# Greece Spearheads a Dynamic Energy Transition

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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 2<sup>nd</sup> 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

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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?





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

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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 coproduct 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 petroleumrelated 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.

# G20 finance meeting to set aside geopolitics, focus on economics

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With their countries deeply divided over Israel's attacks on Gaza, finance officials from the Group of 20 major economies are poised to set aside geopolitics and focus on global economic issues when they meet in Sao Paulo, Brazil this week.

Brazil, keen to ensure a productive session that delivers consensus on key economic priorities, has proposed a much shorter closing statement than seen in recent years — a move already negotiated with other members, according to a Brazilian government source and two sources familiar with the draft.

The South American country is the current G20 president.

The latest draft, still being finalized, mentions the risks of global fragmentation and conflicts in general terms but omits any direct reference to Russia's invasion of Ukraine or the Israel-Gaza war, the sources said.

Finance officials and central bankers from the U.S., China, Russia and the world's other largest economies will meet in Sao Paulo to review global economic developments at a time of slowing growth, the growing strains of record debt burdens, and worries that inflation may not yet be tamed, which are keeping interest rates high.

The International Monetary Fund last month said the chance of a "soft landing" in which inflation falls without triggering a painful global recession had increased, but warned that overall growth and global trade remained lower than the historical average.

Russia's invasion of Ukraine almost exactly two years ago roiled the G20, exposing long-simmering fault lines within the group and thwarting efforts by G20 officials to reach consensus on a final statement, or communique, after their meetings.

India and Indonesia, which held the G20 presidency before Brazil, opted for chair statements summarizing areas of agreement and noting dissenting voices — namely Russia — but even that could prove difficult given the bitter divisions over the four-month war in Gaza. The war erupted when the ministers last met in Marrakech, Morocco in October, intensifying divisions between the United States and its Western allies, and non-Western countries in the G20.

Brazil, Saudi Arabia and South Africa have been outspoken critics of Israel's relentless assault on Gaza since the Oct. 7 surprise attack in which Palestinian Islamist group Hamas killed around 1,200 people and seized 253 hostages, one G7

source said. The retaliatory attacks have killed more than 29,000 Palestinians, according to the Gaza health ministry.

The U.S., meanwhile, last week vetoed a draft United Nations Security Council resolution on the Israel-Hamas war, blocking a demand for an immediate humanitarian ceasefire and pushing instead for a temporary ceasefire linked to the release of the remaining hostages held by Hamas.

The deep differences over Gaza necessitated a different approach this year, the Brazilian official said, adding, "If the topic is included, there will be no consensus."

To prevent differences over Gaza from derailing progress on economic issues, Brazil proposed a shorter statement with no specific mention of either war. Washington argued against language holding Israel accountable, which South Africa and others had argued was needed if the statement mentioned and condemned Russia's war against Ukraine, a G7 source said.

G7 finance officials, also meeting in Sao Paolo, will be forceful in their condemnation of Russia and its war, a second G7 source said.

#### **'BROADER ETHOS'**

Brazil wants to focus this week's discussions on ending inequality and hunger, reforming international taxation, addressing sovereign debt distress and working toward sustainable development. Reforms of multilateral banks and climate finance will feature more prominently at the spring meetings of the IMF and World Bank in Washington in April, the Brazilian source and a G20 source said.

Mark Sobel, the U.S. chair of the Official Monetary and Financial Institutions Forum (OMFIF), said stripping geopolitics from the communique made sense for a group that had historically focused on economic and financial issues.

"Yes, it reflects fractiousness, but it also reflects this broader ethos of the finance ministers and central bankers to focus on economic and financial matters in a technical way," he said.

One G7 official said the statement would likely be "concise and ambiguous, only mentioning issues where there's no contention."

U.S. Treasury Secretary Janet Yellen plans to underscore the importance of the G20 body, highlighting collaborative efforts to address global challenges such as sovereign debt and the COVID-19 pandemic, a senior U.S. official said.

Yellen will meet with Brazilian Finance Minister Fernando Haddad to celebrate 200 years of U.S.-Brazil relations, an event the Brazilian official said was designed to highlight the South American country's "interest in not embracing a divisive approach, but focusing on constructive efforts."

One unresolved issue is to what extent the U.S., Japan and Canada will prevail in demanding a mention of the economic impacts of geopolitical conflicts in the communique, the first Brazilian official said.

But the failure of G20 foreign ministers to include the issue sent a strong signal, the official said.

"The outcome of the sherpas meeting strengthens our understanding that the topic (of geopolitics) should not be included in the communique."

Eric Pelofsky, a former senior U.S. official now with the Rockefeller Foundation, said there was value in meeting in configurations like the G20, despite clear differences.

"Sometimes talking without success is still talking. Maybe that means that at the end of the day, somebody has a coffee that they weren't supposed to have and they find a bit of common ground that they weren't supposed to know existed."

Source: Reuters

# Ras laffan petchem complex to reinforce qatar's position in global petrochemical industry

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Ras Laff an petchem complex to reinforce Qatar's position in global petrochemical industry.

Qatar's strong position in the global petrochemical industry will be further enhanced with the \$6bn Ras Laffan Petrochemical Complex, one of the largest in the world, will start production by the end of 2026.

By then, Qatar's overall petrochemical production capacity is estimated to touch 14mn tonnes a year.

The Ras Laffan Petrochemical Complex is Qatar Energy's largest investment ever in Qatar's petrochemical sector, and marks :ul important milestone in the country's downstream expansion strategy.

The petrochemical complex will not only facilitate further expansion in Qatar's downstream and petrochemical sectors, but will also reinforce the country's integrated position as a major global player in the upstream, LNG and downstream sectors.

The Ras Laffan Petrochemicals complex consists of an ethane cracker "1th a capacity of 2.lmn tonnes of ethylene per year. The 435 -acre project site also includes two polyethylene trains with h a combined output of 1.7mn tonnes per year of high- density polyethylene (HOPE) polymer products. His

Highness the Amir Sheikh 'Thmim bin Hamad al-Thani laid the fowldation stone for the Ras Laffan Petrochemical Complex on February 19.

QatarEnergy has joined hands with Chevron Phillips Chemical Company (CPChem) on the projected and created a joint venture, in which QatarEnergy will own a 70% equity share, and CPChem 30% stake.

In a few years, the Ras Laffan petrochemicals complex will help meet the rising global demand for high-density polyethylene, when the largest ethane cracker in the Middle East and one of the largest in the world begins production.

Polyethylene is used in the production of durable goods like pipe for natural gas and water delivery and recreational products such as kayaks and coolers. It is also used in packaging applications to protect and preserve food and keep medical supplies sterile.

The facility will be constructed with modern, energy-saving technology and use ethane for feedstock, which along with other measures, is expected to result in lower greenhouse gas emissions than similar global facilities.

The integrated olefins and polyethylene facility will be utilising "state-of-the -art design and technology" during its construction and operation to promote energy efficiency.

It is important to stress the unique environmental attributes of this world scale complex. It will have lower waste and greenhouse gas emissions, when compared with similar global facilities.

The Ras Laffan Petrochemicals Complex will be utilising "state-of-the-art design and technology" during its construction and operation to promote energy efficiency.

The world-class construction, operation, and technology standards planned at the complex are all designed to ensure energy savings, and significant reduction of emissions and hydrocarbon waste compared with similar global facilities. HE the Minister of State for Energy Affairs Saad bin Sherida al-Kaabi said: "Our two companies (Qatar Energy and Chevron Phillips Chemical Company) are making sure we buy and inlplement the best technology available to reduce emissions. In the last 20 years or so, there has been a huge leap in emissions reduction and energy use. Wherever we can recycle, we will; Ras Laffan Petrochemical Complex will also have multiplier effects on Qatar's economy as it is expected to generate significant economic benefits for the country including increased tax revenue and foreign investment.

# QatarEnergy drills 20+ appraisal wells past 10 years; confirms huge increase in NF gas reserves

The drilling of more than 20 appraisal wells in the past 10 years using state-of-the-art technologies has confirmed significant increase in North Field (NF) gas reserves, to more than 2,000 trillion cubic feet, said HE the Minister of State for Energy affairs, Saad Sherida al-Kaabi.

Addressing a press conference at the QatarEnergy headquarters yesterday, al-Kaabi said, "I want to specifically mention the tireless work over the past two decades to evaluate the giant North Field and unlock its potential, especially in sectors that were not covered extensively by previous drilling and evaluation work."

Most recently, QatarEnergy has focused its efforts and attention on determining how far west the North Field extends in order to evaluate the production potential from those areas.

"We have continued geological and engineering studies and have drilled a number of appraisal wells in that area.

"I am pleased to announce today that, praise be to God, these great efforts have confirmed, through technical tests of the appraisal wells, the extension of the North Field's productive layers further towards the west, which means the ability to produce significant quantities of gas from this new sector.

"Recent studies have shown that the North Field contains huge additional gas quantities in the North Field estimated at 240th cubic feet, which raises Qatar's gas reserves from 1,760th cubic feet to more than 2,000th cubic feet, and the condensates reserves from 70 to more than 80bh barrels, in addition to large quantities of liquefied petroleum gas, ethane, and helium."

Al-Kaabi noted, "These are very important results of great dimensions that will take Qatar's gas industry to new horizons, as they will enable us to begin developing a new LNG project from the North Field's western sector with a production capacity of about 16 MTPY.

"As such, Qatar's total LNG production will reach about 142MTPY when this new expansion is completed before the end of this decade. This represents an increase of almost 85% compared to current production levels. With the completion of this project, Qatar's total hydrocarbon production will exceed 7.25mn barrels of oil equivalent per day."

The minister revealed that QatarEnergy will immediately commence the basic engineering works necessary to ensure that the planned progress is achieved according to the approved schedule for this new project, which will be called the 'North Field West'.

"These expansion project, which we are working to implement, aim to achieve optimal utilisation and

management of our natural resources with the aim of contributing to what our wise leadership aspires to in terms of ensuring the economic and social well-being of current future generations of Qatar as articulated by the Oatar National Vision 2030.

"At the same time, these projects reaffirm QatarEnergy's commitment to reinforce its global leadership in the production and supply of LNG and live up to its commitment to provide an economic, safe and reliable energy source, giving priority to environmental sustainability for a more prosperous and brighter future."

Minister al-Kaabi also expressed his sincere thanks and gratitude to His Highness the Amir, Sheikh Tamim bin Hamad al-Thani for his wise leadership and guidance, and the unlimited support of Qatar's energy sector.

# Lessons from euro's first 25 years

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Jan 31, 2024MARCO BUTI and GIANCARLO CORSETTI

Prior to the introduction of the European single currency in January 1999, its architects foresaw a future of macroeconomic stability and accelerated growth. While the euro has delivered on some of these promises, it has failed to facilitate the continent's economic and political integration.

FLORENCE — The 25th anniversary of the euro's introduction, which has passed largely under the radar, offers an opportune moment to assess the current state of the greatest monetary experiment in modern history.

The euro's launch in January 1999 polarized economists. In the

face of much skepticism — the late American economist Martin Feldstein even argued that the single currency could trigger a war in Europe — the euro's architects envisioned a future characterized by macroeconomic stability, anchored by an independent central bank and a fiscal framework geared toward stability. Structural reforms, which the European Union's member states were expected to implement, were meant to enhance the monetary union's capacity to adjust to shocks.

None of those scenarios materialized. Over the past quarter-century, the euro has shown extraordinary resilience, navigating through several critical challenges and defying early predictions of its collapse. But while the single currency has delivered on some of its promises — most notably, maintaining price stability for most of its existence — it has failed to boost Europe's potential growth or facilitate the continent's full economic and political integration.

This mixed record can be attributed largely to the fact that Europe's economic union was incomplete from the outset. Despite the significant progress that has been made since its inception, the eurozone's fiscal and economic frameworks remain woefully underdeveloped compared to its monetary infrastructure.

To understand the consequences of the eurozone's unfinished architecture, it is useful to divide the past 25 years into four distinct periods. The first phase, from 1999 to 2008, could be labeled the "2% decade": economic growth, inflation, and budget deficits (as a share of GDP) all hovered around this rate. This phase was characterized by the excessive optimism of the "Great Moderation."

But the internal imbalances that emerged during this period would haunt the eurozone for years to come. The convergence of interest rates, evidenced by minimal spreads, resulted in overly sanguine portrayals of member states' public finances. Simultaneously, loose fiscal and monetary conditions reduced

European governments' incentives to undertake structural reforms and bolster their banking systems.

Nominal convergence also masked more profound structural disparities, as capital flowed from the eurozone's richest members to their poorer counterparts, where it was frequently channeled into less productive sectors, such as real estate and non-tradable services, often through instruments like short-term bank loans. Consequently, while the eurozone's current accounts appeared balanced, significant imbalances emerged.

The fallout from the 2008 global financial crisis, particularly the discovery that Greece had lied about its budget deficits and debt, eroded trust among member states. The prevailing narrative shifted to one of moral hazard, emphasizing the need for each country to get its own house in order. By the time eurozone governments finally coordinated a response — establishing the European Stability Mechanism (ESM), launching the banking union project, introducing the European Central Bank's Outright Monetary Transactions program, and expanding the ECB's balance sheet — the euro appeared to be on the brink of collapse.

The key turning point was the pledge by then-ECB President Mario Draghi to do "whatever it takes" to preserve the euro in July 2012. But with monetary policy increasingly viewed as the "only game in town," the eurozone's economic and financial structures remained fragmented.

The COVID-19 crisis changed that. The exogenous nature of the pandemic shock, together with the lack of impending elections, enabled EU leaders — led by French President Emmanuel Macron, then-German Chancellor Angela Merkel, and European Commission President Ursula von der Leyen — to present a unified front, unencumbered by the pressure to avoid moral hazard. The EU suspended the Stability and Growth Pact, which had previously capped member states' budget deficits at 3% of GDP, and rolled

out the Support to mitigate Unemployment Risks in an Emergency and the NextGenerationEU recovery programs, financing both through common borrowing. Meanwhile, the ECB introduced its €1.85 trillion (\$2 trillion) Pandemic Emergency Purchase Program.

Although this demonstration of collective leadership reassured markets, fueling an economic rebound, the optimism proved to be short-lived. A global inflationary surge, fueled by robust macroeconomic stimulus and pandemic-related supply-chain disruptions, was exacerbated by the energy-price shock that followed Russia's full-scale invasion of Ukraine. Although European policymakers worked together to reduce the EU's dependence on Russian gas, they failed to mount a collective response akin to the NextGenerationEU initiative. Confronted with rising deficits and debt, not to mention the most aggressive monetary-tightening cycle since the 1980s, EU countries have once again put eurozone reforms on hold.

Two important lessons follow from the euro's first 25 years. First, the monetary union's incomplete institutional framework has proven to be both costly and dangerous. Finalizing the banking union, especially the creation of a common resolution fund with the backstop of the ESM and deposit insurance, is essential to ensure stability and bolster the international role of the euro. Thus, Italy's recent failure to ratify the ESM treaty is a serious setback. Pushing forward the capital market union is essential if Europe is to meet the financial challenges posed by the digital and green transitions. To achieve all of this, EU leaders must strike a balance between risk sharing and risk reduction.

Second, completing the euro is crucial for safeguarding and developing the EU's greatest achievement: the single market. European countries' current pursuit of national industrial policies, funded through state aid, undermines the core values of the single-market project. To address this challenge, the EU must formulate a cohesive European industrial policy. This

should include an increase in cross-border investments, focusing on European public goods such as human-capital development, the availability of critical materials, and the green and digital transitions.

After the fall of the Berlin Wall, German Chancellor Helmut Kohl, French President François Mitterrand, and European Commission President Jacques Delors turned the dream of a single currency into a reality. During the COVID-19 crisis, Macron, Merkel, and von der Leyen managed to overcome seemingly insurmountable obstacles and achieve a historic breakthrough. Now, a quarter-century after its introduction, the euro requires visionary leaders to shepherd European sovereignty to its next phase.

This article draws on the CEPR Policy Insights February 1, 2024, paper "The First 25 Years of the Euro," written under the auspices of the European University Institute's Economic and Monetary Union Laboratory (EMU Lab).

# Greenland's ice loss surges: Satellite data shows alarming retreat

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Aggravating concerns about global warming and its consequences, a new, comprehensive analysis of satellite data has found Greenland has lost more ice than previously estimated and that the majority of glaciers on the landmass have retreated significantly. The Greenland Ice Sheet has shed about one-fifth more ice mass in the past four decades than previously estimated, researchers at Nasa's Jet Propulsion

Laboratory in Southern California reported in a new paper. Icebergs are falling into the ocean at an accelerating rate. Though this additional ice loss has had only an indirect impact on sea levels, it could hold implications for ocean circulation in the future.

Published in Nature on January 17, the analysis offers a comprehensive look at retreat around the edges of the entire ice sheet from 1985 to 2022, drawing from nearly a quarter million pieces of satellite data on glacier positions. Of the 207 glaciers in the study, 179 retreated significantly since 1985, 27 held steady, and one advanced slightly. Most of the ice loss came from below sea level, in fjords on Greenland's periphery. Once occupied by ancient glacial ice, many of these deep coastal valleys have filled with seawater — meaning the ice that broke off made little net contribution to sea level. But the loss likely accelerated the movement of ice flowing down from higher elevations, which in turn added to sea level rise.

"When the ice at the end of a glacier calves and retreats, it's like pulling the plug out of the fjord, which lets ice drain into the ocean faster," said Chad Greene, a glacier scientist at JPL and the study's lead author. For decades researchers have studied the Greenland Ice Sheet's direct contributions to global sea level rise through ice flow and melting. Scientists participating in the international Ice sheet Mass Balance Inter-comparison Exercise (IMBIE) estimated that the ice sheet had lost 5,390 billion tonnes between 1992 and 2020, adding about 13.5 millimetres to global mean sea level, according to the Intergovernmental Panel on Climate Change. But the IMBIE measurements do not account for ice lost due to the retreat of terminal glaciers along the edges of Greenland. (These glacier edges were already in the water, whether submerged or floating.) The new study quantifies this amount: For the 1985 to 2022 period in the new paper, the ice sheet was estimated to have lost about 1,140 billion tonnes -21% more mass lost than in the IMBIE assessment.

Although it doesn't add to sea levels, the additional ice

represents a significant influx of fresh water to the ocean. Recent studies have suggested that changes in the salinity of the North Atlantic Ocean from melting icebergs could weaken the Atlantic Meridional Overturning Circulation, part of the global "conveyor belt" of currents that transport heat and salt around the ocean. This could influence weather patterns worldwide, as well as affect ecosystems, the authors said.

Icebergs have tumbled from Greenland's glaciers for thousands of years as part of a natural cycle that typically balanced glacier growth in the winter with melting and retreat in the summer. The new study finds that ice retreat has far outpaced growth throughout the 21st century. The researchers also found that Greenland's ice extent remained relatively steady from 1985 to 2000, then started a marked recession that continues to this day.

The data showed a glacier in northeast Greenland called Zachariae Isstrom lost the most ice, dropping 176 billion tonnes of mass due to retreat. It was followed by Jakobshavn Isbrae on the western coast, which lost an estimated 97 billion tonnes and Humboldt Gletscher in the northwest, which lost 96 billion tonnes. Only one glacier, Qajuuttap Sermia in southern Greenland, experienced any growth over the study period, but its gains were too small to offset the losses from other glaciers.

The researchers also found that glaciers with the largest seasonal fluctuations in the position of their ice front experienced the greatest overall retreat. The correlation suggests the glaciers that are most sensitive to warming each summer will be most impacted by climate change in the coming decades.

# Developing Countries Need Debt Relief to Act on Climate Change

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While developed economies have pledged to increase climate financing sharply by 2030, developing-economy policymakers are struggling to cover the costs of action. With medium-term strategies being used to address a short-term threat, progress on the green transition will be undermined, with potentially catastrophic implications.

WASHINGTON, DC/PARIS — If developing economies found it hard to manage their debts in 2023, they are likely to face even more formidable challenges this year. Though most possess relatively small debt stocks and are not considered insolvent, many are in dire need of liquidity. As long as this remains true, they will struggle not only to manage their debts, but also to invest in the green transition.

Developing economies have faced a series of external shocks in recent years, including the COVID-19 pandemic, war-related disruptions of food and energy supply chains, and an uptick in global inflation. Moreover, their access to capital markets has been curtailed, preventing them from rolling over maturing loans, as they would do in normal times. As a result, countries have been forced to channel a large share of their tax and export revenues to service their debt, avoiding default at the cost of priorities like infrastructure investment, social-welfare programs, and climate action.

The outlook for these countries is likely to worsen in the next few years. According to estimates by the Finance for Development Lab (FDL), large debt payments are coming due in 2024 and 2026 for at least 20 low- and lower-middle-income

countries. As countries hit this "debt wall," their already fragile fiscal positions will deteriorate further. This does not bode well for climate action.

Climate change is not some distant menace; its effects are already being felt worldwide, especially in climate-vulnerable developing economies. But international summits on the topic last year sent a disappointing message: while developed economies pledged to increase climate financing by 2030, developing-economy policymakers are struggling against severe fiscal constraints. With medium-term strategies being used to address a short-term threat, developing and emerging economies have been expressing frustration, including at the Summit for a New Global Financing Pact that was held in Paris last June.

Multilateral development banks can provide an essential lifeline, but their capacity would have to be strengthened — and quickly. According to World Bank data, the new concessional loans the world's poorest countries received from MDBs in 2022 were smaller than these countries' debt-service payments, a large share of which went to private and bilateral creditors. Increasing capital flight from the developing world — driven not least by monetary tightening in advanced economies — will intensify the needs of illiquid lower-income countries.

But it is not only a matter of financial capacity. MDBs have so far been inconsistent, at best, when it comes to supporting countries struggling to repay their debts. For example, both Kenya and Ethiopia have been under pressure to repay their private and Chinese creditors, which are now collecting more in debt-service payments than they are providing in new loans. But only Kenya received enough support from the International Monetary Fund, the World Bank, and others to refinance its debt that is maturing this year.

By contrast, assistance to Ethiopia has declined in recent years. As a result, Ethiopia recently defaulted on its external debt, even though it amounts to just 25% of GDP. While the Kenya approach is not the solution — providing similar levels of support to all illiquid countries would require a tripling of MDB flows — this is clearly unacceptable.

A better approach would focus on closing the gap between short-term debt concerns and long-term investment needs, by unlocking net-positive inflows for countries facing liquidity constraints. As the FDL has proposed, an agreement among debtors, creditors, and MDBs to permit countries to reschedule debts coming due — delaying maturities by 5-10 years — would create fiscal space for climate-friendly investments, financed by MDBs.

For this liquidity bridge to work, MDBs would have to accelerate progress on implementing existing reform plans and increase funding substantially, while the IMF helps manage debt-rollover risks. Importantly, private and bilateral creditors would have to agree to the rescheduling. That is why, compared to the Debt Service Suspension Initiative that the G20 introduced in 2020, the proposal includes stronger incentives for private-sector creditors to participate, in addition to longer time horizons.

There are good reasons to believe that creditors can be convinced to join the program voluntarily. It is, after all, in their best interest to remain invested in solvent countries with strong growth prospects; no one benefits from debt crises like those that have ensnared Zambia and Sri Lanka. In any case, creditors would continue receiving interest payments, and as global interest rates fall and economic-growth prospects improve in the coming years, debtors may well be able to return to capital markets and resume repayment of the principal.

Shaping a workable blueprint along these lines is a task for upcoming international gatherings, such as the G20 summit in

Brazil later this year. Logistical and financial coordination will be needed to ensure sufficient liquidity. Coordination among the IMF, the World Bank, and regional development banks will also be essential to ensure that participating debtor countries pursue investments that genuinely support green growth.

If nothing is done to help countries facing liquidity crises, the world will risk a wave of destabilizing debt defaults, and progress on the green transition will be severely undermined, with catastrophic implications for the entire world. Because promising solutions like the liquidity bridge can prevent such outcomes, they deserve broad global support.