

# Ensuring Europe's supply of critical minerals



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

The new European Commission has rightly put critical raw materials at the top of its agenda. Fortunately, it will not be starting from scratch. Last year, the EU adopted the Critical Raw Materials Act, which calls for the bloc to extract 10%, process 40%, and recycle 25% of what it consumes

annually by 2030, and limits the share of any external supplier to 65%. To meet the CRMA's targets, the Commission must focus on co-ordinating funding, engaging in resource diplomacy with Africa, and establishing secondary material partnerships.

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

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

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

barriers while helping African partners move into higher-value-added activities, such as downstream processing, and invest in industrial upgrading.

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

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

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

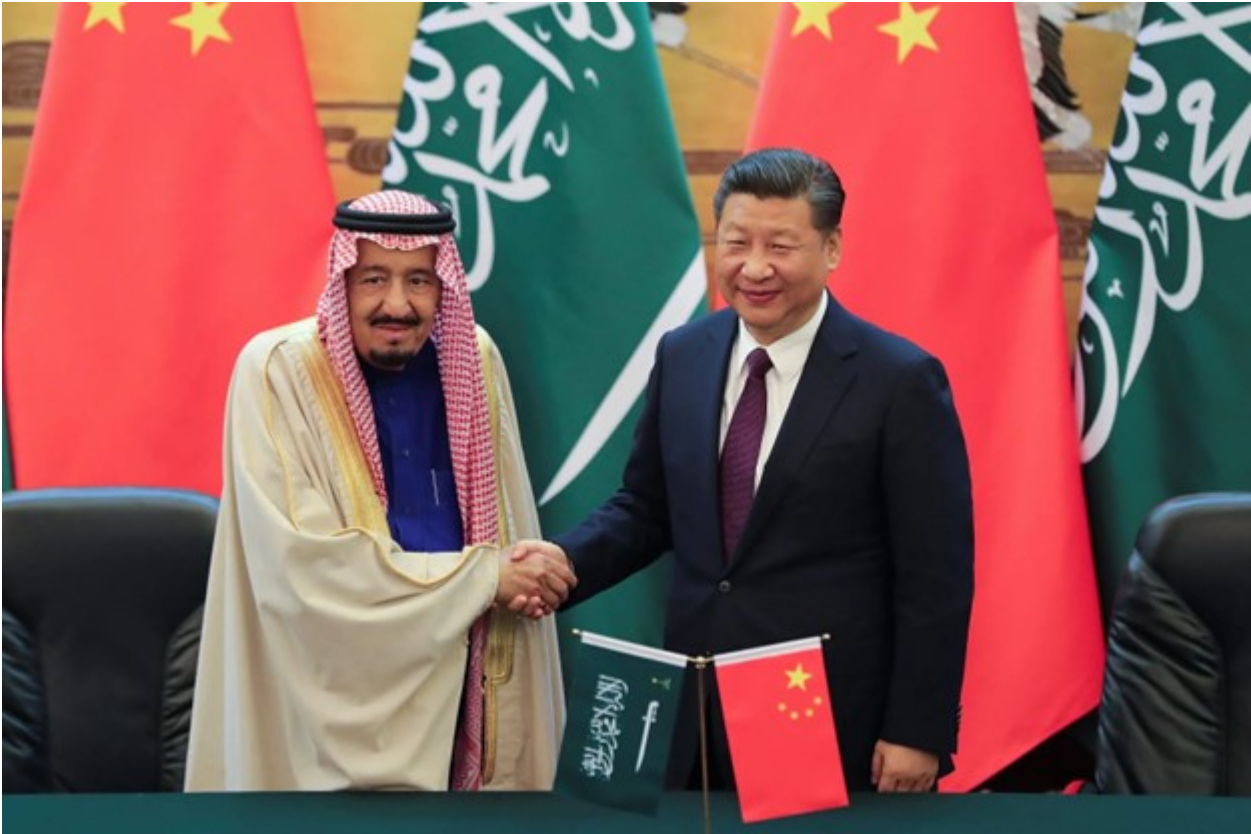
The EU is facing an uphill battle to source and produce the critical raw materials that will define its future. And while

the CRMA hardly represents an easy fix for the bloc's import dependency, it can strengthen supply-chain resilience, contribute to EU sovereignty, and bolster Europe's economic security – in other words, boost the bloc's industrial competitiveness against a worsening geopolitical backdrop. But to realise the CRMA's full potential, the Commission must make it fit for purpose. – Project Syndicate

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## **AS AMERICA “PIVOTS TO ASIA”, SAUDI ARABIA IS ALREADY THERE – BY ROUDI BAROUDI**



The biggest news in the energy industry last week was that a state-owned Chinese company had completed a massive offshore oil and gas platform for Saudi Aramco. Breathless media reports shared impressive details about the facility's record-setting size, weight, and output capacity, with some describing it as a massive bet on continuing strong demand for fossil fuels despite the meteoric rise of renewables.

The real significance of this news, though, is not to be found at the Qingdao shipyard where it was made, at the headquarters of the China Offshore Oil Engineering Company that built it, or at the Marjan field off Saudi Arabia's east coast where it will be installed and operated.

In fact, in order to truly appreciate the implications involved, one needs to travel back in time a little more than 50 years. For on 8 June 1974, the United States and Saudi Arabia reached a historic agreement that has bound the two countries ever since.

Signed by then-US Secretary of State Henry Kissinger and then-Minister of Interior Prince Fahd bin Abdulaziz, the pact



established two joint commissions tasked, respectively, with increasing bilateral economic cooperation and with determining the kingdom's military needs. It also created several joint working groups responsible for specific elements to support growth and development, including efforts to: a) expand and diversify Saudi Arabia's industrial base, beginning with the manufacture of fertilizers and other aspects of the petrochemical sector; b) increase the number of qualified scientists and technicians available to make the most of technology transfers; c) explore partnerships in areas like solar energy and desalination; and d) find ways to cooperate in agriculture, especially in the desert.



Henry Kissinger with Prince Fahd of Saudi Arabia, 1974

Contrary to widespread misperceptions, the agreement did not say anything about Saudi crude being priced and/or transacted

exclusively in US dollars. In a side-deal that remained secret until 2016, however, the United States pledged full military support in virtually all circumstances and the Kingdom of Saudi Arabia committed to investing a massive share of its oil revenues in US Treasury bills. While there was no public quid pro quo, therefore, this was to some extent a distinction without a difference: the world's biggest oil exporter ended up spending hundreds of billions of dollars on American debt and American-made weapons, making it only sensible that the vast majority of its crude sales would be in greenbacks. By extension, the sheer weight of Saudi oil in world markets – and especially within the Organization of Petroleum Exporting Countries – virtually guaranteed that the dollar would become the de facto default currency of those markets, Petrodollars.

These arrangements suited both sides at the time, which featured a very particular set of circumstances. The previous year, as Egypt and Syria attempted to regain territories occupied by Israeli forces since the 1967 war, US President Richard Nixon authorized an unprecedented airlift of weaponry – everything from tanks, artillery, and ammunition to helicopters, radars, and air-to-air missiles – to Israel. Arab oil producers responded by playing their strongest card, announcing an oil embargo against states that supported the Israeli war effort. That led directly to supply shortages, soaring prices, and long lines at filling stations across the United States and many other countries, too, and indirectly to several years of higher inflation. Although the embargo had been lifted in March 1974, Washington was keen to prevent similar shocks in the future.

The American economy was particularly vulnerable to longer-term repercussions because of several factors, including a general slowdown caused by its long, expensive, and ultimately unsuccessful war in Vietnam. The real problem, though, stemmed from another issue: in 1971, as the dollar continued to lose ground against major European currencies, Nixon had taken the

United States off the gold standard, gutting the Bretton Woods arrangements put in place after World War II and throwing foreign exchange markets into disarray. With the Cold War as backdrop, America appeared to be losing ground in its strategic competition with the Soviet Union.

The so-called "side-deal", then, was actually far more important than the public agreement because it would restore the dollar's primacy in international markets, making it once again the world's favorite reserve currency, while simultaneously reducing the likelihood of future Arab oil embargos. The new system worked very well for a very long time: the US economy regained its stability, and Saudi Arabia embarked on a long program of socioeconomic development that continues to this day. Even as the Americans have sought further protection by reducing their reliance on Saudi and other OPEC crude, their bilateral partnership and the dollar's general prevalence in the oil business have likewise persisted despite all manner of diplomatic spats, crises, and other obstacles.

Back in the present-day, the Soviet Union is no more, and although the United States has an even more formidable strategic rival in China, this competition carries neither the day-to-day intensity nor the seeming inevitability of nuclear Armageddon that the Cold War engendered. In addition, the United States is now producing more crude oil than any country ever has, further insulating its economy against exogenous shocks, while China's rapid expansion has made it the world's most prolific energy importer. In fact, Washington is years into a "pivot to Asia" that will see it focus less attention on the Middle East.

Meanwhile, Saudi Arabia is now led by Crown Prince, Mohammed bin Salman (MBS), a young and highly ambitious ruler who has shown himself more than willing to act independently of American desires or even demands. Accordingly, it should not surprise anyone that the behemoth facility now being



transported to Marjan is just the most visible tip of the Sino-Saudi iceberg. Theirs is a burgeoning relationship driven by complementary needs, with both parties investing in one another's economies and cooperating on large-scale energy and industrial projects.

Given all of the foregoing, it is much too early to declare the end of an era. Even if rumors that the Saudis will soon start selling oil futures contracts in yuan or other currencies turn out to be true and the results include an erosion of the dollar's value, the US-Saudi economic relationship remains very much in place, as do defense ties ranging from procurement and maintenance to joint exercises and training. This is not to mention the approximately 60,000 Saudi students who study at American universities every year, or the countless other business and/or personal ties nurtured over decades.



Then, US President, Jimmy Carter receiving the Crown Prince Fahd of Saudi Arabia at the White House in Washington, 1977. Seeing the continuation of the Petrodollar Agreement.

All the same, a new era has definitely begun: just as the Americans have opened up other avenues to secure their energy needs, the Saudis are now moving decisively to diversify their foreign partnerships and have been doing so for many years. Inevitably, the global oil and gas economy's center of gravity will shift eastward, but how could it be otherwise when China and several other Asian economies have become such powerhouses? The diversification path will almost certainly include occasional stretches where Riyadh will have to make difficult decisions, but this, too, reflects the confidence that MBS has in his country's ability to determine its own destiny.

Roudi Baroudi has worked in the energy sector for more than four decades, with extensive experience in both the public and private sectors. Having advised dozens of companies, governments, and multilateral institutions on program and policy development. He has been a loyal advocate for energy stability and peace. He is also the author or co-author of numerous books and articles, and currently serves as CEO of Energy and Environment Holding, an independent consultancy based in Doha, Qatar.

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# ‘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 18<sup>th</sup>-century Scottish poet Robert Burns called ‘man’s inhumanity to man’.”

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## الخبير في مجال الطاقة رودري بارودي: دول شرق البحر المتوسط يجب أن تتعاون بمجال الطاقة



أشار أحد أهم الخبراء في مجال الطاقة رودري بارودي، في مؤتمر انعقد في أثينا، إلى أن “دول شرق البحر الأبيض المتوسط يجب أن تتعاون مع بعضها لزيادة إنتاج وتصدير الطاقة والتخفيف من التوترات الإقليمية”.

وقال بارودي امام المشاركين في المؤتمر: "يجب ان نضع في الاعتبار الاحتمالات الايجابية إذا أصبحت اليونان وتركيا وقبرص شركاء بحكم الواقع أو بحكم القانون في خط أنابيب ينقل غاز شرق المتوسط إلى المستهلكين في بلغاريا ورومانيا وإيطاليا، وان نتخيل مستقبلاً تعتمد فيه شركات الغاز الإسرائيلية واللبنانية ولكن بشكل مستقل "على نفس مصنع الغاز الطبيعي المسال في قبرص".

وأضاف بارودي "لننصوّر أهمية وإيجابية سيناريوهات التعاون الثنائي بين اليونان وتركيا من جهة وسوريا وتركيا من جهة ثانية إضافة إلى الترابط الإقليمي الذي سيوفر طاقة احتياطية لدول ساحلية متعددة"، لافتاً إلى أنه "بدلاً من قبول أفكار معينة على أنها مستحيلة بشكل دائم، يجب أن نفكر في المستقبل ونضع الأساس لأعمال إيجابية مشتركة على ان تكون نقطة البداية الجيدة مماثلة لاتفاقية الحدود البحرية بين لبنان وإسرائيل في عام 2022".

وشدد بارودي أمام حشد من المتخصصين في مجال الطاقة ومسؤولين حكوميين على أن "استخدام الحوار والدبلوماسية لتوسيع التعاون في مجال الطاقة لن يفيد فقط دول شرق البحر المتوسط ولكن أيضاً جميع دول الاتحاد الأوروبي والكثير من" الجوار "المحيط به وان هذا الاستحقاق المهم يستحق أكثر من اهتمام بروكسل، لا بل يستحق تخصيص موارد الدعم، وتعيين موفد مكلف بتسهيل الاتصالات والمفاوضات اللازمة".

وختم بارودي بالقول: "هذه هي الطريقة الفضلى التي نحتاجها للتفكير إذا أردنا الوصول إلى حيث يجب ان نكون بدلاً من السماح لأنفسنا بالإحباط بسبب وجود عقبات، فنحن نحتاج إلى التفتيش عن طرق جديدة وحديثة تلتف على الأفكار والمواقف القديمة، وتعزيز سيادة القانون وخاصة قانون حقوق الإنسان كأساس للنظام الدولي، وتعزيز السلام الدائم بين جميع الدول، عندها فقط يمكننا إعلان النصر على ما أسماه الشاعر الاسكتلندي روبرت بيرنز في القرن الثامن عشر: وحشية "الإنسان للإنسان".

# 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.

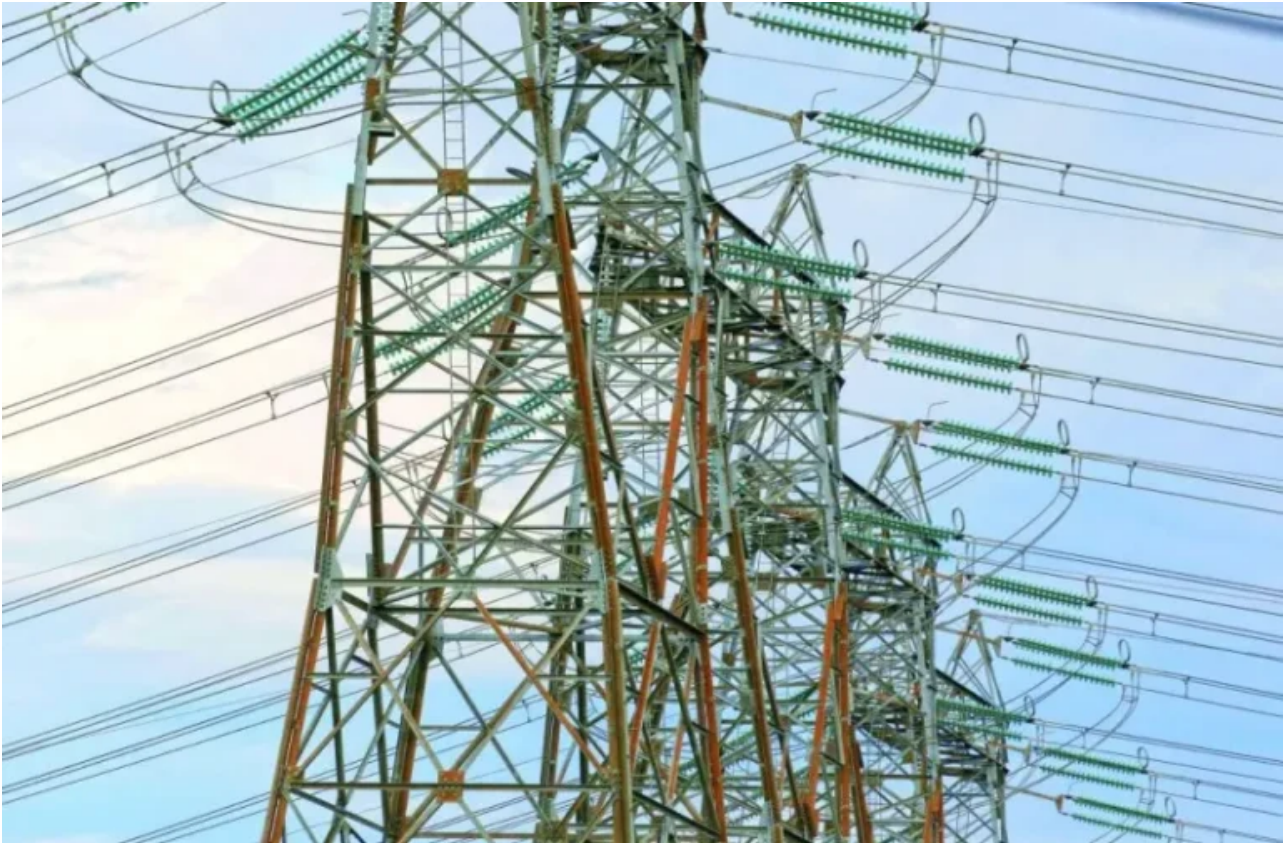
Aramco is expanding its portfolio into LNG at a time when global demand for the fuel has surged, particularly in Europe, which is replacing reduced pipeline supplies from Russia. It forayed into the global LNG market last September by acquiring a minority stake in EIG Partners' MidOcean Energy in a deal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

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## **Crunch time for the power sector**





Many of us take electricity for granted. We flip a switch and expect the light to turn on. But the capacity and resilience of power systems – generation, transmission, and distribution – are not guaranteed, and if these systems fail, it's lights out for the entire economy.

I recently participated in a meeting of the Power and Energy Society (PES), which operates under the aegis of the Institute of Electric and Electronic Engineers. The mood at the event – attended by more than 13,000 industry professionals from around the world, plus hundreds of companies exhibiting advanced equipment and systems – was upbeat and energetic. But, despite the prevailing “can-do spirit,” everyone at that meeting knew that the power sector is confronting tremendous challenges, beginning with the growing frequency of extreme weather events. Firms are now working to devise innovative ways to restore power more quickly after outages, and are investing in infrastructure that will increase resilience to shocks. This includes efforts to minimise the risk that the system itself will cause or exacerbate a shock, such as a forest fire.

Compounding the challenge, the power sector must make progress

on the green transition. That means reducing its greenhouse-gas emissions, while maintaining a stable power supply for the economy. Since renewables work differently from fossil fuels, this implies a transformation not only of power generation, but also of transmission and distribution, including storage. Meanwhile, demand for electricity is set to surge, owing to factors like electric-vehicle adoption and the rapid growth of data centres and cloud-computing systems. The power needs of artificial-intelligence systems, in particular, are expected to grow exponentially in the coming years. According to one estimate, the AI sector will be consuming 85-135 terawatt hours per year – about as much as the Netherlands – by 2027. To meet these challenges, all three components of the power system need to be integrated in so-called smart grids, which are managed by digital systems and, increasingly, AI. But developing smart grids is no small feat. For one thing, they require a host of devices and systems, such as residential smart meters and distributed energy resource management systems (DERMS), which are needed to manage multiple flexible and fluctuating energy sources and integrate them into power networks. And, because they are built on digital foundations, effective cybersecurity systems are essential to support stability and resilience.

None of this will come cheap. The International Energy Agency estimates that, if the world economy is to reach net-zero emissions by 2050, annual investment in smart grids will need to double – from \$300bn to \$600bn – globally through 2030. This represents a significant share of the estimated \$4-6tn that will be needed annually to finance the overall energy transition. But, so far, the required investment has not been forthcoming. Even in advanced economies, the smart-grid funding gap exceeds \$100bn.

Meeting all these challenges will require coordinated action across what are often highly complex systems. The US is a case in point. America's roughly 3,000 electric utilities operate in various combinations of generation, transmission, and distribution, as well as playing a market-making role as

intermediaries between generation and distribution. Each US state has its own regulators, and local distribution can be regulated at the municipal level. America's nuclear infrastructure is managed at the federal level, by the Department of Energy, which also funds research and, under the 2022 Inflation Reduction Act, finances investment in the power sector. And the US Environmental Protection Agency plays a major role in setting the direction and pace of the energy transition.

Other entities oversee the country's three major grid regions and the interconnections among them. For example, the not-for-profit North American Electric Reliability Corp is responsible for six regional entities that together cover all the interconnected power systems of Canada and the contiguous US, as well as a portion of Mexico.

Achieving the necessary transformation of power systems will require us to figure out how to finance the relevant investments, who will ultimately pay for them, and how a complex, technologically sophisticated, and rapidly evolving smart-grid system can be co-ordinated.

It is difficult to imagine how investment could be mobilized at the scale necessary without the financing power of national governments. This is especially true in the US, where there is no shared carbon price to level the playing field. It is thus good news that, last month, President Joe Biden's administration announced a range initiatives and investments designed to support and accelerate structural change in the power sector.

As for who should pay, the answer is complicated. In principle, investments that reduce costs or augment service quality and stability should be reflected in tariffs. The problem is that the investments that improve service quality must be spread across multiple entities that own different assets in the grid. Highly decentralised regulatory structures would make coordinating all these tariff changes and transfers unwieldy, at best.

When it comes to investments that advance the green energy

transition – including the global public good of emissions reduction – we know who should not pay: local communities. In fact, the implementation of local-level charges to finance such investments is bound to lead to inefficiencies and underinvestment. It would also be unfair: there is no good reason why consumers in areas with problematic legacy systems should pay more. If they are asked to, they are likely to resist.

A better approach would be to use an expanded federal industrial policy not only to help finance and especially to co-ordinate long-term investments in the power sector, but also to guide the development of a complex, interconnected smart-grid system. This system needs a banker and an architect working with firms, regulators, investors, researchers, and industry organisations like the PES to carry out a complex, fair, and efficient structural transformation. National governments need to be involved in filling both roles. – Project Syndicate

- *Michael Spence, a Nobel laureate in economics, is Emeritus Professor of Economics and a former dean of the Graduate School of Business at Stanford University and a co-author (with Mohamed A El-Erian, Gordon Brown, and Reid Lidow) of Permacrisis: A Plan to Fix a Fractured World (Simon & Schuster, 2023).*

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## **Climate change march: From Paris to Glasgow**



The latest IPCC report shows that we are dangerously close to 1.5C already. Every fraction of a degree matters

The COP26 climate conference will be a clarifying moment, poised between global co-operation and competition. As one of the key French officials tasked with delivering a deal at COP21 in Paris in 2015, I can attest to the weight of expectations placed upon this year's hosts, Italy and the United Kingdom.

The summit in Glasgow this November is by far the most fraught meeting of governments since Paris. Paradoxically, greater global integration continues alongside emerging fault lines, including the injustices of the Covid-19 pandemic and a growing desire for inward, nationalistic policies.

While global trade is on track to increase by 8% this year, after falling by 5.3% in 2020, the rollout of medical supplies along global supply chains has exposed deep sources of antagonism and rivalry. The issue of vaccine solidarity – compounded by wealthy countries earmarking trillions for their own economic recoveries – has seriously strained multilateral ties. COP26 is approaching under a cloud of tension.

This year's conference will test the spirit of co-operation that emerged in Paris, where – after several abortive efforts – 196 governments adopted the historic Paris accord and made “net zero” a geopolitical reality. The agreement has since provided the organising principle for all climate action – one that nation states, regions, cities, businesses, investors, civil society, and individuals all had a voice in, and can all act upon. This was people-powered multilateralism at its best. Six years later, we ought to be seeing a positive domino effect of bold pledges from states. Instead, we are watching a nervous game of poker. As with vaccines, wealthier countries are not sharing their wealth and technology.

Tellingly, the international community still has not met the Paris agreement's target of \$100bn per year for supporting climate investments in developing countries. This figure is a threshold, not an end goal: it is essential that we clear this hurdle for all parties at COP26 to know that wealthy countries mean business and are sincere in their solidarity.

Equally concerning is the absence of specifics for how G20 countries intend to meet abstract net-zero targets. Many remain fully locked into fossil fuels. Since these economies account for almost 80% of worldwide emissions, they must start including more concrete, comprehensive decarbonisation planning as part of their Nationally Determined Contributions (NDCs) under the Paris agreement.

The European Commission's new Fit for 55 plan shows how this can be done in a detailed, sector-specific way. Unfortunately, the European Union is the exception. Everyone else is still playing poker, even as the room fills up with water.

Just this year, climate-driven disasters have struck Brazil, Canada, Madagascar, China, Germany, Russia, the United States, and many others. There is no need to recall every cataclysmic weather event, because it is already sufficient to say that the problem has broken beyond our readiness.

As climate modelling improves, the path to remaining within 1.5C of warming is narrowing before our eyes. In early August, the latest report from the Intergovernmental Panel on Climate



Change (IPCC) showed that we are dangerously close to 1.5C already. Every fraction of a degree matters. The differences between a 1.5C world and a 2C world would be dramatic.

When we were negotiating the Paris agreement, the preceding G20 gathering was similarly fraught – some might say disastrous. Many felt the COP21 was doomed to fail as a result. But after weeks of intense work and dialogue, the Paris summit managed to exceed most expectations, mine included.

How can the UK and Italy steer the talks toward another successful outcome? If the parallels with 2015 offer any indication, the key for this final “sprint” is to emphasise that no-one, and no single country, can tackle the climate crisis alone. Because every single party to the United Nations Framework Convention on Climate Change has an equal say, any single signatory can cause negotiations to stumble. Good faith dialogue, concrete plans, and serious means to finance them are the only way forward.

There are some recent positive developments to build on. Earlier this year, South Korea and Japan – respectively the world’s second- and third-largest coal financiers after China – both pledged to end their public coal investments abroad.

But there are also clear areas where governments have more work to do. According to the International Energy Agency, staying on track for net-zero emissions by 2050 requires that no new coal, oil, or gas projects be started after 2021. That means all of the world’s largest emitters must immediately end coal investments abroad and clarify how they will phase out their own use of coal.

Only a sincere spirit of multilateralism can solve the imbalance at the heart of the climate crisis, the impacts of which are profoundly unfair. Countries that are hardly responsible for the problem’s escalation are the ones facing the most severe, often existential risks. Why would small island states negotiate themselves into submersion?

The Paris agreement was only possible because of its commitment to multilateralism, and this remains the best guide

to ensuring its relevance. It is telling that soon after a G20 climate meeting delivered few tangible positives this year, the world's Least Developed Countries issued a statement calling on their wealthier counterparts to "take responsibility."

Sovereign, competitive impulses will always strain the space for cooperation. But within that space, there are ample opportunities to achieve positive-sum outcomes – in technological innovation and adoption, for example. These instincts are rooted in the national interest, and thus should be responsive to the fearsome, increasing prospect of overshooting 1.5C.

In this spirit, some concrete steps to defuse tensions at COP26 would include a dedicated item for meaningful discussions on "loss and damage," while this summer's ferocious weather events still loom large in everyone's memory. The conference also must press the issue of financing for climate adaptation efforts as part of the broader drive to meet the minimum \$100bn per year target. Finally, G20 countries that have not delivered their NDCs must do so as soon as possible, demonstrating that their policies are sufficient to keep the world on a 1.5C pathway.

G20 countries anxious to promote their role as climate leaders must listen carefully to the warnings from others, particularly those on the front lines. If we see momentum on these fronts between now and November, the UK and Italy could herald COP26 as a success, keeping the 1.5C goal in our sights. – Project Syndicate

1 Laurence Tubiana, a former French ambassador to the United Nations Framework Convention on Climate Change, is CEO of the European Climate Foundation and a professor at Sciences Po, Paris.

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# Cheap imports threaten US solar panel production boom



US companies have announced plans to build dozens of solar panel factories across the country since last year when President Joe Biden's signature climate law unleashed billions of dollars of subsidies, raising hopes a clean energy boom can provide tens of thousands of good paying jobs.

But global solar panel prices have collapsed due to a wave of new Asian production capacity in recent months, leading many in the US solar industry to worry many of these proposed factories may be uneconomical. As many as half may soon be delayed or canceled, a figure not previously reported, according to Reuters interviews with industry analysts, solar companies, and trade groups.

Changing market forces have already derailed solar manufacturing operations in Europe. In recent days, the US race for a clean energy transition has already been hit by huge writedowns and project cancellations the offshore wind

industry.

“The more prices decline in the global market, the more difficult it is to build US local manufacturing,” said Eburne Zoco, executive director for clean energy technology at S&P Global Commodity Insights. “If the cost gap between imported modules and locally manufactured modules is too big ... many of these announcements might not happen.”

Solar shipments into the US more than doubled through August to \$10bn from about \$4bn a year earlier, according to the US International Trade Commission.

The domestic industry’s souring outlook could hurt Biden’s climate agenda and hinder reelection efforts for a president who has hailed solar project plans as proof his clean energy policies can create millions of good-paying jobs.

US solar manufacturers and trade groups have said they need more government help at the federal and state levels or those jobs may not materialise, and the US will keep relying on panels made with mainly Chinese components. US officials have repeatedly warned that over-reliance on Chinese clean energy technology could pose a security risk similar to Europe’s historical dependence on Russian natural gas.

A White House spokesperson did not respond to questions about recent market challenges facing domestic solar manufacturers, but said Biden’s policies had generated a huge wave of investment and were revitalising American manufacturing.

Companies have announced over three dozen solar factories since passage of the Inflation Reduction Act in August 2022 that collectively promised to create 17,000 jobs and bring in nearly \$10bn in investment, according to projects tracked by the clean energy business advocacy group E2.

Of eight solar company representatives, trade groups and researchers who spoke to Reuters, all eight agreed the market has worsened. Energy research firm Wood Mackenzie shared its new forecast that just 52% of the 112 gigawatts of solar module capacity companies planned will be online by the target date of 2026, a projection it has not previously made public.

Mike Carr, executive director of the Solar Energy

Manufacturers for America trade group, said factories could be delayed, extending US dependence on China.

“A misunderstanding of the policy opportunity here could really undermine a signature initiative of this administration, which is to restore manufacturing competitiveness to the United States, and particularly in such a key industry,” Carr said.

Globally, the solar industry has already absorbed a 26% drop in panel prices this year to about 19 cents per watt, according to S&P Global Commodity Insights. US prices have been more resilient, but SEMA and analysts say spot prices are declining for those without long-term contracts.

The increase in solar imports stems partly from a temporary waiver of tariffs on Malaysia, Thailand, Cambodia and Vietnam, which expires in June, 2024. Imports are also up sharply from India, Mexico and other nations unaffected by that move.

The IRA provides a decade of tax incentives worth 30% of a project’s cost. But industry consultant Brian Lynch said that could be outweighed by the glut of cheap panels and worries about rising costs for labor, raw materials and financing.

“It’s almost like Dr Jekyll and Mr. Hyde. The incentives to site and open up a US factory are phenomenal,” Lynch said. “But if pricing is going to continue to go down, if the continued gamesmanship on the trade is going to continue, they can’t justify it.”

The US Commerce Department said imported panels and cells remained important to the clean energy transition.

“Commerce is committed to holding foreign producers accountable to playing by the same rules as US producers,” a Commerce spokesperson said.

The IRA also contains a 10% bonus credit for panel manufacturers using American-made components. This perk is critical for domestic panels that may command a 40% price premium to imported alternatives, according to Wood Mackenzie. But so few components are produced domestically that much of the industry cannot secure that bonus. So far, solar module

factory announcements have been more than double those for solar cells, the crucial components that transform sunlight into energy.

The industry needs more government help, including “the right tax and trade policies that build on the IRA and similar state laws that create the space for emerging US solar manufacturers to compete on a global scale,” said Danny O’Brien, president of corporate affairs at Hanwha Qcells, which is making one of the largest investments in the domestic solar supply chain.

Meyer Burger, which plans to build a factory in Colorado, said the government needs to help domestic manufacturers deal with “underpriced products that are coming from Asia”.

The Solar Energy Industries Association (SEIA), a large solar trade group that has long opposed tariffs, is also advocating for more support for manufacturers, warning it does not expect that every proposed factory will be built.

Convult Energy plans next year to open 2 gigawatts of module capacity in New York and Maine followed by a facility for components in 2025. CEO Hari Achuthan said module production lines are already about four months behind schedule because the company’s financiers are waiting for the Treasury Department to issue crucial rules on how to secure the IRA tax credits.

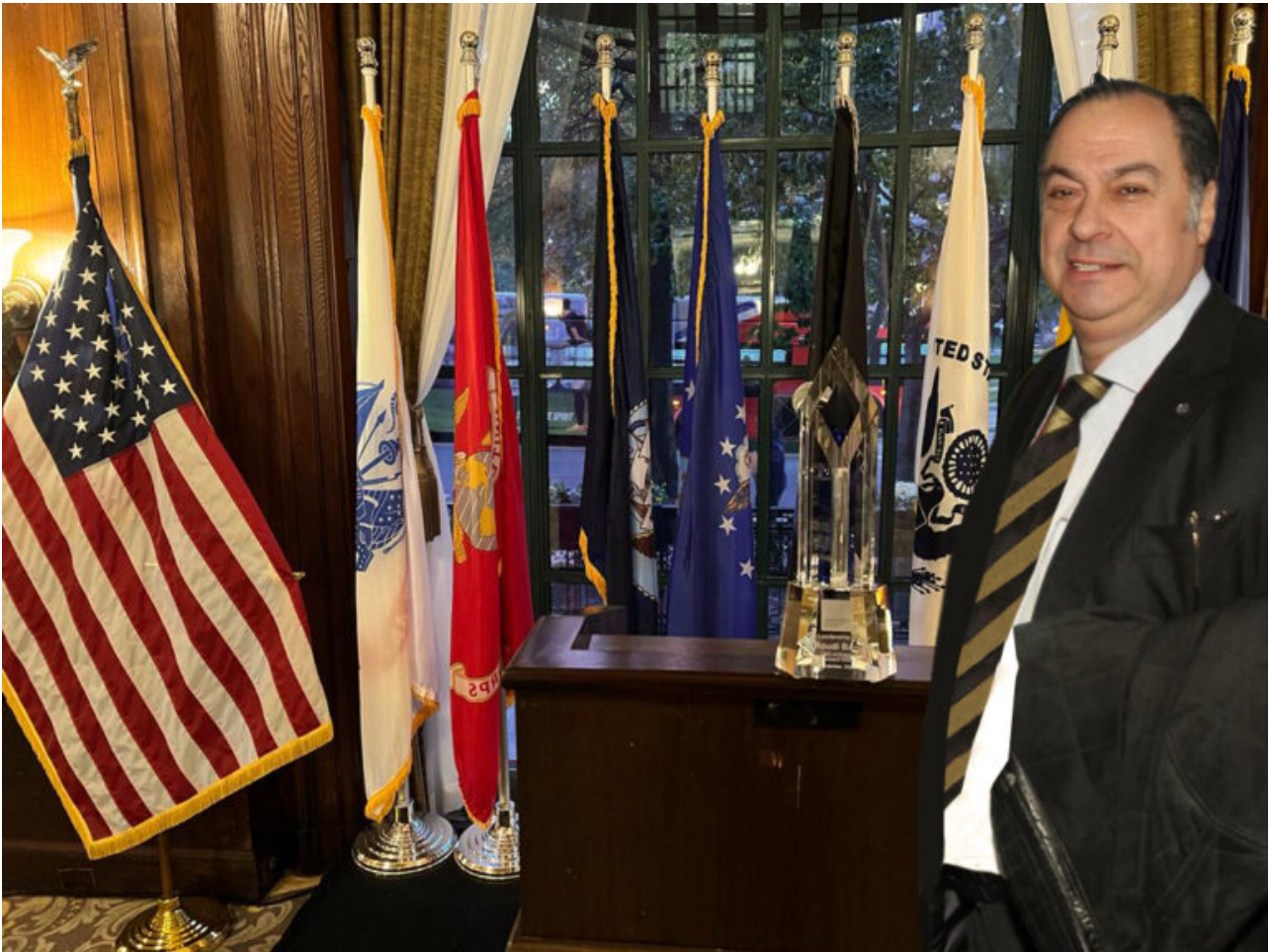
“Our country has done a phenomenal job seeing through the IRA bill. But now it’s going to come down to the details of the IRA and how we execute it and the support that we need to get from the Commerce Department and anybody else with regard to tariffs on imports,” he said. – Reuters

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## **Regional Energy Expert Roudi**



# Baroudi Earns Award from Washington Think Tank



## Transatlantic Leadership Network Recognizes Author for Contributions to Peaceful Development in Eastern Mediterranean

WASHINGTON, DC November 9, 2023: Doha-based Lebanese author Roudi Baroudi was one of two people presented with the 2023 Transatlantic Leadership Award at a ceremony in Washington this week.

Although circumstances relating to the conflict in the Gaza Strip prevented Baroudi from attending the event, both he and Joshua Volz – the Deputy Assistant Secretary for Europe, Eurasia, Africa, and the Middle East and the Office of International Affairs at the US Department of Energy – were recognized by the Transatlantic Leadership Network (TLN). Each was cited at a gala dinner on Monday for his “valuable

contribution in building a peaceful and prosperous Eastern Mediterranean” as part of the TLN’s 2nd Annual Conference on Freedom of the Media.

“I was deeply honored to be named a recipient of this prestigious award, and I will always be grateful for the many ways in which the TLN has supported my work for several years now,” Baroudi said. “I also look forward to working together in the future so that one day, our descendants can know the benefits of peace and coexistence. It is precisely in difficult and trying times that cooler heads must be able and willing to look at the reasons for current bloodshed and recrimination, then envision pathways to a better future.”

Baroudi, who serves as CEO of independent consultancy Energy and Environment Holding in Doha, is a long-time champion of dialogue, cooperation, and practical solutions to both the global climate crisis and recurrent tensions in the East Med. A regular speaker at regional energy and policy conferences, Baroudi’s insights are also avidly sought by local and international media, as well as governments, major energy companies, and investors.

Having advised both public and private sector actors on a wide variety of energy issues, Baroudi is widely credited with bringing unique perspective to all manner of policy discussions. He is the author of several books, including “Maritime Disputes in the Eastern Mediterranean: The Way Forward” (2021), and “Climate and Energy in the Mediterranean: What the Blue Economy Means for a Greener Future” (2022). Together with Notre-Dame University – Louaize, Baroudi has also published a study of the US-brokered October 2022 Maritime Boundary Agreement between Lebanon and Israel, and is currently preparing another volume on Lebanon’s prospects for similar deals with Cyprus and Syria.

The TLN describes itself as “a nonpartisan, independent, international network of practitioners, private sector leaders

and policy analysts dedicated to strengthening and reorienting transatlantic relations to the rapidly changing dynamics of a globalizing world.”

Monday’s ceremony was attended by a broad cross-section of high-profile figures, including senior officials from the Departments of Energy and State, numerous members of Washington’s extensive diplomatic corps, and representatives of both international organizations and various media outlets.

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## Transport minister leads team to Tbilisi Belt and Road Forum



Qatar is participating with a delegation headed by HE the Minister of Transport and Communications Jassim Seif Ahmed al-

Sulaiti in the Tbilisi Belt and Road Forum, which was inaugurated on Tuesday in Tbilisi, Georgia, under the theme: "Partnership for Global Impact".

Inaugurated by the Prime Minister of Georgia, Giorgi Gakharia, on Tuesday, the forum saw the attendance of over 2,000 participants from 60 countries, including heads of states, ministers, diplomats and representatives of international and business organisations.

In his opening speech, Gakharia stressed the importance of the new Silk Road in modern economic integration and globalisation, saying that the participation in the initiative is among the top priorities of the Georgian government.

Georgia was one of the first countries applauding the China-proposed Belt and Road Initiative (BRI) to create new trade corridors between Europe and Asia and improve existing ones, he said.

The Tbilisi Silk Road Forum, he said, is "an important opportunity" and a platform on which the countries involved in the BRI, international organisations and the private sector discuss regional economic challenges and explore ways to overcome the challenges and share experience.

The forum is being held for the third time in Tbilisi.

It is opened by the Prime Minister of Georgia and organised by the Georgian ministries of foreign affairs, economy and sustainable development and supported by China and the Asian Development Bank.

The mission of the forum is to serve as an international platform for multilateral high-level dialogue among senior policymakers, businesses and community leaders to discuss important issues on trade and connectivity, examine challenges facing countries along the New Silk Road connecting East and West, and find common solutions that have a positive impact on

the region and the global economy.

Day 1 provides opportunities to discuss a full spectrum of issues related to trade, artificial intelligence (AI), transport and energy in separate panel discussions, and Day 2 focuses on the private sector and investment opportunities in Georgia.

Meanwhile, Prime Minister Gakharia met HE al-Sulaiti in Tbilisi on Tuesday. The meeting reviewed bilateral relations between Qatar and Georgia in the fields of transportation, mobility and communications and means of further enhancing them, in addition to discussing a number of topics of common interest.