

السعودية - الصين: شراكة نفطية ترسم معالم عصر جديد في الطاقة

يمثل #التعاون النفطي بين السعودية والصين أحد أهم الشراكات الاستراتيجية في العصر الحديث، إذ يجمع بين أكبر مصدر للنفط في العالم وأكبر مستورد له. إلا أن هذا التعاون لا يقتصر على تجارة النفط وحدها، بل يشمل استثمارات مشتركة تهدف إلى تعزيز العلاقات الاقتصادية الثنائية، خصوصاً مع توسع "#أرامكو السعودية" في السوق الصينية.

!"منصة "مرجان

بلغت #الاستثمارات الصينية في السعودية 16,8 مليار دولار في عام 2023، في مقابل 1,5 مليار دولار في عام 2022، استناداً إلى بيانات بنك الإمارات دبي الوطني. في هذا الإطار، يوضح الدكتور خالد رمضان، الخبير النفطي ورئيس المركز الدولي للدراسات الاستراتيجية بالقاهرة، لـ "النهار" أن هذا #لتعاون النفطي السعودي - الصيني يؤثر إيجاباً في #أسواق الطاقة العالمية، "وما منصة 'مرجان' النفطية البحرية التابعة لأرامكو في الصين إلا ترجمة فعلية لهذا التعاون"، وستستخدم لزيادة الإنتاج السنوي لحقل المرجان النفطي إلى 24 مليون طن.

وتعد منصة "مرجان" أثقل منصة نفط وغاز بحرية في الصين مخصصة للأسواق الخارجية، وواحدة من أكبر المنصات في العالم، فهي أطول من مبنى مكون من 24 طابقاً، وتعادل مساحة سطحها 15 ملعب كرة سلة، ويمكنها جمع ونقل 24 مليون طن من النفط و7,4 مليارات متر مكعب من الغاز سنوياً.

شراكة في التنمية

يضيف رمضان: " أبرمت أرامكو السعودية في عام 2023 صفقات بقيمة 8 مليارات دولار مع شركاء صينيين في قطاعي المنبع أي الاستكشاف والإنتاج، والمصب أي التكرير والتوزيع". إلى ذلك، توظف نظرتها المتفائلة إلى إمكانات النمو في الصين على المدى الطويل، والفرص عالية الجودة، "من أجل توسيع عملياتها المتكاملة في قطاع الصناعات التحويلية الصينية، والتي يمثل الاستثمار فيها أهمية". "استراتيجية لنمو أعمال أرامكو في آسيا

يلفت رمضان إلى أن دور أرامكو يتجاوز الاستثمار، "لأنها تريد أن تكون شريكاً رئيسياً في التنمية الاقتصادية في الصين، والاستفادة من الفرص الجديدة التي تلوح في الأفق، من خلال شراكات استراتيجية تعزز وجودها في قطاع الصناعات التحويلية في الصين، بما فيها المواد الكيميائية والمواد المركبة المتقدمة والمواد غير المعدنية".

وهكذا، تظل الصين محورية في استراتيجية أرامكو لتنويع محفظتها،

لتشمل منتجات كيميائية أكثر تخصصًا وعالية القيمة، خصوصاً أن الصين تمثل 40 في المئة من مبيعات المنتجات الكيميائية العالمية. تعزيز سلاسل التوريد

الصين ثاني أكبر اقتصاد في العالم، لذا تعد أكبر مستورد للنفط الخام، إذ تستهلك 14 مليون برميل يوميًا، تليها أوروبا بنحو 12,8 مليون برميل يوميًا. من ناحية أخرى، تعد السعودية أكبر مصدر للنفط الخام في العالم، تليها روسيا وكندا والنرويج ونيجيريا. وانطلاقاً من هذا الواقع، "سهل أن نرى كيف يمنح توسيع التعاون النفطي بين الصين والسعودية الأسواق استقراراً أكبر، ويعزز أمان سلاسل الإمداد النفطية، ويزيد فرص المنافسة في الأسواق العالمية"، بحسب ما يقول الخبير النفطي الدولي رودي بارودي.

ويضيف لـ "النهار": "بالنسبة إلى السعوديين، سيضمنون شريكاً استراتيجياً طويل الأمد، لن يشتري النفط الخام فحسب، بل يستثمر أيضاً في سلسلة النفط اللاحقة، من المصافي إلى مصانع البتروكيماويات". فأرامكو السعودية، أكبر شركة نفط في العالم، مستثمر كبير في مشروع "رونغشينغ سينوبيك فوجيان" للتكرير (Rongsheng Sinopec Fujian Refining & Petrochemical venture) والبتروكيماويات وفي شركتين كبيرتين للبتروكيماويات هما (Rongsheng Petrochemical) و"رونغشينغ (Hengli Petrochemical) "هينغلي وتفاوض أرامكو لشراء 10 في المئة في "هينغلي"، (Rongsheng Petrochemical). وتسعى لإبرام صفقات مماثلة مع شركتين صينيتين أخريين، بعدما أبرمت صفقة منفصلة قيمتها 3,4 مليارات دولار لشراء حصة في شركة "رونغشينغ" في العام الماضي.

تحالف مؤثر

في الضفة الأخرى، استثمرت الصين مليارات الدولارات في السعودية، "حيث دخلت الشركات الصينية على خط مشاريع سعودية واسعة النطاق تركّزت في معظمها في التكرير والبنية الأساسية للغاز"، بحسب بارودي، الذي يضيف: "من شأن التعاون الطويل الأجل بين البلدين أن يعيد تشكيل أجزاء من المشهد النفطي والبتروكيماوي العالمي ويؤكد الخبير النفطي الدولي أن أرامكو السعودية مستثمر كبير في صناعة الهيدروكربون في الصين، "والجانبان يركزان جهودهما على توسيع مصانع إنتاج السوائل وتحويلها إلى كيماويات في مصفاة الجبيل بالسعودية، وفي وحدة البتروكيماويات في نينغبو تشونجين بالصين".

ويرى بارودي أن هذا التطوّر في العلاقة التصنيعية والتحويلية هو "نتاج علاقة استراتيجية دبلوماسية سعودية - صينية، بدأت تحاك قبل أكثر من ثلاثة عقود، لا تقتصر على التجارة والاستثمارات المتبادلة، بل تتعداها إلى تحالف تنعكس آثاره على الاقتصاد العالمي، ما من شأنه أن يقلل من تأثير أي تباطؤ اقتصادي في المستقبل، وأن يحمي "أسواق الهيدروكربون والبتروكيماويات".

إلى جانب ذلك، يعزز التعاون بين السعوديين والصينيين التحول العالمي في مجال الطاقة، بفضل التوافق في الرؤى التنموية بين البلدين. رؤية "السعودية 2030" ومبادرة "الحزام والطريق" الصينية تستهدفان إضافة المزيد من الاستثمارات في الطاقة المتجددة. ومن هنا، تستهدف أرامكو الاستفادة من الطلب المتزايد على الصناعات الخضراء الناشئة في الصين، "ليتطور التعاون الصيني - السعودي في مجال الطاقة من مجرد تعاون في مصادر طاقة تقليدية ليشمل قطاع الطاقة الجديدة"، بحسب رمضان.

شراكة تبادلية

يقول بارودي إن هذا التعاون يرتقي يوماً بعد يوم إلى مستوى الشراكة التبادلية، "الفوائد متبادلة، ويعمل كل من الطرفين على تنويع إيراداته، وخفض إنفاقه الإنتاجي"، مذكراً بأن هذا التعاون "يدعم قدرة البلدين على تحقيق استقرار الاقتصاد العالمي، إذ يبشر بتغيرات مالية ضخمة".

فمحتمل جداً أن تبدأ السعودية بقبول اليوان الصيني، من بين عملات آسيوية أخرى، بوصفه عملة معتمدة في التبادلات النفطية. وهذا، برأي بارودي، يمنح الصين والسعودية مزايا اقتصادية كبيرة، خصوصاً أن المملكة جادة في مسيرة تنويع مصادر اقتصادها، والخروج من دائرة "الاعتماد الكلي على الإيراد النفطي".

يضيف بارودي: "إن تحققي المملكة هذا الهدف سيشكل نقطة تحول أساسية في سياستها الاقتصادية عموماً، والنفطية خصوصاً، إذ ستكمل تحررها من قيود البترو-دولار بعد اتفاقية مع الولايات المتحدة دامت 50 عاماً، وبعد دخولها مع الصين في مجموعة الـ 'بريكس' التي وضعت نصب عينيها الوقوف في وجه هيمنة الدولار الأميركي على الاقتصاد العالمي".

China delivers heaviest offshore oil and gas platform for Saudi deployment



The Marjan oil and gas collection and transportation platform is seen as breakthrough of construction technology of large-scale offshore oil and gas platform for the Chinese builders, weighing more than 17,200 tons, making it one of the world's largest.

The platform is expected to collect and transport 24 million tonnes of crude oil and 7.4 billion cubic meters of associated gas every year. Its platform scale, pipeline types and sizes, and system complexity all setting new records compared to similar platforms.

Construction of the project took 34 months.

Delivery of the platform project will help the Chinese industry players transform from sub-contractor to main-contractor in global offshore engineering market, said China Offshore Oil Engineering.

The platform will be transported to its installation site 6,400 nautical miles away in the waters off Saudi Arabia at the end of August to improve Marjan oilfield's production capacity.

China advocates shared future with Five Principles of Peaceful Coexistence



This year marks the 70th anniversary of the Five Principles of Peaceful Coexistence. The commemorative conference of the 70th anniversary of the Five Principles of Peaceful Coexistence was held in Beijing on June 28. Xi Jinping, President of the People's Republic of China, attended the commemorative conference and delivered an important speech. He expounded on

the essence of the Five Principles of Peaceful Coexistence and their relevance for our times, pointed the direction for building a community with a shared future for mankind amid major global transformation, and voiced a strong message of the Global South to work with people around the world for a better future.

70 years ago, in face of the scourge of hot wars and the confrontation of the Cold War, the Chinese leadership specified the Five Principles in their entirety for the first time, namely, mutual respect for sovereignty and territorial integrity, mutual non-aggression, mutual non-interference in each other's internal affairs, equality and mutual benefit, and peaceful coexistence. The Five Principles are included in the China-India and China-Myanmar joint statements, which jointly called for making them basic norms for state-to-state relations.

After 70 years of practice, the Five Principles of Peaceful Coexistence have set a historic benchmark for international relations and international rule of law, served as the prime guidance for the establishment and development of relations between countries with different social systems, remained a powerful rallying force behind the efforts of developing countries to pursue cooperation and self-strength through unity, and contributed historic wisdom to the reform and improvement of the international order.

Over the past 70 years, the Five Principles of Peaceful Coexistence have extended its reach from Asia to the world, transcending ideological differences, social system variations and uneven levels of development. They have become open, inclusive, and universally applicable basic norms for international relations and fundamental principles of international law, making indelible historic contributions to the cause of human progress.

Seventy years on, we are now in a volatile and unstable era where changes and turbulence are intertwined. At this historic moment when mankind has to choose between peace and war, prosperity and recession, unity and confrontation, the spirit

of the Five Principles of Peaceful Coexistence has become more appealing rather than obsolete. Bearing the intertwined destinies of countries and the shared and fundamental interests of all peoples in mind, President Xi Jinping put forward the vision of building a community with a shared future for mankind, providing a new answer to what kind of world to build and how to build it. This is the best way to inherit, advance and enrich the Five Principles of Peaceful Coexistence under new circumstances.

From the Five Principles of Peaceful Coexistence to building a community with a shared future for mankind, China has remained consistent in the exploration for new ways of state-to-state relations, remained committed to our responsibility in upholding world peace and development, and remained steadfast in pursuing a just and equitable international order.

Over the past decades, the Five Principles of Peaceful Coexistence conformed to the trend for national independence and liberation in Asia, Africa and Latin America, and answered the very important question of how to handle state-to-state relations. Going forward, the Chinese initiative of building a community with a shared future for mankind has become an international consensus. The beautiful vision has been put into productive actions. It is moving the world to a bright future of peace, security, prosperity and progress.

Of all the forces in the world, the Global South stands out with a strong momentum. Standing at a new historical starting point, the great cause of building a community with a shared future for mankind requires the Global South to stay ahead of the historical trend. The Global South should be more open and more inclusive, jointly maintain peace and stability, promote open development, construct global governance, and advocate for the exchange among civilisations.

Both China and Qatar are important members of the Global South. In recent years, under the strategic guidance of President Xi Jinping and His Highness the Amir Sheikh Tamim bin Hamad al-Thani, China-Qatar relations have developed rapidly and comprehensively, serving as a model for countries

with different social systems to firmly adhere to the Five Principles of Peaceful Coexistence, engage in friendly exchanges, and foster mutually beneficial co-operation.

Both China and Qatar are the staunch forces for peace, dedicated to promoting peaceful settlement of international disputes, and participating constructively in the political settlement of international and regional hotspot issues. They are core driving forces for open development, committed to restoring development as the central international agenda item with clear and feasible national development visions and goals, reinvigorating global partnerships for development, and deepening South-South co-operation as well as North-South dialogue.

China and Qatar are also construction teams of global governance and advocates for exchange among civilisations. Both countries actively participate in reforming and developing the global governance system and contribute to enhancing inter-civilisation communication and dialogue.

This year marks the 10th anniversary of the establishment of the China-Qatar strategic partnership. China wishes to work with Qatar to take this opportunity to strengthen the political foundation of bilateral relations, elevate the mutually beneficial cooperation between the two countries to a new level.

China stands ready to join hands with Qatar and other countries in the world to overcome challenges, achieve shared prosperity, create an open, inclusive, clean and beautiful world of lasting peace, universal security, and shared prosperity, build a community with a shared future for mankind, and open up a brighter future for humanity.

Global oil demand growth to cool as China slows, says EIA



The US government's energy-tracking agency added to a chorus of concerns about falling demand for oil next year caused by an economic slowdown in China, the world's largest crude importer.

Global crude consumption will be about 104.5mn barrels a day in 2025, down 200,000 barrels a day from a previous forecast, cutting next year's projected demand growth rate to 1.6%, according to a monthly Energy Information Administration report on Tuesday. The downward revision was driven by concerns that China's economy has been slowing.

China reported its weakest economic growth in five quarters last month, and traders and banks have flagged slowing demand in Asia as a bearish factor for crude. The concerns have helped keep oil prices restrained this year even as Opec and its allies dial back production and the conflict in the Middle East raises the risk of supply disruptions in the region.

Despite signs of an economic slowdown across the Pacific, jet fuel remains a bright spot in US consumption. Increased air travel led to an upward revision in projected demand for the fuel this year, and next year's consumption is still expected to exceed pre-pandemic levels, the EIA said.

The EIA also dialled back forecasts for US oil production growth amid a wave of corporate consolidation and efforts to boost output while using less gear. While the EIA still expects US production to increase this year and next, its forecasts were revised down from last month's report by 0.2% for this year and 0.6% for 2025.

The figures are the latest sign the US shale patch is growing more modestly after last year's surprising pop in production that added more than 1mn barrels a day.

Still, the expansion in annual US oil production – the EIA projects 2.3% growth this year to 13.23mn barrels a day and an additional 3.5% increase next year – shows producers are achieving the efficiency gains in drilling and fracking that allows them to grow output.

“We are clearly doing more with less and becoming more operationally efficient each quarter,” Diamondback Energy Inc, one of the biggest producers in the Permian Basin of West Texas and southeast New Mexico, wrote in a letter to stockholders this week.

The Permian, which is the world's largest shale field, is forecast to add a modest 20,000 barrels a day through the end of this year and another 340,000 barrels of production next year, according to the latest EIA projections.

This is how we know when the world has its hottest day



On Sunday, the world had its hottest day on record. Just 24 hours later, that record was broken again, making Monday very likely the hottest day in thousands of years.

It may seem improbable for scientists to gauge the world's hottest day given that they don't have temperature monitors in every corner of the world and less than a century of relatively widespread observations. But they've developed a technique that's increasingly useful as the planet heats up.

This month's shocking heat findings, announced by the EU's Copernicus Climate Change Service, are based on "reanalysis," a technique that mixes temperature data and models to provide a global view of the climate. The center creates a nearly real-time picture of the Earth's climate, including temperature, wind and precipitation, for roughly every 30-square-kilometer chunk of the planet's surface.

This reanalysis goes back to 1940, and it allows researchers to say with confidence when a record is broken, whether for a day, month or year. Beyond the new daily heat record, the data also shows that 2023 was the hottest year ever recorded and that every calendar month for the past 13 months has been the hottest on record.

Though there aren't thermometers in every corner of the world, Copernicus receives a large amount of weather data that it uses to underpin its reanalysis.

"We have this constant flow of information coming into the center," says Carlo Buontempo, director of the Climate Change Service, which is part of the European Center for Medium-Range Weather Forecasts (ECMWF).

Scientists at the center receive 100 million readings per day about weather conditions from around the world. Observations come from airplanes, satellites, ships, radar and surface-level weather stations – all feeding real-time information about temperature, wind, rain and snow information, as well as other factors like air pollution. This information is fed into a model, known as ERA5, which is already equipped with historic information about the global climate.

There are gaps in these observations, because the data sources don't cover every part of the world. Weather conditions like cloudy skies may also reduce the amount of data coming from sources like satellites. To fill these gaps, the scientists take the predictions they have already made, based on the long-term ERA5 model, and test them against the observations. That means a forecast that predicts a particular temperature in a particular place will be tested against all the data researchers receive about the weather in that place and nearby, as well as broader forces like ocean currents and air circulation.

This is done repeatedly while assessing how compatible the

prediction is with what's actually been recorded. The model also accounts for any errors in the recorded data, and relies on the laws of physics, including the weather patterns, currents and airflow that govern how the global climate works.

In this way, it's possible to create a complete picture that is as accurate as possible. That's what allows scientists to confidently declare a record like when the world experiences the hottest day in human history.

Globally, five weather services – the U.S.'s National Oceanic and Atmospheric Administration and NASA, the ECMWF, the China Meteorological Administration and the Japan Meteorological Agency – carry out continuous appraisals of global temperature using this technique. While their models differ slightly, the five groups have come to similar conclusions about record heat in recent months and years.

Historical data is trickier to come by. The longest-running temperature series, the Central England Temperature in the U.K., started in the 17th century. Data from before humans were systematically monitoring temperatures comes from sources like bubbles of gas trapped in glacial ice, or tree rings. These sources aren't as specific as a thermometer reading, but it's possible to say with confidence that recent temperatures are likely the highest in around 100,000 years, Copernicus says.

Meteorologists also have a good idea when a particularly significant day, like the hottest day on record, is on its way. This is partly because global mean temperatures usually peak between early July and early August. Last year's hottest day – which was the previous record for the hottest ever – occurred in early July amid a historic oceanic heat wave. An intensifying El Nino – a natural global climate phenomenon that usually means hotter temperatures globally – provided yet another clue that record heat was brewing.

Until this July, it looked for a while like the world wouldn't set a new daily record, says Buontempo.

"The global mean temperature for the oceans started rising again," he says. "Some of the people who systematically monitor our predictions started to sound alarm bells."

By the start of last week, they were paying extra attention to the reanalysis and getting ready to make an announcement.

This technique isn't just useful for making "hottest day ever" announcements: It's being used to train artificial intelligence forecasting models, especially for "ensemble" weather forecasts, which represent multiple possible future scenarios. It's also used by solar energy companies to help homeowners work out how much energy their panels might generate, and by wind energy companies to plan where to put wind farms.

Copernicus is currently working on a new model, known as ERA6, which will be more precise – dividing the world into 14-km squares – and incorporate many more historic data sources, including early satellite readings from the 1970s.

For Buontempo, more important than any one day is the recent extraordinary streak of record-breaking months, given that's a better indicator of how rapidly the world is warming. But pinpointing a specific day does make a changing climate feel much more immediate.

"I think we have to make it more tangible, more direct, more visible," he says. "It is important that people are informed."

‘Prerequisites for peace’: Expert applauds Skylakakis for endorsing energy transition policies that ‘open the way to dialogue and cooperation’



ATHENS, July 7, 2024 Greece: Energy and Environment Minister Theodoros Skylakakis is on the right track with his approach to Greece's energy transition plans, a noted regional expert says.

“He’s got the right perspective,” industry veteran and author Roudi Baroudi said after Skylakakis spoke at this week’s Athens Energy Summit. “He understands that although the responsibility to reduce carbon emissions is universal, the best policy decisions don’t come in ‘one-size-fits-all’.”

Baroudi, who has more than four decades in the field and currently serves as CEO of Doha independent consultancy Energy and Environment Holding, made his comments on the sidelines of the forum, where he also was a speaker.

In his remarks, Skylakakis expressed confidence that Greece's increasing need to store electricity – as intermittent renewables generate a growing share of electricity – would drive sufficient investment in battery capacity, without the need for subsidies. Among other comments, he also stressed the need for European Union policymakers to account for the fact that member-states currently face the costs of both limiting future climate change AND mitigating the impacts that are already under way.

“Every country is different in terms of how it can best fight climate change. Each one has its own set of natural resources, industrial capacity, financial wherewithal, and other variables. What works in one situation might be a terrible idea elsewhere. That's crucial and Skylakakis gets it,” Baroudi said. “He also understands that an effective transition depends on carefully considered policies, policies that attract investment to where it can not only have the greatest impact today, but also maximizes the impact of tomorrow's technologies and tomorrow's partnerships.”



“What Skylakakis is saying and doing fits in nicely with many of the same ideas I spoke about,” Baroudi added. “When he talks about heavier reliance on wind farms, the added storage capacity is a foundation that will help derive a fuller return from each and every turbine. When he highlights the utility – pun intended – of power and gas interconnections with other countries and regions, these are the prerequisites for peace, the building blocks for cooperation and dialogue.”

In his own speech shortly after Skylakakis’, Baroudi told the audience at the capital’s Hotel Grande Bretagne that countries

in the Eastern Mediterranean should work together to increase cleaner energy production and reduce regional tensions.

“Surely there is a method by which we can re-establish the same common ground enshrined in the wake of World Wars I and II, recall the same common interests and identify new ones, and work together to achieve common goals, just as the UN Charter implores us to,” he said.

Baroudi advises companies, governments, and international institutions on energy policy and is an award-winning advocate for efforts to promote peace through dialogue and diplomacy. He told his audience that with both climate change and mounting geopolitical tensions posing threats to people around the world, policymakers needed to think outside the usual boxes.

In this way, he argued, “we might develop the mutual trust which alone can create a safer, happier, and better world for our children and grandchildren.”

“Consider the possibilities if Greece, Türkiye, and Cyprus became de facto – or de jure – partners in a pipeline carrying East Med gas to consumers in Bulgaria, Romania, and Italy,” he said. “Imagine a future in which Israeli and Lebanese gas companies were similarly – but independently – reliant on the same Cypriot LNG plant for 10-20%, or even more, of their respective countries’ GDPs.”

He also envisioned bilateral cooperation scenarios between Greece and Turkey and Syria and Turkey, as well as a regional interconnection that would provide backup energy for multiple coastal states.

“Instead of accepting certain ideas as permanently impossible, we ought to be thinking ahead and laying the groundwork,” Baroudi said. “For Greece and Türkiye – as for other pairs of coastal states in the region – a good starting point would be to emulate the Maritime Boundary Agreement agreed to by

Lebanon and Israel in 2022.”

Stressing the potential for cooperation to address both energy requirements and the stability required for stronger growth and development, Baroudi – whose books include a 2023 volume about the Lebanon-Israel deal and a forthcoming one urging other East Med countries to do the same – called on the EU to take up the challenge.

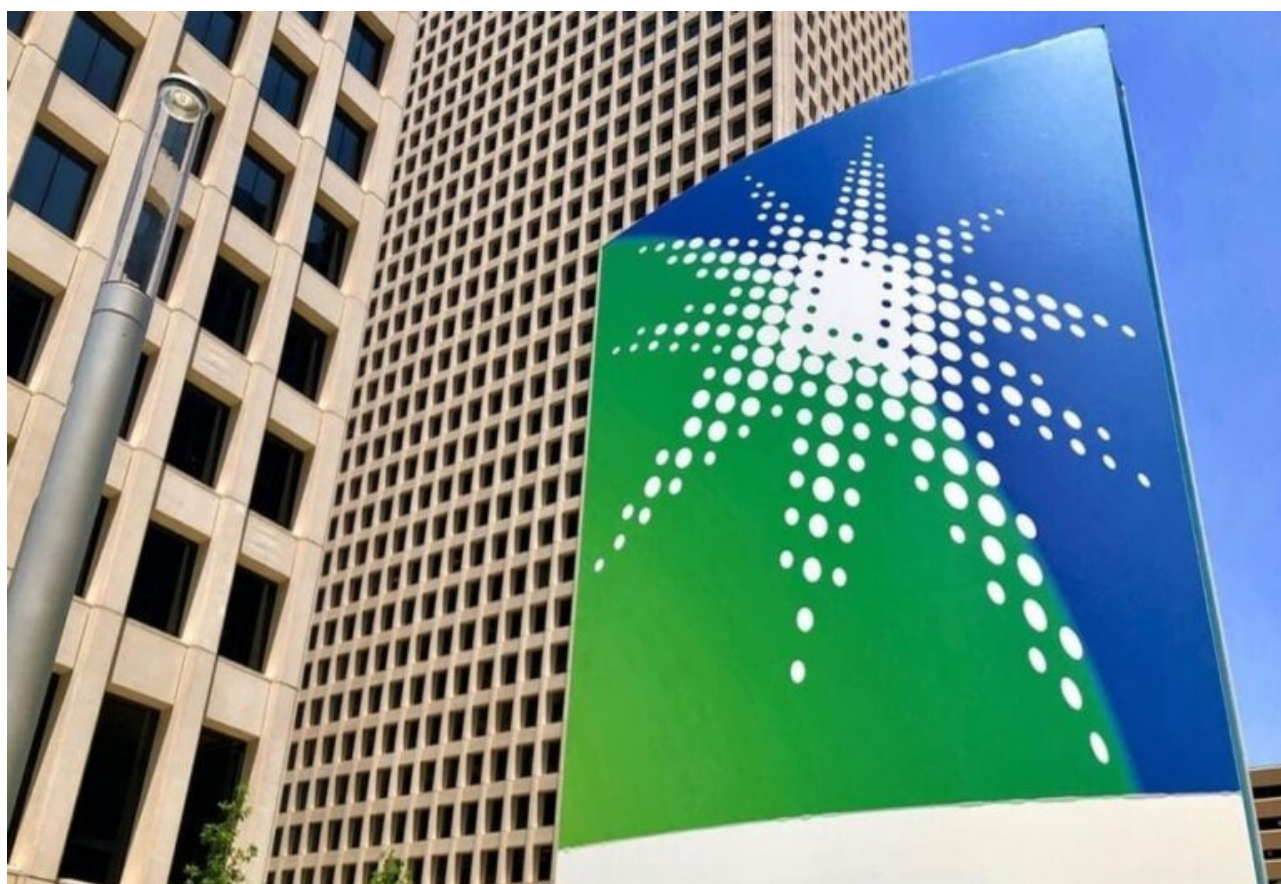


“Using dialogue and diplomacy to expand energy cooperation would benefit not just the countries of the East Med but also the entire European Union and much of its surrounding ‘neighborhood’,” he told an audience of energy professionals and key government officials. “That level of promise more than merits the attention of Brussels, the allocation of support resources, and even the designation of a dedicated point-person tasked with facilitating the necessary contacts and negotiations.”

“This is how we need to be thinking if we want to get where we need to go,” Baroudi said. “Instead of allowing ourselves to be discouraged by the presence of obstacles, we need to be investigating new routes that go around them, strengthen the

rule of law – especially human rights law – as a basis for the international system, and promote lasting peace among all nations. Only then can we declare victory over what the 18th-century Scottish poet Robert Burns called ‘man’s inhumanity to man’.”

Saudi Aramco awards \$25bn in contracts for gas expansion



Saudi Aramco, the world’s biggest oil producer, has awarded contracts worth more than \$25bn for the second phase of the expansion of its Jafurah gas field and the third phase of expanding its main gas network.

The development of the Jafurah field, which is estimated to

hold 200 trillion cubic feet of gas, is expected to cost \$100bn and boost the state energy firm's gas production by more than 60 per cent by 2030.

"These contract awards demonstrate our firm belief in the future of gas as an important energy source, as well as a vital feedstock for downstream industries," said Amin H. Nasser, Aramco president & CEO.

"The scale of our ongoing investment at Jafurah and the expansion of our master gas system underscores our intention to further integrate and grow our gas business to meet anticipated rising demand."

Aramco awarded 16 contracts, worth a combined total of around \$12.4bn, for phase two development at Jafurah. This phase will include the construction of gas compression facilities, pipelines, the expansion of the Jafurah gas plant, gas processing trains, utilities, sulfur, and export facilities.

The expansion includes the construction of new riyas natural gas liquids (NGL) fractionation facilities in Jubail, including NGL fractionation trains, utilities, storage, and export facilities.

The state-energy giant also awarded 15 lump sum turnkey contracts worth approximately \$8.8bn to kick off the phase three expansion of the master gas system. The expansion will increase the size of the network and raise its total capacity by an additional 3.15 billion standard cubic feet per day (bscfd) by 2028 through the installation of around 4,000km of pipelines and 17 new gas compression trains.

Furthermore, Aramco awarded an additional 23 gas rig contracts worth \$2.4bn, two-directional drilling contracts worth \$612m, and 13 well tie-in contracts at Jafurah, for a total of \$1.63bn.

Aramco's LNG ambitions

Saudi Arabia is working on developing its unconventional gas reserves, which require advanced extraction methods such as those used in the shale gas industry.

Aramco signed 40 corporate procurement agreements worth \$6bn with local suppliers in February as the state-owned energy giant seeks to develop the country's energy services sector while boosting its localisation programme.

The agreements cover the supply of a range of products comprising strategic commodities, such as instrumentation, electrical, and drilling equipment.

Meanwhile, an additional 15 trillion standard cubic feet of gas (scfd) were proven at Aramco's Jafurah field in February, adding significant volumes to the kingdom's proven gas and condensate reserves.

The company estimates that Jafurah's reserves have reached 229 trillion cubic feet of gas and 75 billion barrels of condensates. Jafurah is the country's largest unconventional non-oil-associated gas field and reportedly the biggest shale gas development outside of the US.

Aramco is expanding its portfolio into LNG at a time when global demand for the fuel has surged, particularly in Europe, which is replacing reduced pipeline supplies from Russia. It forayed into the global LNG market last September by acquiring a minority stake in EIG Partners' MidOcean Energy in a deal valued at \$500m.

The state-energy giant signed non-binding agreements with two US energy firms Sempra and NextDecade, for the supply of 5 million tonnes per annum (mtpa) and 1.2 of mtpa LNG, respectively, for 20 years.

How Europe can get the Green Deal done



Since the European Green Deal was introduced in 2019, European Commission President Ursula von der Leyen has touted it as the European Union's new economic-growth agenda. After all, while the strategy's core objective is climate-related – to reduce the EU's greenhouse-gas emissions to net-zero by 2050 – it aims to achieve that by modernising the economy and fostering innovation. But not everyone is convinced.

In recent months, European drivers have complained about the EU's looming ban on the production and sale of cars with internal combustion engines, households have resisted plans to phase out gas boilers, and farmers have revolted against environmental regulations they view as overbearing. With the approach of next month's European Parliament elections, far-

right parties are jostling to establish themselves as the official standard-bearers of this growing discontent and preparing to use any power they win to sabotage the green agenda.

The protesters make some legitimate points. The radical transformation that the European Green Deal entails raises difficult questions about who should bear the costs of climate action, both within and among countries. If those costs end up falling disproportionately on ordinary workers – let alone the poorest and most vulnerable communities – the transformation will exacerbate inequality, with potentially serious social and political knock-on effects. Fortunately, properly designed climate policies can avert that outcome and actually lead to greater social equality.

The European Green Deal has accounted for climate-justice considerations since the beginning. Advocates always knew that they would need to secure the political support of coal-intensive Poland, and they had not forgotten the “yellow vest” revolt that erupted in France in 2018, after President Emmanuel Macron attempted to introduce a carbon tax in road transport.

It is no coincidence that the first flagship initiative under the European Green Deal was the Just Transition Fund, which will dedicate €20bn (\$21.6bn) in 2021-27 to support the “economic diversification and reconversion” of the territories expected to be the most negatively affected by the green transition. Nor is it a coincidence that, while creating the first-ever carbon market for buildings and road transport, the European Commission established the Social Climate Fund, which is expected to mobilize at least €86.7bn between 2026 and 2032 to compensate the most vulnerable groups for higher energy prices.

These policy initiatives reflect the advice one would find in the economic literature on carbon dividends. But they will prove insufficient to offset the profound distributional effects of climate policy, particularly as decarbonisation accelerates and includes sectors that directly affect ordinary

people's daily lives, such as buildings and transport. That is why Europe also needs a new green social contract, which focuses primarily on these sectors.

To this end, the EU should streamline and simplify existing funding instruments to deliver even more decisive support for the transformation of coal and carbon-intensive regions. It should also take steps to ensure that EU countries make better, more targeted use of carbon-market revenues to support the uptake of green alternatives, from electric vehicles to home heating systems. And it should push for a "Rural Green Deal" that supports small farmers while requiring the agri-food industry to transform its systems. While such EU-level action would not eliminate the distributional consequences of climate policy, it would help significantly.

The EU must also turn decarbonisation into a real economic opportunity by developing a solid green industrial policy. This will require, first and foremost, revitalising the "boring" EU single-market agenda, in order to leverage the bloc's greatest asset – a huge shared market for goods, financial services, energy, workers, and ideas – to incentivise new investments in clean tech.

Interventions in specific technology areas will also be needed. Rather than mimic the broad-based US Inflation Reduction Act, the EU should make the most of its limited resources by delivering targeted support in areas where it already has a solid comparative advantage on which to build. While some incumbent industries might need support as they decarbonise, supporting breakthrough innovations should be the primary goal.

The European Green Deal has come a long way since it was conceived five years ago. But if the EU is to achieve its 2030 climate goals and achieve net-zero emissions by 2050, it must act now to ensure that it can weather the inevitable political headwinds. A new green social contract and industrial policy can make all the difference. – Project Syndicate

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Potential Qatar-Greece investment ties seen in energy, high-tech industries

Greece's economic resurgence with Prime Minister Kyriakos Mitsotakis at the helm is seen to open potential Qatari investments in a wide range of sectors, including energy, tourism, and high-tech industries.

In an exclusive interview with Gulf Times, Energy and Environment Holding CEO Roudi Baroudi underscored the growing bilateral ties of both countries, saying Qatar is well-positioned to capitalise on Greece's economic stability, which has been attracting foreign direct investments (FDI).

"After the bond and fiscal crisis that Greece went through in 2012-2014, it took them a few years of solid reconsolidating their books with the assistance of the IMF, the World Bank, and especially the EU...the stupendous economic growth brought about by Prime Minister Mitsotakis has brought a lot of FDI back.

"Qatar has always had certain private investments in the financial and energy sectors. Today, Greece is a hub for diverse investment opportunities and its economy is open to different markets other than just tourism, real estate, and industry, but they have direct access to Europe, as well, in terms of oil and gas," Baroudi explained.

Baoudi noted that the energy sector, particularly liquefied natural gas (LNG), is vital in enhancing further Qatar-Greece investment opportunities and economic ties. He also said Qatar's decades-long expertise in the LNG industry could help catalyse Greece's bid to become a major logistics centre.

"Greece has probably the largest ships, crude tankers, and gas tankers in the world, making them one of the leaders in the global maritime business. Qatar's LNG capabilities are already well-established with more than a dozen LNG ships working for QatarEnergy subsidiaries," Baroudi noted.

At the Qatar Economic Forum held in Doha last month, HE the Minister of Finance Ali bin Ahmed al-Kuwari emphasised that Qatar's energy sector is performing "very well," citing QatarEnergy's plans for a new LNG expansion project that would further raise the country's LNG production capacity to 142mn tonnes per annum.

Al-Kuwari said, "We are going to increase Qatar's (liquefied natural gas) production by 85% in a phased manner until 2030. We are going to be reaching 142mn tonnes per annum of LNG."

According to Baroudi, recent developments in Qatar's energy industry could extend potential investment opportunities with Greece beyond shipping to LNG infrastructure. "Qatar's expertise could be crucial as Greece expands its LNG port to supply gas to neighbouring countries following the Ukraine-Russian war. QatarEnergy is also making strategic investments in the Eastern Mediterranean, such as in Cyprus and Egypt as part of a larger regional strategy," he said.

Baroudi also pointed to knowledge exchange as another avenue for collaboration and investment in terms of port management. "There is no question that Hamad Port will benefit a lot from further co-operation with the Port of Piraeus, which is Greece's largest port, and the second largest in the Mediterranean," Baroudi stated.

Asked about potential partnerships outside the energy sector and port management, Baroudi said both countries could also forge joint opportunities in digital connectivity, artificial intelligence (AI), and clean tech. Among other industries, Baroudi also noted that Qatar could expand its tourism and hospitality footprint amidst Greece's favourable economic environment.

Economic development in an age of great-power competition



Now that the United States has introduced a new set of import tariffs on Chinese goods, the world's two largest economies appear to be on the brink of open economic warfare – and developing countries are in danger of getting caught in the crossfire. Beyond the risk that they could face sanctions or other trade restrictions if one superpower perceives them to be helping the other, Sino-American trade tensions are eroding

the value of many of these economies' comparative advantages, such as cheap labour and land. Coping with these challenges will require skillful economic statecraft.

Comparative and competitive advantages are dynamic by nature; they can be acquired or lost over time. As Harvard's Michael Porter put it in 1990, "National prosperity is created, not inherited. It does not grow out of a country's natural endowments, its labour pool, its interest rates, or its currency's value, as classical economics insists." Rather, an economy's competitiveness "depends on the capacity of its industry to innovate and upgrade."

As a growing number of governments pursue industrial policies – from short-term protective measures, like tariffs, to more forward-looking initiatives, such as targeted subsidies and deep structural reforms – the capacity to innovate and upgrade depends significantly on the state's ability to work with the market to boost competitiveness. This poses a challenge for advanced economies no less than it does for developing countries.

Consider Europe, which was forced to rethink its prevailing business model – selling high-quality engineering products – after Russia's full-scale invasion of Ukraine in 2022. As supply chains were disrupted, and energy costs and inflation soared, Europe's reliance on others for critical goods, including inputs for its own manufacturing, became an enormous economic liability. Add to that China's growing dominance in electric vehicles, and Europe finds itself increasingly anxious about its future competitiveness.

To be sure, many European economies remain highly competitive: Europe dominates the top 20 of the International Institute for Management Development's 2023 World Competitiveness Rankings, with Denmark, Ireland, and Switzerland leading the pack. But Europe's larger economies have been sliding in the rankings. Germany dropped seven spots between 2022 and 2023, to 22nd

place, and France fell five spots, to 33rd.

One problem, pointed out in a report from the McKinsey Global Institute, is that while Europe leads in sustainability and inclusivity, per capita GDP (at purchasing power parity) is lagging. In 2022, it was 27% lower than in the United States, with about half that difference attributable to cultural norms – Europeans work fewer hours per capita over their lifetimes – and the other half resulting from differences in productivity levels. Boosting productivity is now a central concern of European policymakers and will have to be addressed partly through the development of high-tech industries.

This approach has certainly worked for the US, which spends 3.5% of its GDP on research and development – a smaller share than South Korea (4.9%) and Israel (5.6%), but significantly larger than China (2.4%) and the European Union (2.2%). All of these economies are devoting considerable attention to dual-use R&D in strategic areas like artificial intelligence, green tech, and quantum computing. What stands out about the US is that, while the government is providing funding and incentives, not least through the 2022 Inflation Reduction Act, it is the private sector that is driving plans to invest \$400-500 billion in R&D over the next decade.

As a report by the Boston Consulting Group notes, R&D is part of a “virtuous cycle of innovation” that sustains America’s technological leadership. For example, the US claims 46% of the global market for semiconductor design. Thanks to its advanced technologies, the US semiconductor industry has a gross profit margin of 59%, which is 11 percentage points higher than competitors. In 2020, US semiconductor revenues reached \$208 billion – twice the revenues of the second-leading country.

But not just anyone can emulate America’s high-tech success,

which is partly a function of its large and dynamic capital market. In 2022, the total market capitalization of the US stock market was 2.5 times higher than that of Europe. As a share of GDP, total market value in the US exceeded 158% in 2022, lower than Taiwan (195% of GDP), but higher than every other economy, including China (65.4%), Japan (126%), Germany (45.5%), and India (103.7%).

With its deep capital markets, the US is well-positioned to generate funding for high-risk R&D and, more importantly, reward and retain talent. Other economies – including China, the EU, Japan, and most developing countries – cannot compete on this front, not least because their banking systems remain far more risk-averse.

Recognizing America's comparative advantages in high-tech sectors, China focused on building prowess in mid-tech areas of engineering and operational production and distribution, which opened the way to comprehensive competition at scale. Since 2014, China has led the world in exports of high-technology goods, accounting for more than 30% of the global market share. Since 2000, it has tripled its share of gross value added.

For developing countries, this means that it will be very difficult to compete in mid-tech industries, not just the high-tech sectors that the advanced economies (and, increasingly, China) dominate. Add to that their limited capacity to finance investment and their dependence on access to global or regional markets to achieve economies of scale, and economic statecraft becomes all the more challenging.

Some priorities are clear. To achieve technological upgrading, countries must invest as much as possible in digital infrastructure and education, as well as projects related to the United Nations Sustainable Development Goals. To cope with rising protectionism among major economies, they will most likely also increase support for domestic "champions," even if

it means perpetuating market fragmentation.

Overall, however, we will probably see a lot more experimentation in development strategies in the coming years. Developing countries will just have to hope that the US and China come to some sort of grand bargain before their competition escalates into conflict.

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