Carbon Capture and Delay



As long as coal plants are still operating, it is a good idea to require them capture their carbon dioxide emissions. But those designing policies to hasten such practices must tread carefully, lest they unwittingly extend the life of dirtier energy sources.

NEW YORK — In May, the US Environmental Protection Agency proposed new power-plant rules that would effectively require every existing coal- or gas-fired plant in the United States either to capture and store most its carbon dioxide emissions, or to switch to burning low-emissions "green hydrogen." Yet it would be cheaper to replace America's more than 200 coal-fired plants with new solar or wind facilities, and then to do the same with its gas plants soon thereafter.

This claim will surely be met with cries of: "It's not that simple! You also have to account for the Earth's rotation, cloud cover, and a lack of wind." Indeed, one also must acknowledge ever-present NIMBYism, long-term energy contracts, and other complexities that stand in the way of immediately swapping coal for solar. But nobody is seriously suggesting shutting down every fossil-fueled power plant everywhere all

at once. The transition will take time.

Time, of course, is relative. Even the new EPA rules would be phased in gradually, with the real bite coming only in the next decade. But we can't wait for the EPA's rules to bite and force the changes, nor should we. And the "we," in this case, includes everyone from consumers to local energy regulators to utility executives and banks planning their investment decisions.

Carbon capture and storage (CCS) is a godsend, and green hydrogen has the potential to be one, too. But, looking to the next decade and beyond, we also will be deploying many other advanced climate-tech solutions, from better batteries to smarter grids. Given the urgency of the climate crisis and all the new technologies coming down the pike, it makes little sense to wait for the EPA's new rules to force changes years from now.

Power-plant economics are changing fast. In 2019, the think tank Energy Innovation published its first "coal cost crossover" report, which found that 62% of US coal plants were more expensive to run than to replace with local solar or wind generation. By 2021, that figure had risen to 72%; and as of earlier this year, it was 99%. With the exception of one coal plant in Wyoming, it would be cheaper to produce electricity with solar or wind, plus battery storage, than to keep the existing coal fleet up and running.

While the 2023 figure accounts for the expanded solar and wind tax credits under the Inflation Reduction Act, it does not include additional incentives like those provided by the IRA's loan program, which utilities can tap to help finance renewables. More to the point, it came before the new EPA proposals, raising the question of what effects these rules might have.

For the most part, the EPA's rule changes are standard

regulatory fare, reflecting the need to pass muster with a Supreme Court that is intent on curtailing federal regulators' powers. Instead of allowing for flexibility in achieving carbon-reduction goals, the EPA is taking a more direct approach, essentially mandating that existing coal plants capture and store their released carbon. But especially in connection with generous IRA subsidies for CCS technology, US policymakers may be unwittingly throwing a lifeline to coal plants that would otherwise be economically unviable.

When considered in isolation, the EPA rule is clearly good for the environment and for public health, since it would significantly decrease particulate matter and ozone pollution. But assessments of CCS tend to get murky fast. Lest we forget, Donald Trump and his advisers were big fans of the technology, which they saw as a way "to help coal and still help the climate."

Since combining CCS with coal will always be more expensive than burning coal outright, mandating CCS, in theory, should indeed make coal even less competitive than it already is. But CCS mandates do not operate in a vacuum.

In practice, operating licenses for coal plants are not issued by the same people writing federal rules. These decisions are made at the state and local level, primarily through state-level public utility commissions that have many competing priorities. Even if they are committed to decarbonizing, one important goal is to keep the lights on. That goal, in turn, has all too often been interpreted as keeping current generation capacities profitable. When faced with new CCS mandates and accompanying subsidies, they may simply see an opportunity to maintain coal-plant profitability for longer.

How can federal policymakers get around this problem? Broadly speaking, the focus should be on pushing cheaper solar and wind power into the system, as that will force coal- and gasplant operators' hands. We also need better, nimbler planning

and investment processes, to allow for grid-connection rights to be reassigned from coal plants to renewables that would be built in their stead. As matters stand, most US states do not give consumers a choice about how their electricity is generated. That needs to change.

As long as coal plants are still operating, it is a good idea to make them capture their CO_2 emissions. But that does not mean it is a good idea to be helping them continue to operate. The sooner that coal is replaced by renewables, the better it will be for the planet, consumers, and even utility companies.

Qatar second top global LNG exporter, top GECF exporter in June



Qatar was the second top global LNG exporter in June, latest data from the Gas Exporting Countries Forum (GECF) has shown. Among the GECF member countries, Qatar topped in liquefied natural gas exports last month.

Total global LNG exports reached 32.18mn tonnes during June. The increase in LNG exports from non-GECF countries and a rise in LNG reloads outweighed the lower LNG exports from GECF member countries.

The share of non-GECF countries and LNG reloads in global LNG exports increased from 50% and 0.6%, respectively, from a year earlier to 50.4% and 0.8% in June 2023.

Conversely, GECF's market share in global LNG exports decreased from 49.4% to 48.8%.

During H1, 2023, cumulative global LNG exports reached 205.45mn tonnes, indicating a 4.1% increase (8.06mn tonnes) you.

Last month, the US, Qatar and Australia were the top LNG exporting countries, GECF noted.

In June, LNG exports from GECF member countries and observers declined by 1% (0.15mn tonnes) y-o-y, reaching a total of 15.69mn tonnes.

The weaker LNG imports were driven by Russia, Egypt, Nigeria, Malaysia, Equatorial Guinea, Norway and the United Arab Emirates.

Conversely, LNG exports increased in Qatar, Angola, Algeria, Mozambique, Trinidad and Tobago and Peru.

During H1, 2023, cumulative LNG exports from GECF member and observer countries increased by 2.2% (2.13mn tonnes) y-o-y, totalling 99.93mn tonnes.

In Russia, higher maintenance activity at the Sakhalin 2 and Yamal LNG facilities led to a reduction in LNG exports, the report said.

Lower feedgas availability in Egypt and Nigeria contributed to the decline in LNG exports in both countries.

In June, Egypt did not export any LNG cargo.

The decline in Malaysia's LNG exports was mainly attributed to weaker exports from the Bintulu LNG facility.

An unplanned outage at the Hammerfest LNG facility caused a drop in LNG exports from Norway.

On the other hand, lower maintenance activity at the Qatargas LNG and Soyo LNG facilities boosted LNG exports from Qatar and Angola.

In Algeria and Trinidad and Tobago, higher feedgas availability supported the increase in LNG exports from both countries.

The continued ramp-up in LNG exports from the Coral South FLNG facility drove Mozambique's LNG exports higher.

In June, global LNG imports expanded sharply by 6.8% (2.09mn tonnes) y-o-y to reach 32.85mn tonnes.

This growth was primarily driven by a strong rebound in Asia Pacific's LNG imports, with higher imports in Europe and Latin America and the Caribbean (LAC) also having some contribution. Conversely, the Middle East and North Africa (Mena) region experienced a decline in LNG imports.

During the first half (H1) of 2023, cumulative global LNG imports grew by 4% (7.95mn tonnes) y-o-y to 206.62mn tonnes.

The bulk of the increase in global LNG imports during H1 2023 came from Europe, followed by Asia Pacific, LAC and North

America. This offset the lower LNG imports in the Mena region, GECF noted.

Qatar's LNG projects will achieve significant reductions in greenhouse gas emissions: Al-Kaabi



Qatar's LNG projects will achieve significant reductions in greenhouse gas emissions through carbon capture and sequestration as well as the use of solar energy, noted HE the Minister of State for Energy Affairs Saad Sherida al-Kaabi.

"In all, we aim to reduce the overall carbon intensity by about 30% compared to previous generation designs," al-Kaabi said delivering the keynote address on the virtual mode at the 12th LNG Producer-Consumer Conference being held in Tokyo, Japan.

Al-Kaabi, who is also the President and CEO of QatarEnergy stressed the need for a clear roadmap with specific targets to achieve a fair and effective energy transition with a realistic and stable path towards the reduction of the global carbon footprint.

The minister said, "I would like everyone around the world calling for a speedy energy transition to consider that the world needs a fair and effective transition with a realistic and stable path, which wisely balances humans flourishing with environmental protection, it should not continue to only focus on the needs of the rich and well-developed countries but must prioritise the needs of developing countries.

"This highlights the need for a realistic and resolute energy transition, starting with a solid integration of natural gas in the energy mix of today and tomorrow. We strongly believe that Gas will be needed as a safer reliable base load in the energy mix for most nations for decades well beyond 2050."

Highlighting the challenges facing the energy industry, Minister al-Kaabi said, "Lack of investments in the oil and gas upstream sector remain as an unresolved and unchallenged chronic problem, contributing to greater lack of clarity, volatility, and supply uncertainty. This lack of investment will likely cause increased instability for every region around the world."

In this context, al-Kaabi said, "Qatar is providing the world with the cleanest available hydrocarbon source of energy, which has met both the economic and environmental aspirations for a better future. By 2029, about 40% of all new global LNG supplies will be provided by QatarEnergy projects.

Minister al-Kaabi concluded his remarks by stressing the State of Qatar's determination to work with its clients and partners to realise the full potential of LNG as a vital contributor to a realistic and responsible energy transition, and to continue to take concrete action across the entire spectrum of the energy industry to address the challenges of climate change.

The LNG Producer-Consumer Conference is a global annual dialogue, launched in 2012, organised by Japan's Ministry of

Economy, Trade and Industry, and the Asia Pacific Energy Research Centre.

It provides ministers, heads of international organizations, corporate executives, and other stakeholders with a venue to share the latest trends in the global LNG market and discussing opportunities and challenges with a view to its development.

تنـبيه… كـي لا تذهـب الثـروة النفطي^سة إلى المجهول



يقترب لبنان من ساعة الصفر في مجال الاسكتشافات النفطية البحرية، التي تعاقدت معها شركة Transocean Barents خصوصا أن سفينة الحفر لإتمام عمليات الاستكشاف في البلوك رقم Total -Energies 9 والموجودة حاليا في النروج، ستنتقل إلى لبنان في تموز الجاري .

هـذا مـا يؤكـده خـبير الطاقـة الـدولي رودي بـارودي فـي حـديث لــ"المركزية"، ويشير إلى أن "هذا التطو"ر الهام يعني أن شركة "توتال" تقوم بواجباتها التعاقدية إن لناحية استكمال التجهيزات التقنية واللوجستية، أو لناحية البدء الفعلي بعمليات الحفر والاستكشاف في هذا الحقل". ويقول إن "عملية ترسيم الحدود البحرية مع إسرائيل كانت ضرورية للبدء بهذا العمل المهم، خصوصاً لجهة طمأنة تحالف الشركات الدولية... كما أن هذا الترسيم سيسمح بفرز مكامن النفط والغاز ضمن المناطق المتداخلة مع إسرائيل فوراً، موضحاً أن "قانون البحار ،"Total-Energies وذلك من خلال اتفاقية هو آلية أساسية لتسوية جميع المشاكل سلمياً، إذ أن الدول تستطيع اللجوء إليه ساعة تشاء لترسيم حدودها البحرية المتنازع عليها وهو المرجع الصالح لأحكام وقرارات المحاكم الدولية والتحكيم والمعاهدات الثنائية، ما يؤم"ن استقراراً مطلوباً لجذب الشركات والمعاهدات النفط والغاز

وفي هذا السياق، يلفت إلى أن هناك "أربعة بلوكات إسرائيلية وهي 74 و27 و36 و70 التي ستُطرح للمزايدة، تتجاوز جنوبًا المنطقة E4 – الاقتصادية المصرية الخالصة وتقتطع من البلوك المصري رقم مساحة ١٤٠ كيلومتراً مربعاً، أي ما يوازي خمس مرات مساحة حقل "زهر"، وعلى الرغم من أن مصر وإسرائيل ليس لديهما توقيع رسمي فمن خلال المفاوضات واستناداً إلى القانون ، MBL للحدود البحرية الدولي، يمكن تقاسم العائدات في المناطق المختلطة، من هنا فإن هذا التعدي أو التداخل لم يمنع الجانبان المصري والإسرائيلي من تعيين موعد للمناقصات في 16 تموز 2023 أي بعد حوالي الأسبوعين…أما لبنان كما أسلفنا ذكره، فيمكنه تحصيل عائدات المناطق المتداخلة لمن خلال اتفاقية "توتال إنريجي" الموق عق مع إسرائيل

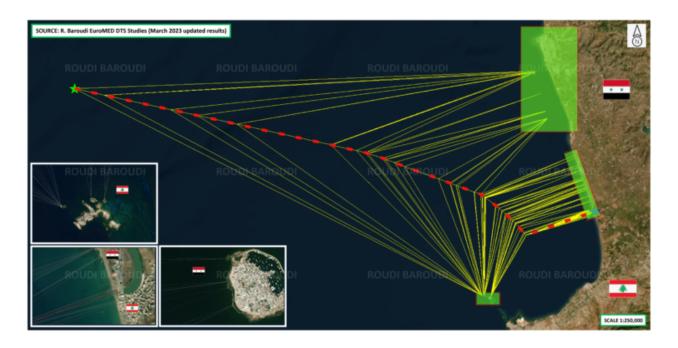
الإصلاحات أولويّة وإلا..

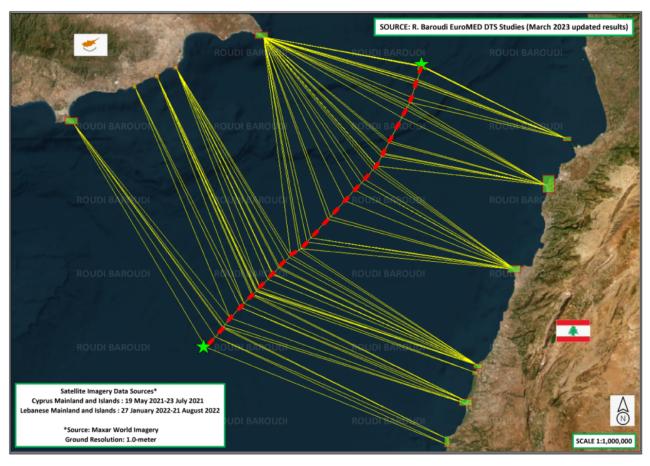
ويشدد بارودي على أن "الإصلاحات الاقتصادية والمالية والقانونية المطلوبة من المجتمع الدولي والهيئات الاقتصادية اللبنانية، تبقى أولوية من أجل الاستفادة من الثروات النفطية التي يمكن أن تتكشف في المياه اللبنانية، إذ أن الحوكمة الصحيحة هي التي تؤمّن الاستعمال الصحيح للثروة النفطية... فمن هنا ضرورة ان تقوم الحكومة فوراً بإصلاحات جذرية تبدأ بالاعتماد على خارطة الطريق المقترحة من قبل صندوق النقد الدولي، وضرورة إقرار قانون لصندوق سيادي مستقل شفاف على مثال البلدان التي سبقتنا في هذا المجال وإلا فإن مصير الثروة النفطية سيكون مشابها لغيرها من الثروات التي هدرت نتيجة الثروة النفطية سيكون مشابها لغيرها من الثروات التي هدرت نتيجة

وليس بعيداً، يوضح أن "غياب الإصلاحات وسيادة القانون سيمنعان شركات النفط الدولية الكبرى من القدوم والاستثمار في بلد يحتاج إلى مداخيل مالية جديدة وشفافة، ولعل ّالتمديد الجديد لمهلة تقديم طلبات الاشتراك في دورة التراخيص الثانية في مياه البحرية اللبنانية التي انتهت في 30 حزيران حتى الثاني من تشرين الأول 2023، أكبر دليل على أن غياب الإصلاحات وتردّي الأوضاع السياسية والمالية وعدم تحسّن سمعة لبنان في مكافحة الفساد، ستمنع من تحقيق تقد م فاعل في عمليات الاستكشاف، كما يرضاف إلى هذه المشكلة التباطؤ في استكمال عملية ترسيم الحدود البحرية مع قبرص، والتأخر البحرية مع سوريا .

لبنان يتمتع بمزايا كثيرة" يختم بارودي، منها "ديناميكية شعبه"… وشمسه وبحره وجباله بالاضافة الى حسن الضيافة، وقريبا جدا قد يتمتع باستكشافات غازية ونفطية واعدة تمكّنه في حال استغلالها بطريقة مستدامة وشفافة، من وضع لبنان على الطريق الصحيح في عملية ."النهوض الاقتصادي والمالي التي يحتاج إليها

الحدود البحرية لشرق البحر الأبيض المتوسط: حاجة لبنان إلى إكمال ترسيم الحدود البحرية من خلال إبرام إتفاقيات مع قبرص وسوريا - خبير طاقة متخصص





أثينا، اليونان — 25 حزيران 2023: صرّح خبير طاقة إقليمي في مؤتمر عالمي للطاقة في أثينا يوم الأربعاء أنه على لبنان استكمال اتفاقية ترسيم الحدود البحرية مع إسرائيل الموقعة العام الماضي من خلال السعي لاتفاقات مماثلة مع قبرص وسوريا.

Energy and إعتـبر رودي بـارودي، الرئيـس التنفيـذي لشركـة

وهي شركة استشارية مستقلة مقرها الدوحة، ،Environment Holding قطر: "يجب أن يتابع لبنان مفاوضات مفتوحة وموضوعية مع هذين الجارين، على لبنان محاورة الدولتين حتى يتم رسم الحدود البحرية ".بين لبنان وسوريا وقبرص بالكامل وتسويتها رسميًا

وفي حديثه إلى الحاضرين من قادة قطاع النفط والغاز وكبار المسؤولين الحكوميين في قمة أثينا للطاقة، أشار بارودي إلى عدة أسباب لإعطاء الأولوية لمثل هذه الاتفاقيات، بما في ذلك حقيقة أن لبنان وسوريا لديهما «مجموعات نفط وغاز بحرية محددة تتداخل .«بهوامش كبيرة

وإعتبر أنه «إذا لم يتم تصحيح ذلك، فقد تعني النتائج أن المستثمرين سيبقون بعيدين عن كلا الجانبين، أو سيبطئون في أنشطتهم الاستكشافية، أو حتى أن العلاقات قد تتدهور بين البلدين ». «وان أي «من هذه التطورات من شأنه أن يقوض مصالح جميع المعنيين.

وحد ّد بارودي ملاحظاته بضرورة التزام الدول الساحلية بسيادة (UNCLOS).

وأوضح أن «قواعد اتفاقية الأمم المتحدة لقانون البحار متاحة للجميع، وقد تم تحديد معانيها بشكل أكبر من خلال قرارات المحاكم والتحكيم والمعاهدات الثنائية، والتكنولوجيا المطلوبة لتحديد الحدود العادلة هي في متناول جميع الدول تقريبًا». "ما يعني عمليا أنه يمكن أن تدلي به عمليا أنه يمكن أن تدلي به المحكمة أو المحكم حول مطالباتها بالحدود البحرية، طالما أن هناك المحكمة .

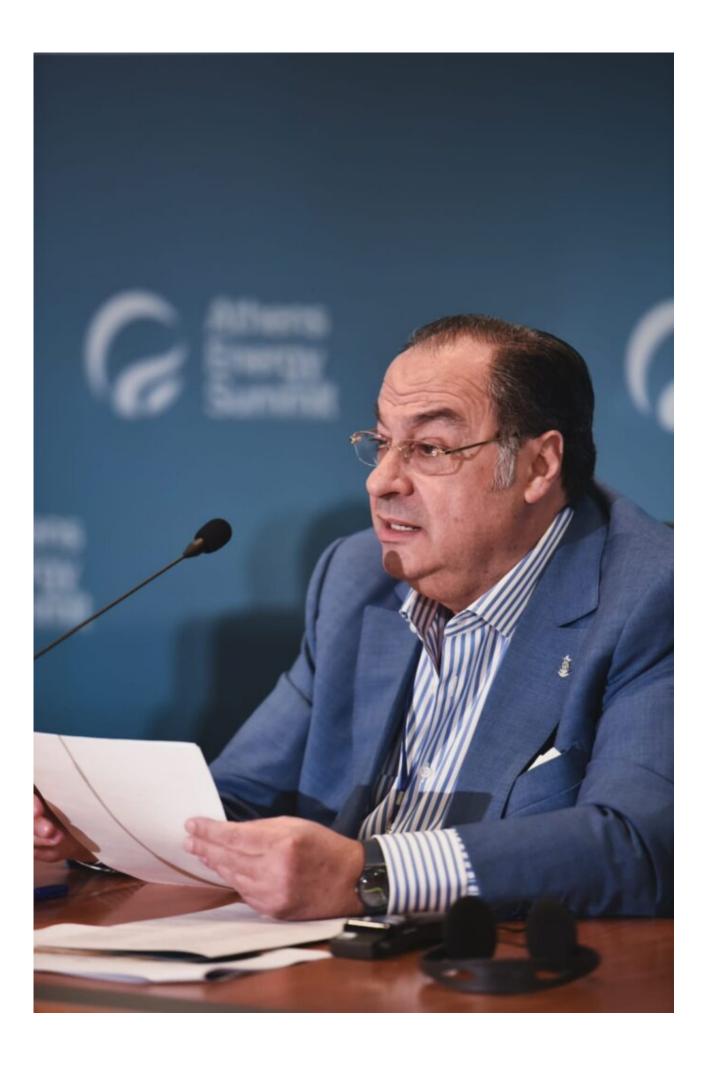
واردف بارودي إنه بالإضافة إلى حماية مصالحهم الخاصة، فإن لبنان وجيرانه سيضربون أيضًا مثالاً مفيدًا لدول البحر الأبيض المتوسط الأخرى في حل النزاعات الحدودية حبيا.

وأشار على وجه التحديد إلى حالة تركيا واليونان وقبرص، حيث يهدد عدم وجود حدود بحرية تركية — قبرصية وتركية — يونانية مستقرة بعرقلة تنفيذ خط أنابيب مخطط لنقل غاز شرق البحر المتوسط إلى البر الرئيسي الاوروبي. حيث يـُنظر إلى هذا المشروع على أنه أمر بالغ الأهمية لخطط أوروبا لاستبدال واردات الطاقة من روسيا، والتي تم تقليصها بشكل حاد منذ غزو الأخيرة لأوكرانيا عام 2022، خصوصا وان الرئيس التنفيذي لشركة الطاقة الإيطالية العملاقة إيني حذر

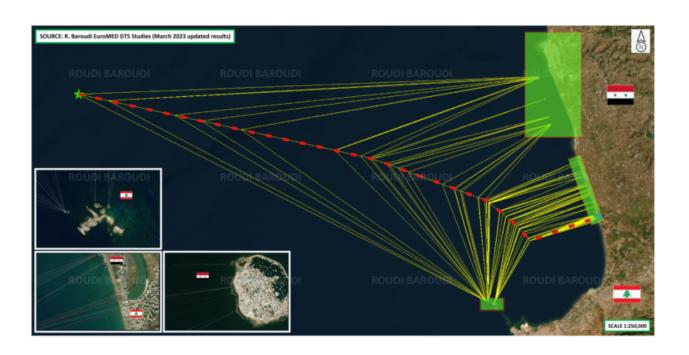
وقال بارودي «الأتراك واليونانيون والقبارصة يختلفون حول أشياء كثيرة، لكن لديهم أيضًا مصلحة مشتركة في كل من التنمية». الاقتصادية، وبالتالي في الاستقرار المطلوب لتسريع هذه التنمية». واضاف في هذا المجال فان « اتفاقية الأمم المتحدة لقانون البحار توفر آلية موثوقة، متجذرة في العلم وتطبيقها القائم على القواعد، يمكن أن توفر الإطار لبدء مناقشة اختلافاته هذه الدول بطريقة خاضعة يمكن أن توفر الإطار لبدء مناقشة اختلافاته هذه الدول بطريقة خاضعة .«للرقابة

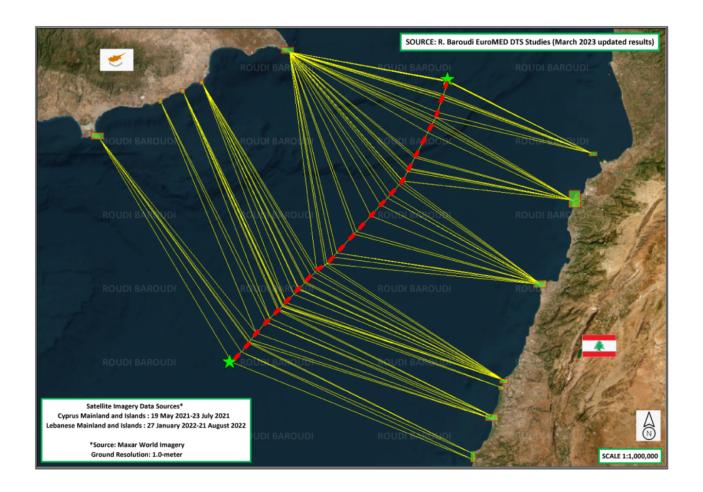
وقد تضمن عرض الدراسة من قبل بارودي أيضًا الكشف عن العديد من الخرائط الحصرية ، بناءً على صور الأقمار الصناعية، والخدمات الجيوتقنية الأخرى. وتشير الخرائط إلى المكان الذي يحتمل أن تحدد فيه الحدود البحرية المقبلة، وفقا للقواعد التي وضعتها اتفاقية .

رودي بارودي، وهو من المختصين في صناعة الطاقة منذ أربعة عقود ولديه خبرة في كل من القطاعين العام والخاص، هو أيضًا مؤلف العديد من الكتب حول هذا الموضوع، بما في ذلك «النزاعات البحرية في البحر الأبيض المتوسط: الطريق إلى الامام». هذا العمل، الذي نشرته شبكة القيادة عبر الأطلسي في عام 2021، اصاب حينما توقع أنه يمكن حل الاتفاقية اللبنانية الإسرائيلية باستخدام المبادئ التوجيهية لاتفاقية الأمم المتحدة لقانون البحار كنموذج واستخدام الحدودي .حلول غير تقليدية لجوانب معينة من نزاعهما الحدودي



Eastern Mediterranean Maritime Boundaries: Lebanon needs to complete maritime borders by striking deals with Cyprus and Syria – veteran energy expert





ATHENS, Greece — June 25, 2023: Lebanon should follow up last year's maritime boundary agreement with Israel by seeking similar deals with Cyprus and Syria, a regional energy expert told a high-profile energy conference in Athens on Wednesday.

"Lebanon should be pursuing open and unbiased dialogues with both of these neighbors, and the parties should continue the talks until their boundaries are fully mapped and officially settled," said Roudi Baroudi, CEO of Energy and Environment Holding, an independent consultancy based in Doha, Qatar.

Speaking to an audience of industry leaders and senior government officials at the Athens Energy Summit, Baroudi cited several reasons to prioritize such agreements, including the fact that Lebanon and Syria have each "designated offshore oil and gas blocks that overlap by considerable margins."

"If these are not rectified, the results could mean that investors will stay away from both sides, or they will slow-

walk their exploration activities, or even that relations could deteriorate," he told the audience. "Any one of these developments would undermine the interests of all concerned."

Baroudi rooted his remarks in the need for coastal states to abide by the rule of law, in particular the United Nations Convention on the Law of the Sea (UNCLOS).

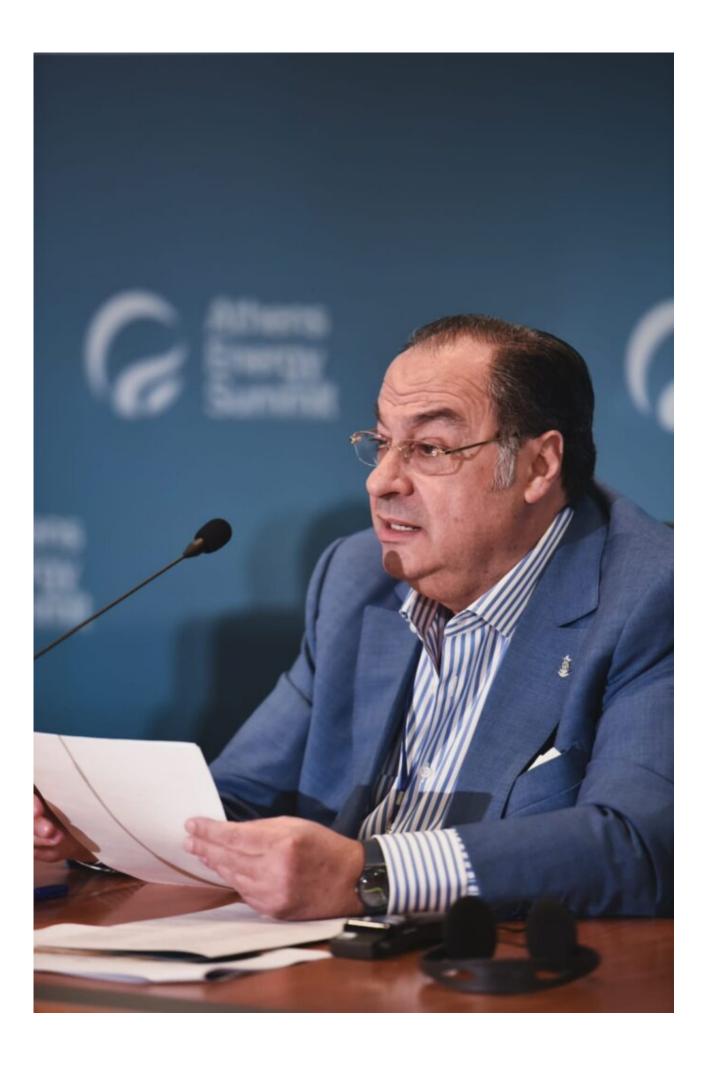
"The UNCLOS rules are available to all, their interpretation has been further defined by court verdicts, arbitration, and bilateral treaties, and the technology required to determined fair boundaries is within the financial grasp of virtually all states," he explained. "What this means in practice is that governments can know in advance what a court or an arbitrator would say about their maritime boundary claims. So long as there is good will on both sides, this radically simplifies the process."In addition to protecting their own interests, Baroudi argued, Lebanon and its neighbors would also be setting a useful example for other Mediterranean countries.

He pointed specifically to the case of Turkey, Greece, and Cyprus, where the absence of settled Turkish-Cypriot and Turkish-Greek maritime boundaries threatens to block a planned pipeline that would carry East Med gas to mainland. That project is seen as a crucial for Europe's plans to replace energy imports from Russia, which have been sharply curtailed since the latter's 2022 invasion of Ukraine, but the CEO of Italian energy giant Eni recently warned that it would not go forward without Turkish approval.

"The Turks, the Greeks, and the Cypriots disagree about many things, but they also have a shared interest in both economic development and, therefore, in the stability required to accelerate it," Baroudi said. "UNCLOS provides a reliable mechanism, rooted in science and a rules-based application thereof, which could provide the framework for them to start discussing their differences in a controlled manner."

Baroudi's presentation also included the unveiling of several exclusive maps he commissioned from one of the world's leading providers of high-precision mapping, based on satellite imagery, and other geotechnical services. The maps indicate where, following the rules laid down by UNCLOS, the future maritime boundaries are likely to be situated.

A four-decade veteran of the energy industry with experience in both the public and private sectors, Baroudi is also the author of several books on the subject, including, "Maritime Disputes in the Mediterranean: The Way Forward". That work, published in 2021 by the Transatlantic Leadership Network, rightly predicted that the Lebanon-Israel agreement could be resolved by both using the UNCLOS guidelines as a model and employing unconventional remedies to certain aspects of their boundary dispute.



Saudi Arabia's Oil Cut Risks Leaving Bitter Taste for Budget



Saudi Arabia's plan to slash oil production by around 10% may hit its finances hard.

Sunday's decision, which will see the kingdom lower crude output to 9 million barrels a day next month and perhaps beyond, has failed to boost prices much. Oil futures have risen less than 1% since Energy Minister Prince Abdulaziz bin Salman announced the unilateral cut after an OPEC+ meeting.

The prince, speaking in Vienna, described it as a "lollipop" for other members of the producers' cartel.

The kingdom's fiscal outlook was worsening even before this weekend. The budget was in deficit for the past two quarters as oil dipped, while spending on salaries and massive tourism and infrastructure projects soared.

The International Monetary Fund estimates Riyadh will need an oil price of almost \$81 a barrel to balance its books this year, which is above Brent's current level of around \$77.

The situation is starker when Crown Prince Mohammed bin Salman's giga-projects such as the new city of Neom are taken into account. The IMF mostly excludes those because they're largely funded by the sovereign wealth fund and other state entities, rather than directly from the government's budget.

If those are included, Saudi Arabia's breakeven oil price rises to \$95 a barrel, according to Bloomberg Economics.

The Saudi government is more optimistic and expects to post an annual fiscal surplus of \$4.3 billion for this year.

The kingdom was the fastest-growing economy in the Group of 20 last year, as Russia's invasion of Ukraine roiled energy markets and pushed oil above \$125 a barrel. It also pumped an average of 10.5 million barrels a day, an annual record.

Saudi Arabia's Solo Oil Cut Is a Risky Strategy: Javier Blas

The latest production cut means the economy will probably grow 0.7% in 2023 instead of 1%, according to Monica Malik, chief economist at Abu Dhabi Commercial Bank PJSC.

It "will also increase Saudi Arabia's budget breakeven oil price if all other things remain equal," said Malik.

Many energy analysts, as well as the Organization of the Petroleum Exporting Countries, expect the oil market to tighten in the second half of the year as demand in China and India picks up further. That could bolster prices, outweighing the financial impact on Saudi Arabia of its lost

production.

But plenty of traders are bearish, saying high interest rates and economic weakness in the US and Europe will weigh on oil prices for at least the rest of the year.

Riyadh's move to lower output is "unlikely to underpin a sustainable price increase," said Citigroup Inc. analysts including Ed Morse. "Demand is looking weaker and non-OPEC supply stronger by year-end than many analysts had forecast."

If oil doesn't jump, "we expect that additional production cuts will be more prolonged and the impact on the fiscal balance will be more negative" for Saudi Arabia, said Amy McAlister, lead economist for Europe, Middle East and Africa at Oxford Economics.

With assistance by Paul Abelsky

Climate science beats climate fatalism



The Paris climate agreement's goal of limiting global warming to 1.5C is in the headlines again. According to the latest projections from the World Meteorological Organisation, "There is a 66% likelihood that the annual average near-surface global temperature between 2023 and 2027 will be more than 1.5C above pre-industrial levels for at least one year." A supercharged El Niño cycle means that record-breaking temperatures are almost certain.

But, as concerning as these warnings are, it would be even more worrying if one year above 1.5C was taken as a sign that the 1.5C target has been missed. Drawing that erroneous conclusion would lead us to abandon the Paris agreement's goal just when we should be doubling down on it.

The 1.5C goal will not be lost with just one or a few years of extreme temperatures. The Paris goal refers to human-caused temperature increases that are measured over the course of decades. We must keep this firmly in mind to stave off the dangerous climate fatalism that has been gaining momentum in recent years.

Yes, now that the planet has warmed roughly 1.2C above pre-

industrial levels, "once-in-a-century" heatwaves, forest fires, and floods are becoming more familiar to us. In some low-lying regions, rising seas are already forcing people to relocate. But there is still a massive difference between 1.2C and 1.5C — let alone between 1.5C and 2C — and the science shows that it is still possible to end this century at or below 1.5C.

Recent climate research has affirmed the importance and necessity of the 1.5C guardrail. As the Intergovernmental Panel on Climate Change warned last year, extreme weather events, ecosystem collapse, and planetary tipping points can happen at markedly lower levels of global warming than previously thought. Since the IPCC's last reporting cycle in 2014, we have amassed much more evidence to show that even a 1.5C warmer world would be immensely challenging, and that temperature increases above that level would be truly devastating.

With every additional tenth of a degree of warming, more people will be exposed to life-threatening heatwaves, water shortages, and flooding. Worse, various studies show that the likelihood of reaching tipping points, like the potential collapse of the West Antarctic ice sheet, increases exponentially above 1.5C. These represent red lines. The world would not fall off a cliff, but there would be a fundamental shift in which planetary systems start moving irreversibly down the path toward more ice melt, marine-ecosystem change, and rising sea levels.

The only sensible approach is to mitigate that risk by reducing greenhouse gas (GHG) emissions as fast as possible. Though we still might overshoot the 1.5C limit in the short term, we can return to it in the long run. But that will be possible only if we have cut fossil-fuel emissions to zero. This is the crucial first step toward achieving net-zero GHG emissions.

It is no less important to preserve and restore the natural land and ocean systems that absorb and store carbon. And if we distort the Earth's carbon cycle (through the thawing of permafrost, for example), we will undermine our ability to reverse global temperature increases.

Limiting warming to 1.5C this century requires that we halve our emissions by 2030. This is not an arbitrary figure. Only if we halve our emissions this decade will we halve the pace of warming in the 2030s and bring it to a halt in the 2040s. Think of it as the difference between tackling climate change ourselves, or passing a civilisational time-bomb to our children.

Slowing the warming process also buys us precious time for adaptation. Even a rich country like the United States will be limited in how fast and fully it can adapt to the consequences of climate change. For those in more vulnerable places, the situation is incomparably worse. Disasters like the flooding in Pakistan last year can derail a country's economy and leave it in a downward spiral of rising debt and poverty — all of which will be compounded by future climate disasters for which it could not afford to prepare.

Moreover, many of the net-zero commitments made by governments, companies, and cities around the world are premised on the 1.5C limit. Phaseout plans for coal (such as those in Germany, Vietnam, and the United Kingdom) are based on 1.5C-aligned modelling, which shows that OECD countries need to stop using coal by 2030, and that non-OECD countries need to do so by 2040. Gas must follow shortly thereafter.

With the clock ticking down, these 1.5C-based models are telling us how to prioritise. We must decarbonise electricity first, then electrify as much transportation, buildings, and industry as we can, while also reducing demand. Beyond this low-hanging fruit, we also will need to scale up technologies for carbon removal.

Investments have been moving in this direction. Since the Paris agreement was concluded in 2015, the costs of solar, wind, and batteries have plummeted. Electric vehicles and heat pumps are going mainstream. These are market-driven responses to government incentives. Public policy has been crucial for instilling confidence and supporting clean-energy growth.

To give up and start looking beyond 1.5C would let big emitters off the hook. Rather than instilling confidence, it would signal to everyone that they should expect less — and betray all those who live in places that lack the resources and possibilities to adapt to a warmer world.

If we don't keep pushing for the most ambitious science-based targets, those with vested interests in the status quo will exploit our fatalism. Following a massively profitable year, owing to Russia's war in Ukraine, BP recently signalled that it will divert much of its intended investments in decarbonisation toward oil and gas.

The best science we have tells us that 1.5C is still feasible, and it tells us how to get there. As the British climate-change diplomat Pete Betts puts it, "If we do go above 1.5C, the message is not to give up. It's to double down." — Project Syndicate

l Carl-Friedrich Schleussner is Head of Climate Science at Climate Analytics and an honorary professor at Humboldt University Berlin.

l Bill Hare is a founder and CEO of Climate Analytics.

l Johan Rockström is Director of the Potsdam Institute for Climate Impact Research and Professor of Earth System Science at the University of Potsdam.

QatarEnergy signs production sharing contract for Agua-Marinha block in Brazil



QatarEnergy, and its joint-venture partners TotalEnergies, Petrobras, and PETRONAS Petróleo Brasil Ltd (PPBL) signed the Production Sharing Contract (PSC) for the Agua-Marinha block, which was awarded to the consortium in December 2022 in the 1st Cycle Permanent Offer round, by Brazil's National Agency of Petroleum, Natural Gas, and Biofuels (ANP).

Under the terms of the PSC and associated agreements, QatarEnergy will hold a 20% working interest, alongside TotalEnergies (30%) Petrobras (operator, 30%), and PPBL (20%). Commenting on this occasion, HE the Minister of State for Energy Affairs, Saad bin Sherida al-Kaabi, also the President and CEO of QatarEnergy, said: "We are pleased to sign the Production Sharing Contract with our partners and with

Brazil's Ministry of Mines and Energy. This signing builds on QatarEnergy's sizeable upstream presence in Brazil, and we look forward to progressing with exploration activities on this highly prospective block. I wish to thank Brazil's National Agency of Petroleum, Natural Gas, and Biofuels and the Brazilian authorities for this opportunity and their ongoing support."

The Agua-Marinha block has a total area of 1,300sq km and is located in water depths of about 2,000m within the prolific Campos Basin. The work programme includes drilling one exploration well during the exploration period.

Building a new, better SDR BY JAYATI



With much of the developing world teetering on the edge of a

debt crisis, the calls for a new issuance of special drawing rights (SDRs, the International Monetary Fund's reserve asset), have grown louder and more urgent. But to have the desired effect, the International Monetary Fund (IMF) must modify its allocation criteria and clarify how SDRs can be used to support low- and middle-income countries through the current economic turmoil.

One proposal currently being considered is to expand SDR allocation beyond individual countries to include multilateral development banks and dedicated funds. The idea of channelling SDRs to multilateral institutions like the World Bank and regional development banks, which are uniquely equipped to assist emerging and developing countries, has become increasingly popular in recent years.

The Bridgetown Initiative, led by Barbadian Prime Minister Mia Mottley, has called for a new issuance of SDR500bn (\$650bn) "or other low-interest, long-term instruments" to support the creation of a multilateral agency that would accelerate "private investment in the low-carbon transition, wherever it is most effective."

Similarly, the recent report by the High-Level Advisory Board on Effective Multilateralism (of which I was a member) recommends the "immediate, and thereafter regular" annual issuance of additional SDRs to aid countries facing foreign-exchange shortages. The report also suggests that IMF shareholders amend the organisation's Articles of Agreement to permit "selective SDR allocation." This proposed change aims to facilitate a more targeted and effective distribution that prioritises the most vulnerable countries over the world's largest economies, which receive the lion's share of SDR allocations under the current rules.

Another proposed amendment stipulates that "specific conditions" would automatically trigger SDR allocations to ensure a "swifter global response." Notably, the report emphasises that eligibility for SDR allocation should not be conditional on the recipient country adopting an IMF-supported fiscal consolidation program.

Unfortunately, these proposals were not even discussed during the Spring Meetings of the IMF and World Bank in April. But we must continue to pursue these reforms, because increased international liquidity, delivered in a timely and efficient manner, is needed more than ever.

By modernising the outdated system of SDR allocation, the international community could also narrow the climate-finance gap. But, first, the many developing countries currently at risk of a severe debt crisis must receive immediate budgetary support. Unless we create a global financial safety net, the United Nations Sustainable Development Goals stand little chance of being met.

The ongoing financial turmoil highlights the current system's inherent inequities. Over the past few weeks, governments that control global reserve currencies, such as the United States and Switzerland, have pumped massive amounts of liquidity into the banking sector to rescue private banks. In contrast, debtor countries that have applied for debt relief under the G20's Common Framework for Debt Treatments have been waiting for years for a fraction of those sums.

The sovereign-debt crisis currently engulfing the world's poorest countries, which also happen to be the countries most affected by climate change, requires immediate action. At a minimum, low- and middle-income countries grappling with balance-of-payments challenges should be given the opportunity to bolster their foreign-exchange reserves through a new SDR allocation.

But even if a fresh allocation is eventually agreed upon, countries must understand how to make the most of it. Unfortunately, the IMF's vagueness on this issue has caused much confusion, with some asserting that SDRs belong to central banks, not governments, and others insisting that they are loans rather than assets distributed by the IMF.

Consequently, many recipient countries' newly allocated SDRs simply augment foreign-exchange reserves. While this can have a positive impact by increasing a country's perceived creditworthiness, it can also hinder more effective uses of

SDRs, particularly in times of acute shortages and fiscal constraints.

The Ecuadorian economist Andrés Arauz has highlighted these concerns, arguing that there is no legal basis for central banks to appropriate SDR allocations. The IMF's own guidance says that members "enjoy a large degree of freedom in how to manage the SDRs allocated to them," including the extent to which "central banks are involved in their management and whether the budget can directly use them for budget support." According to the Fund, SDRs are "allocated and held by the member and instructions for its use come through the fiscal agency of the member" (emphasis added). In other words, governments can use SDRs as they see fit.

The confusion over the nature and status of SDRs stems, in part, from the IMF's own misclassification of these assets. As Arauz points out, prior to the release of the IMF's latest balance-of-payments manual (BPM6) in 2009, SDR allocations were treated as equity rather than as liabilities that recipient countries must repay. The BPM6, however, reclassified them as liabilities, essentially treating them as debt. This change, which was made without clear reasoning or transparent discussion, must be contested, because it can deter the use, transfer, and recycling of SDRs, preventing allocations from fulfilling their potential.

Some countries, particularly in Latin America, have demonstrated creativity in their use of SDRs. Ecuador, for example, used them to finance its 2021 investment plan. The same year, Paraguay channelled its allocation to investments in health, education, housing, and other public expenditures, and Argentina used its \$4.6bn allocation to pay off maturing debt, fulfilling its obligations to the IMF.

In other countries, central banks' perceived role as the custodian of SDRs did not completely restrict alternative uses. Colombia, for example, used SDRs to facilitate a domestic debt swap between the government and the central bank and generate short-term liquidity. Although Mexico's central bank asserted its ownership of the country's SDRs, the Mexican

government acquired international reserves from it through a currency exchange in late 2021.

The current crisis is an opportunity to construct a fairer, more sustainable international monetary system. A sensible reform agenda must include increased SDR issuance and the creation of more efficient and equitable distribution mechanisms. To achieve this, the G7 countries, as the IMF's largest shareholders, must demonstrate a modicum of wisdom and leadership. — Project Syndicate

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