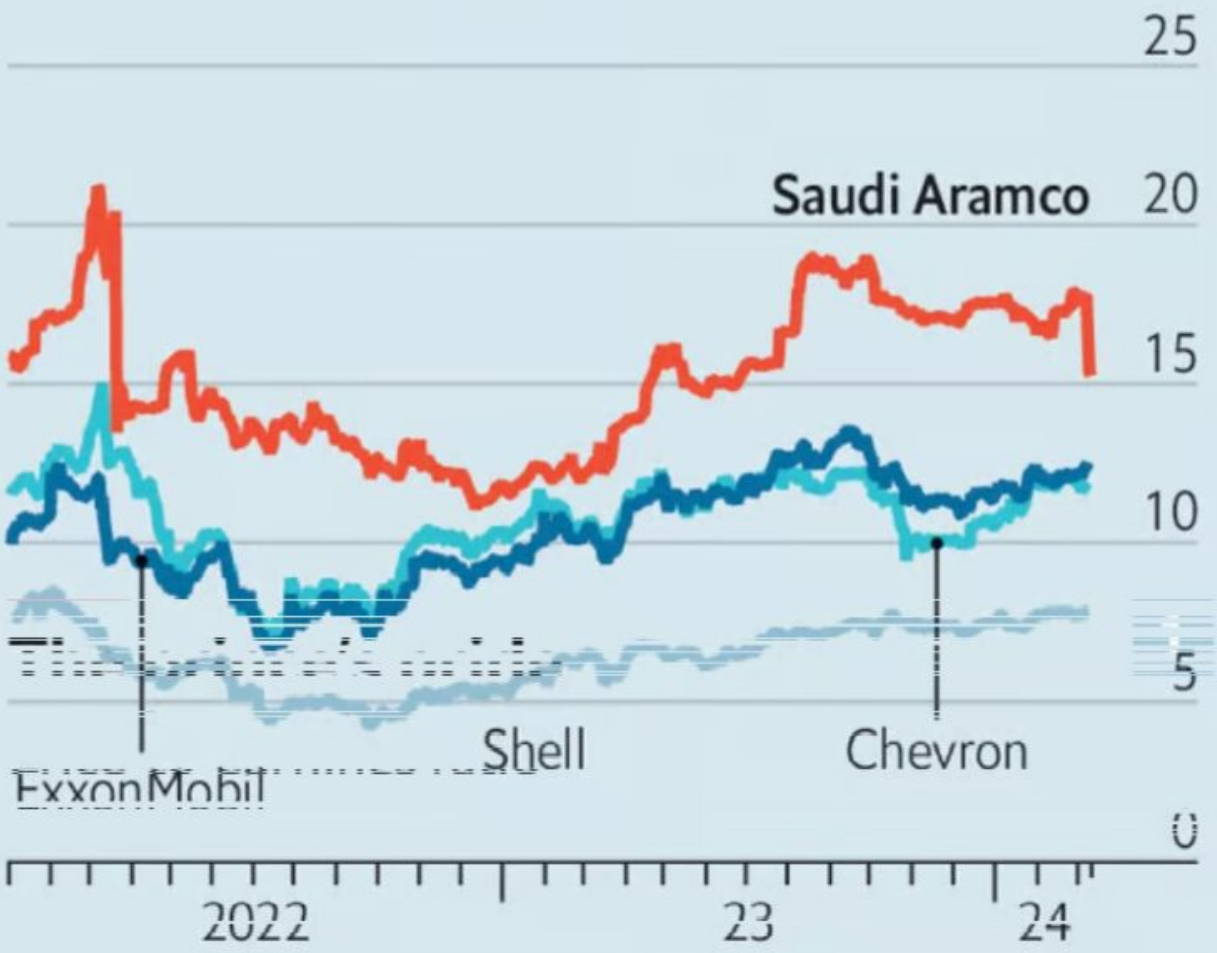
output cuts since late 2022 to support the market. A new cut for the first quarter took effect in January and earlier this month was extended to cover the second quarter.
The OPEC report also said that OPEC oil production rose by 203,000 bpd in February to 26.57 million bpd led by Nigeria and Libya, despite a new round of voluntary output cuts by the OPEC+ alliance that started in January.

Is Saudi Aramco cooling on crude oil?

The prince's pride

1

Price-to-earnings ratio*

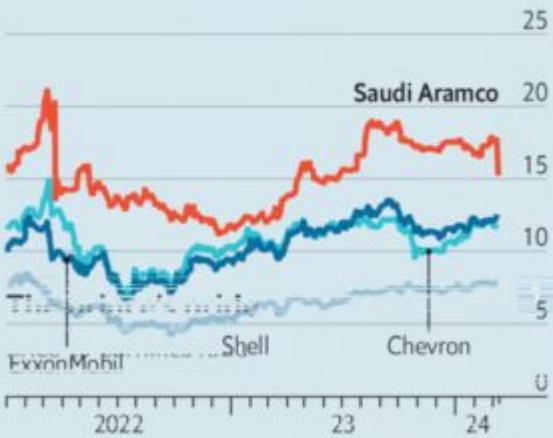


Source: S&P Global Market Intelligence *12-month forward

The prince's pride

1

Price-to-earnings ratio*



Source: S&P Global Market Intelligence *12-month forward

Locked stocks and barrels

2

Oil

Sources: Bloomberg; LSEG Workspace *Forecast

Don’t bet on it

Has saudi arabia stopped believing in a bright future for petroleum? That is the question that in recent weeks has hung over Saudi Aramco. The desert kingdom’s national oil goliath has a central position in the world’s oil markets. Its market value of $2trn, five times that of the second-biggest oil firm, ExxonMobil, and its rich valuation relative to profits are predicated in large part on its bountiful reserves of crude and its peerless ability to tap them cheaply and, as oil goes, cleanly (see chart 1). So Saudi Arabia’s energy ministry stunned many industry-watchers in January by suspending the firm’s long-trumpeted and costly plans for expanding oil-production capacity from 12m to 13m barrels per day (b/d). Was it proof that even the kingpin of oil had finally accepted that oil demand would soon peak and then begin to decline?

To get a hint of Aramco’s answer, all eyes turned to its financial results for 2023, reported on March 10th. No one expected a repeat of the year before, when high oil prices and surging demand propelled Aramco’s annual net profit to $161bn, the highest ever for any listed firm anywhere. But analysts and investors were still keenly interested in the extent of the decline in the company’s revenue and profit, in any changes to its capital-spending plans and, possibly, in the unveiling of an all-new strategy.

In the event, profits did fall sharply, from $161bn in 2022 to $121bn last year, though that was still the second-best performance in the company’s history. Thanks to a recently introduced special dividend, Aramco paid nearly $100bn to shareholders last year, 30% more than amid the bonanza of 2022. It also promised to hand over even more in 2024.

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image: the economist
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Shovelling a larger chunk of a smaller haul to owners could, on its own, imply that the company is indeed less gung-ho about its oily future. Except that the rich dividend was accompanied by two developments that point in the opposite direction. First, Aramco is rumoured to be preparing a secondary share offering that could raise perhaps $20bn in the coming months—a move typically associated with expansion rather than contraction. Second, even more tangibly, Aramco is already ramping up capital spending.

Its annual results reveal that investments rose from less than $40bn in 2022 to around $50bn last year. In a call with analysts on March 11th Aramco confirmed that the suspension of its planned capacity expansion will save around $40bn in capital spending between now and 2028. But, it added, that does not mean Aramco is not investing. On the contrary, the aim is to spend between $48bn and $58bn in 2025, and maybe more in the few years after that.

A bit of that money will go to clean projects such as hydrogen, carbon capture, renewables and other clean-energy technologies. Some will go to cleanish ones, such as expanding Aramco's natural-gas production by over 60% from its level of 2021 by 2030, and backing liquefied-natural-gas projects abroad. But most is aimed at ensuring that Aramco can maintain its ability to pump up to 12m b/d of crude.

Given the company's actual output of around 9m b/d (see chart 2), this does not compromise its ability to move markets. If anything, it strengthens Aramco's position because it implies spare capacity of 3m b/d—above the company's historic average of 2m-2.5m b/d, according to Wood Mackenzie, a consultancy. The world's biggest oil firm is, in other words, committed both to pumping oil and to preserving Saudi Arabia's role as the market's swing producer.

That is in part because the company is also committed to pumping money into the economic vision for Saudi Arabia championed by Muhammad bin Salman, the kingdom's crown prince and de facto ruler. This became more evident on March 7th, when Aramco announced the transfer of 8% of its shares, worth $164bn, out of the hands of the government and into the Public Investment Fund (pif), a vehicle for Saudi sovereign wealth which Prince Muhammad has tasked with diversifying the economy. This leaves the pif with 16% of Aramco, compared with the 2% or so that is owned by minority shareholders and traded on the Riyadh stock exchange (the rest remains directly in the government's hands).

In light of all this, Saudi Arabia's plans to suspend the expansion of production capacity do not reflect a u-turn away from hydrocarbons. Rather, the pause is born of a hard-headed assessment of market realities: a surge in oil production in the Americas, soft demand in China and cuts to output from the opec cartel (of which Saudi Arabia is the most powerful member). As Amin Nasser, Aramco's chief executive, summed it up in the results presentation, "Oil and gas will be a key part of the global energy mix for many decades to come, alongside new energy solutions." And so will Aramco. ■

US gas glut gets hedge funds ultra bearish

LONDON, Feb 26 (Reuters) – Portfolio investors have become extremely bearish about the outlook for U.S. gas prices, even

though prices have already fallen to their lowest level in real terms since futures began trading in 1990.

Hedge funds and other money managers sold the equivalent of 399 billion cubic feet (bcf) in the two major futures and options contracts linked to prices at Henry Hub in Louisiana over the seven days ending on Feb. 20.

Fund managers have been net sellers in each of the most recent five weeks, selling 2,085 bcf since Jan. 16, according to position reports filed with the U.S. Commodity Futures Trading Commission.

As a result, the combined position has been reduced to a net short of 1,675 bcf (3rd percentile for all weeks since 2010) down from a net long of 410 bcf (42nd percentile) in the middle of January.

The gas market has been chronically oversupplied in recent months, with inventories 436 bcf (+21% or +1.26 standard deviations) above the prior 10-year seasonal average on Feb. 16.

The surplus has swelled consistently since the start of the winter heating season on Oct. 1, when it was just 64 bcf (+2% or +0.24 standard deviations).

Chartbook: Gas and oil positions, opens new tab

Exceptionally strong El Niño conditions over the Pacific ensured temperatures have been mostly above average across the major population centres of the northern United States.

Domestic gas production has continued to increase, in spite of the relatively low prices, adding to the burgeoning surplus of gas in storage.

The rig count for gas has actually increased marginally since September 2023 as producers have been unresponsive to falling prices until the last few weeks.

In addition, more associated gas is being produced as a co-product of drilling for oil, where prices are close to the long-term inflation-adjusted average and drilling rates are steady.

From a purely positioning perspective, the balance of risks must lie to the upside, with real prices at multi-decade lows and lots of short positions that must eventually be repurchased.

Short positions have only ever been greater in the first quarter of 2020, when stocks were at record levels and the

economy was bracing for the arrival of the first wave of the coronavirus epidemic.
So there is potential for a huge short-covering rally if and when the news flow becomes more positive and inventories start to erode.
But hedge fund managers have tried and failed to identify the turning point three times in the last twelve months and been forced to retreat each time.
Bloated gas stocks in Europe and Japan after the price spike of 2021/22 will make it hard for the market to rebalance via increased exports.
Many analysts now expect the rebalancing to be postponed until the winter of 2024/25 with prices likely to remain suppressed until nearer then.

PETROLEUM

Investors continued to add to their position in petroleum-related futures and options over the seven days ending on Feb. 16, but at a slower rate than in previous weeks.
Hedge funds and other money managers purchased the equivalent of 17 million barrels in the six most important petroleum-linked futures and options contracts.
All the buying was concentrated in NYMEX and ICE WTI (+29 million barrels) with small sales in Brent (-4 million), European gas oil (-4 million), U.S. diesel (-4 million) and U.S. gasoline (-1 million).
Even after the recent buying, positions in WTI remain the most bearish of any of the major oil contracts, weighed down by the continued rise in domestic oil production, even as OPEC restricts Middle East supplies.
The net position in NYMEX and ICE WTI of 109 million barrels is still in only the 8th percentile for all weeks since 2013.
That compares with net positions in Brent, gasoline and the distillates contracts all between the 60th and 70th percentiles.
WTI buying seems to have been motivated by unwinding previous bearish short positions (-17 million barrels) and cautious initiation of new longs (+13 million).
Crude inventories around the NYMEX WTI delivery point at Cushing in Oklahoma are still 14 million barrels (-32% or

-1.14 standard deviations) below the prior 10-year seasonal average. Despite an extended shutdown of BP’s refinery at Whiting in Indiana, Cushing stocks have increased only slightly in the last two weeks, underscoring the risk of a squeeze on deliverable supplies.

With positioning so bearish, the balance of risks lies to the upside; some fund managers have begun to cut short positions and get long accordingly.