بارودي: استجرار الكهرباء والغاز من قبرص ينوع مصادر الطاقة ويحميها من أي تداعيات جيوسياسية

### ARTISTIC MAP ILLUSTRATION OF CYPRUS BLOCK 6 GAS & ELECTRICITY PLAY



تبدو العلاقات اللبنانية القبرصية في حال تطور سريع وقد فتح هذا الباب رئيس الجمهورية العماد جوزاف عون فلاقى استجابة ورغبة عارمة لدى نظيره القبرصي كريستو دوليديس تجاه تطوير العلاقة بين البلدين الجارين وما لفت أن الرئيس القبرصي هو الذي بادر وطرح على الرئيس عون استجرار الكهرباء من قبرص إلى لبنان وقد تلقف رئيس الجمهورية اللبنانية هذه المبادرة وطلب من وزير الطاقة جو صدي متابعة

وفي هذا السياق أثنى خبير الطاقة الدولي رودي بارودي على مبادرة الرئيس القبرصي واللبناني، مؤكّدًا وجوب الترحيب بأي خطوة من هذا النوع باعتبارها نقطة انطلاق مهمة لتأمين الكهرباء للبنانيين وحل أزمة القطاع المستفحلة جزئياً منذ عقود وأن هذه الخطوة تأتي بعد الإعلان عن استئناف مفاوضات ترسيم الحدود البحرية بين البلدين. كما أثنى بارودي على الدور الذي يلعبه الرئيس عون في ملف الطاقة ككل واعتباره أولوية لما فيه من فائدة على الاقتصاد وتعزيز

ولفت بارودي إلى أن هذه الخطوة ستتيح تزويد لبنان ما بين 300 و300 ميغاواط وفق مراحل متعددة ولا سيما بعد عام أو عامين على الأكثر عندما تبدأ قبرص بإنتاج الكهرباء من الغاز المستخرج من ENI & حقولها البحرية خاصة حقل كرونوس الذي يديره كل من شركتي ما يعزز تنويع مصادر الطاقة وبأسعار مقبولة لا TOTAL ENERGIES ميما وأن الحقل المعني في قبرص لا يبعد عن حقل زهر المصري سوى ٦٠ كلم ما يعني أن كلفة الإستخراج ستكون مماثلة لتلك المعتمدة في الحقل المعتمدة على المعتمدة على المعتمدة الإستغراج المصري وهي كلفة رخيصة نوعا ما

ولفت بارودي إلى وجود محطتين رئيسيتين لإنتاج الكهرباء في قبرص، بين ليماسولVassiliko إحداهما بين لارنكا وليماسول، والأخرى في وبا فوس، بقدرة إجمالية تقار ب 1600 ميغاواط من دون الكهرباء المنتجة من الطاقة الشمسية وبالتالي يمكن للبنان الاستفادة من هذه الطاقة بكلفة يتم التوافق عليها موضحا أن الكلفة ستكون اقل بكثير من كلفة الكهرباء المنتجة في لبنان عندما تبدأ قبرص العام المقبل باستخدام الغاز المستخرج من حقولها البحرية لإنتاج الكهرباء .

بارودي طالب الحكومة اللبنانية بالإسراع بوضع الأطر الإصلاحية والتنظيمية للقطاع بشأن استجرار الكهرباء من قبرص وبإعداد دراسة جدوى اقتصادية تأخذ في الاعتبار كلفة الاستجرار ولفت أن محطة هي المحطة التي تصدر الغاز في 2026، على أن يواصل Vassiliko لبنان مساعيه لربط شبكته بالشبكة السورية للحصول على دعم إضافي كهربائي عن طريق محطة دير نبوح، بما في ذلك محطة الكسارة في منطقة البقاع .

### قبرص ت<sup>'</sup>نتج 5 آلاف ميغاواط! ما حص<sup>س</sup>ة لبنان منها؟



المركزيية على وقع التحديات الأمنية وتهديداتها، يجهد رئيس الجمهورية العماد جيوزاف عيون لتحريك الملفات الاقتصادية الاستراتيجية التي من شأنها أن تُنهض البلاد من كبوتها التي أوصلتها إلى حد الانهيار فهو لا يوف ر فرصة وجوده في الخارج، حيث يكث ف من رحلاته الرسمية للهدف المنو و عنه، إلا ويتطر ق مع نظرائه العرب والأجانب إلى إمكانات التعاون في سبيل تعزيز العلاقات الاقتصادية والمشاريع الاستثمارية مع لبنان.

وليست مفاوضاته المثمرة التي أجراها مع نظيره القبرصي نيكوس خريستودوليدس خلال زيارته الرسمية الأخيرة إلى نيقوسيا، سوى الدليل الثابت على مساعيه الحثيثة إلى وصل لبنان بالخارج بعد انقطاع دام سنوات لأسباب باتت معروفة علسها "تُذكر ولا تُعاد"! ومن ثمار تلك الزيارة، الإعلان عن تحقيق تقدسم كبير في الجانب التقني من ملف

استكمال المفاوضات حول ترسيم الحدود البحرية بين البلدين، والعمل على تحويل النتائج التقنية إلى صيغة سياسية قابلة للتنفيذ، على غرار اتفاق ترسيم الحدود مع إسرائيل الذي أُبرم في تشرين الأول عام 2022 بوساطة أميركية…

لكن هذه الخطوة لم تكن الوحيدة التي خرج بها الرئيسان اللبناني والقبرصي من لقاء نيقوسيا، بل أحدث طرح الرئيس خريستودوليدس م َد ّكا بل بحري من الجزيرة لتزويد لبنان بالكهرباء، خرقا في ملف الطاقة اللبنانية النازف، على رغم أن الطرح يتطلب دراسة جدوى مفص ّلة تسبق الحماسة على المضي فيه ...

إذ في انتظار وصول وفد تقني قبرصي إلى بيروت في الأيام المقبلة لاستكمال المفاوضات حول ترسيم الحدود البحرية بين البلدين، يستعد و وزير الطاقة والمياه جو الصديّ لزيارة قبرص ولقاء المسؤولين الرسميين والمعنيين بقطاع الطاقة، بهدف متابعة الطرح القبرصي تزويد لبنان بالكهرباء، والاطلاع على حيثيات المشروع وتفاصيله كافة.

### بارودي يرحّب.. ويسأل

في غضون ذلك، يثني الخبير الدولي في شؤون الطاقة والعضو في "معهد شبكة القيادة عبر الأطلسي" في واشنطن رودي بارودي على طرح الرئيس القبرصي، ويشدد عبر "المركزية" على "وجوب الترحيب بأي مبادرة من هذا القبيل"، معتبرا أنها "خطوة جيدة في مسار تأمين الكهرباء للبنانيين وبالتالي توفير الحلول الضرورية لأزمة القطاع المستفحلة طوال عقود".

وي ُشير في السياق، إلى أن "مسافة 160.9 كيلومترا تفصل بين لبنان وقبرص بما يدل على القرب الجغرافي بين البلدين، وهو عامل مساعد في تنفيذ المشروع. والعامل الآخر الذي يشج على البحث في إمكانية الإفادة من هذه المبادرة، أن قبرص لديها محطة إنتاج كهرباء تقع بين لارنكا وليماسول، كما لديها محطة إنتاج Vassilikoss وهي الأكبر على الإطلاق تقع بين ليماسول وبافوس. والجدير ذكره في هذا الإطار، أن الإنتاج الكهربائي لقبرص يعادل 5 آلاف و400 ميغاواط تقريبا ، ومن غير المعلوم حتى الآن الكمية التي ستزو د بها لبنان من مجموع هذا الإنتاج".

ويخلص إلى التأكيد على "وجوب الترحيب بالمبادرة القبرصية مهما كانت كمية الكهرباء التي ستزو دنا بها… وإذ نهن ّئ الحكومة اللبنانية على مشروع استجرار الطاقة من قبرص، عليها التنبّه إلى كلفة الاستجرار الباهظة لأن قبرص تبيع الكيلوواط الواحد بمبلغ يتراوح بين 35 و40 سنتاً ... وهذا رقم يجب التوقف عنده في دراسة الجدوى، مع الإقرار بأهمية المشروع وانعكاساته الإيجابية على لبنان بما يساعد في حل أزمة قطاع الكهرباء المُزمنة".

"لذلك من الأهمية بمكان إعداد دراسة جدوى اقتصادية، مع التشديد على ضرورة تشجيع أي مبادرة تساعد الشعب اللبناني في تأمين ساعات تغذية إضافية من الكهرباء، ونحن نشد على يد الحكومة للمضي في هذه المبادرة ولنترقب من أي محطة ستزو دنا قبرص الكهرباء وبأي كمية وكلفة " يختم بارودي.

وفي الصورة أدناه محطة Vassilikoss للطاقة في قبرص

### Qatar deserves global thanks — and a whole lot more



Most of the world is watching and waiting, hoping and/or praying that a hastily arranged ceasefire between Israel and

Iran will hold. If it does, there will be sighs of relief virtually everywhere; if it does not, the State of Qatar should still be considered for the Nobel Peace Prize.

Yes, you read that correctly: even if the ceasefire that it helped to secure falls apart, Qatar should be considered for what many regard as the most prestigious prize on Earth.



I believe this because peace is more important than any other cause on Earth, and pound-for-pound, no country does more than Qatar to promote peace. Peace is more than a opportunity, more than a process that often belligerents to let their guns fall silent, more even than the gratitude of those whose lives and livelihoods are spared. It also serves other useful purposes, too, including as a commodity that promotes stronger growth and better socioeconomic development, and frees up resources for investment in education, healthcare, and transport infrastructure. Accordingly, achieving peace means more than simply not being at war: it means having the chance to better one's own situation by leaps and bounds. By extension, anyone who provides such a chance to anyone else deserves deep admiration.

By this measurement alone, Qatar's case for a Nobel is rocksolid — and has been for years, long before the world's most powerful county asked it to obtain Iranian consent to a ceasefire. A guick glance at Qatar's track record reveals a foreign policy focused almost entirely on the peaceful resolution of differences. Over the past quarter-century, Qatari diplomacy has helped to resolve or mitigate multiple crises, disputes, and conflicts in too many places to count, including Afghanistan, Darfur, Gaza, Eritrea, Irag, Lebanon, Russia and Ukraine, Sudan and South Sudan, and Yemen. These feats have included the winding down of one all-out civil war and the prevention of another, the brokering of several exchanges involving thousands of prisoners/hostages, the securing of temporary cease-fires, the resolution of dangerous constitutional deadlocks, and - most importantly - the kindling of hope in the hearts of millions.

Not surprisingly, Qatar's diplomatic corps is almost constantly and relentlessly engaged in one form or another of peacemaking. It does not always succeed, but its investments — both political and financial — in this mission pay dividends in other ways, too. Repeated successes are their own reward, but even "failure" both raises Qatar's profile and reaffirms its commitment to dialogue and peace. In addition, both the leadership and the professional diplomats learn important lessons from each and every engagement, making Qatari intervention increasingly effective over time. Just as importantly, this increasing effectiveness contributes to Qatar's growing reputation as an honest and capable broker, and that perception gives it still more influence, leverage, and flexibility going forward.

There are critics, of course. Many American officials, for instance, have criticised Doha for maintaining friendly relations with entities such as Hamas, the Taliban, and, indeed, the Islamic Republic of Iran. But when Washington and

Paris wanted to end the presidential vacuum in Beirut, they turned to Qatar and other brotherly nations, which then helped to gain the acquiescence of Iran and Hezbollah. When Washington wanted to negotiate the release of Israeli soldiers and civilians held in Gaza, it was Qatar that made it happen. When the first Trump administration wanted a negotiated exit from Afghanistan, it was Doha that made the contacts and hosted the talks. And when the current Trump administration decided it was time for Israel and Iran to end hostilities, it was the Qataris who delivered the Iranians — and this despite the fact that Iran had just retaliated against US air strikes by lobbing missiles at a US air base inside Qatar!

In effect, the peninsula is now a platform for peace promotion, and not by accident. As impressive as they are, even Qatar's obvious enthusiasm and evident aptitude for dialogue and diplomacy cannot account for the unprecedentedly large role it has come to play on the world stage.

Instead, today's Qatar is the product of a bold strategy rooted in both purpose and principle. Led by His Highness the Amir Sheikh Tamim bin Hamad al-Thani, the country's entire leadership views respect for international law and the maintenance of international peace and stability as existential objectives for Qatar and its population.

The Amir inherited some of this strategy from his father, but he has expansively built on it, adding both breadth of vision and depth of commitment. Even — and perhaps especially — when this approach has carried dire risks, His Highness the Amir has refused to waver, and his steadfast pursuit of fraternal relations among nation-states has continued. That resolve has been noted by state and non-state actors alike, and some former antagonists have even come to embrace and even emulate much of the Qatari approach.

That's why Qatar deserves the Nobel Peace Prize. Not because it helped end a war between Iran and Israel, but because no

other country is so singularly dedicated to peace. It's the ideas behind its actions that make them special: that a country should not only refrain from seeking out conflict, should not only keenly avoid conflict unless necessary, but should also actively seek to prevent, shorten, and/or mitigate conflict among other countries as well.

What could be more noble — and therefore more Nobel-worthy — than that?

Roudi Baroudi is an energy and policy expert with more than four decades of experience in both the private and public sectors. The author of several books, he currently serves as CEO of Energy and Environment Holding, an independent consultancy based in Doha.

Ρούντι Μπαρούντι: Να Τερματιστεί η Σύγκρουση Ισραήλ- Ιράν, πριν το Κόστος της Γίνει μη Διαχειρίσμο



Σήμα κινδύνου για τις επιπτώσεις που θα έχει ο πόλεμος μεταξύ Ισραήλ και Ιράν, σε όλο τον κόσμο στέλνει ο ειδικός αναλυτής στα ενεργειακά Ρούντι Μπαρούντι. Σε συνομιλία που είχαμε μαζί του με αφορμή άρθρο του που δημοσιεύτηκε στους Gulf Times. Ο κ. Μπαρούντι εστιάζει στις ενεργειακές επιπτώσεις σημειώνοντας ότι «τα αποθέματα αργού πετρελαίου και φυσικού αερίου του Ιράν

είναι, αντίστοιχα, τα δεύτερα και τρίτα μεγαλύτερα στον κόσμο. Ενώ το Ισραήλ έχει εξηγήσει ότι οι υποτιθέμενες πυρηνικές δραστηριότητες του Ιράν ως τον λόγο.

για τον οποίο ξεκίνησε τον πόλεμο, οι επιθέσεις του έχουν επικεντρωθεί επίσης στις υποδομές πετρελαίου και φυσικού αερίου του Ιράν. Πέντε από τα εννέα μεγάλα διυλιστήρια πετρελαίου του Ιράν είχαν πληγεί και τεθεί εκτός λειτουργίας, μαζί με αποθήκες και άλλες εγκαταστάσεις, ενώ οι ισραηλινές δυνάμεις προκάλεσαν επίσης μια τεράστια πυρκαγιά στο κοίτασμα φυσικού αερίου South Pars, το οποίο το Ιράν μοιράζεται με το Κατάρ - και το οποίο περιέχει σχεδόν τόσο φυσικό αέριο όσο όλα τα άλλα γνωστά πεδία φυσικού αερίου στη Γη. Επίσης οι ιρανικές επιθέσεις εναντίον του ισραηλινού συγκροτήματος διυλιστηρίων στη Χάιφα οδήγησαν στο κλείσιμο αρκετών υπεράκτιων πλατφορμών, περαιτέρω μειώνοντας την περιφερειακή παραγωγή υδρογονανθράκων».

Ο κ.Μπαρούντι εκτιμά ότι η κατάσταση μπορεί να επιδεινωθεί. «Η καταστροφή ή η διακοπή της ικανότητας του Ιράν να εξάγει, να επεξεργάζεται, να διανέμει και να εξάγει υδρογονάνθρακες θα προκαλούσε τεράστια προβλήματα στο εσωτερικό και θα ασκούσε ανοδική πίεση στις τιμές παντού, αν και ο παγκόσμιος αντίκτυπος θα ήταν πιθανότατα διαχειρίσιμος. Η κατάσταση θα ήταν πολύ πιο ανησυχητική εάν οι ισραηλινές επιθέσεις έπλητταν την περιοχή Μπαντάρ Αμπάς. Αυτό θα μπορούσε να προκαλέσει την εκτόξευση των τιμών του φυσικού αερίου — και άλλων μορφών ενέργειας — στις παγκόσμιες αγορές», τονίζει.

Δίνει μάλιστα μεγάλη έμφαση στα στενά του Ορμούζ καθώς συνδέει αρκετούς άλλους από τους πιο παραγωγικούς παραγωγούς πετρελαίου και LNG στον κόσμο — συμπεριλαμβανομένων του Ιράκ, του Κουβέιτ, του Κατάρ και της Σαουδικής Αραβίας — με τους πελάτες τους στο εξωτερικό.

«Ως αποτέλεσμα, κάθε μέρα, περίπου το ένα τέταρτο παγκόσμιων αναγκών σε αργό πετρέλαιο και LNG εξέρχεται από τον Κόλπο μέσω του Ορμούζ, καθιστώντας τον το πιο στρατηγικά σημαντικό σημείο συμφόρησης της εποχής μας. Εάν αυτή η ροή σταματήσει ή ακόμη και επιβραδυνθεί σημαντικά, οι συνέπειες θα μπορούσαν να είναι καταστροφικές για μεγάλο μέρος του κόσμου. Αν και οι περισσότερες από αυτές τις εξαγωγές συνήθως προορίζονται για τις αγορές της Ασίας, ακόμη και μια σύντομη μείωση του διαθέσιμου πετρελαίου και φυσικού αερίου θα μπορούσε να εκτινάξει τις τιμές του αργού πετρελαίου, που επί του παρόντος είναι λίγο πάνω από 70 δολάρια το βαρέλι, πάνω από τα 100 ή ακόμα και τα 120 δολάρια σύντομα. Αν μια τέτοια κρίση εφοδιασμού διαρκούσε για κάποιο χρονικό διάστημα, η παγκόσμια οικονομία θα εισερχόταν σε αχαρτογράφητα εδάφη. Όχι μόνο οι υπερβολικά υψηλές τιμές ενέργειας θα προκαλούσαν αύξηση του πληθωρισμού σε όλους τους τομείς, αλλά οι ελλείψεις καυσίμων θα μπορούσαν επίσης να παραλύσουν επιχειρήσεις κάθε μεγέθους και είδους. Μεταφορές και μεταποίηση, επεξεργασία τροφίμων και ιατρική έρευνα, παραγωγή ενέργειας, θέρμανση και ψύξη οικιακών συσκευών, ακόμη και το ίδιο το Διαδίκτυο: όλα όσα εξαρτώνται από την ενέργεια θα μπορούσαν να επιβραδυνθούν σε μικρό βαθμό. Μια παγκόσμια ύφεση σχεδόν σίγουρα θα ακολουθούσε, και δεδομένου του τρέχοντος εμπορικού περιβάλλοντος, αυτό θα μπορούσε να οδηγήσει σε μια ακόμη Μεγάλη Ύφεση».

Ο κ. Μπαρούντι καταλήγει ότι η πιθανότητα παγκόσμιας οικονομικής καταστροφής — για να μην αναφέρουμε τους οικολογικούς κινδύνους και τους κινδύνους για τη δημόσια υγεία που προκαλούν οι διαρροές πετρελαίου, πυρηνικών υλικών ή και άλλων τοξινών στο περιβάλλον — απλά δεν είναι ένας κίνδυνος που οι περισσότεροι έξυπνοι άνθρωποι θέλουν να βιώσουν. «Επομένως, αρμόζει σε όσους έχουν τη δύναμη να αλλάξουν την κατάσταση να κάνουν ό,τι μπορούν για να τερματίσουν τη σύγκρουση προτού το κόστος της γίνει μεγαλύτερο από όσο μπορεί να αντέξει μια εύθραυστη παγκόσμια οικονομία»

### Roudi Baroudi Presents Latest Work to Patriarch al-Rahi



Maronite Patriarch Cardinal Mar Bechara Boutros al-Rahi received the international energy affairs expert, Roudi Baroudi, who presented the Patriarch with a copy of his new book, recently published by Notre Dame University-Louaize (NDU). The book explores ways to resolve maritime boundary delimitation disputes by peaceful means among the countries of the Mediterranean basin in general, and the East Mediterranean region in particular, especially between Lebanon, Syria, and Cyprus. It is grounded in the provisions of the United Nations Convention on the Law of the Sea, relevant international treaties, and the jurisprudence of international courts.

# Israel-Iran war needs to stop before we all get burned



The long-feared war between Israel and Iran is now fully under way, and the repercussions threaten to include significant disruptions — not just for the two belligerents, but also for economies, peoples, and governments around the world.

To understand how and why an armed conflict between two regional powers could have such a widespread impact, start by considering the following:

- 1. Iran's reserves of crude oil and natural gas are, respectively, the second- and third-largest in the world;
- 2. While Israel has posited Iran's alleged nuclear activities as its reason for going to war, its strikes have also focused on Iran's oil and gas infrastructure;
- 3. At the time of this writing, five of Iran's nine major oil refineries had been hit and knocked out of service, along with storage depots and other facilities;
- 4. Israeli forces also started a huge fire at the South Pars gas field, which Iran shares with Qatar and which holds almost as much gas as all of the other known gas fields on Earth.
- 5. For good measure, Iranian strikes against the Israeli refinery complex at Haifa have led to the shutdown of several offshore platforms, further crimping regional hydrocarbon output;

Now consider that it gets worse. The destruction or shutdown of Iran's ability to extract, process, distribute, and export hydrocarbons would cause tremendous problems at home, and put upward pressure on prices everywhere, although the global impact would likely be manageable. The situation would be far more disruptive if Israeli attacks hit Bandar Abbas area. That could cause prices for gas — and other forms of energy — to soar on world markets.

And yet even this is not the greatest peril threatened by this war. That desultory honour goes to the possibility that traffic could be disrupted in the Strait of Hormuz, the relatively narrow channel that connects the Gulf to the open ocean. The passage is only 40 kilometres at its narrowest spot, wending for over 150 kilometres between Oman and the United Arab Emirates, to the west and south, and Iran's Hormozgan Province to the east and north. Hormozgan is also home to the famous port city of Bandar Abbas, which hosts a

giant oil and petrochemical complex that has already been struck at least once by Israeli forces.

What really matters for our purposes is that Hormuz also connects several other of the world's most prolific oil and LNG producers — including Iraq, Kuwait, Qatar, and Saudi Arabia — to their overseas clients. As a result, every day, about a quarter of the world's crude oil and LNG requirements exit the Gulf through Hormuz, making it the most strategically important chokepoint of our times. If this flow were halted or even significantly slowed, the consequences could be disastrous for much of the world. Although most of these exports are typically bound for markets in Asia, even a brief reduction in available oil and gas could send crude prices, currently a little more than \$70 a barrel, shooting past \$100 or even \$120 in short order.

If such a supply crisis lasted any length of time, the global economy would enter uncharted territory. Not only would skyhigh energy prices cause inflation to rise across the board, but fuel shortages could also be expected to cripple businesses of every size and sort. Transport and manufacturing, food processing and medical research, power generation, household heating and cooling, even the Internet itself: everything that depends on energy could slow to a trickle. A global recession would almost certainly ensue, and given the current trade environment, that might lead to another Great Depression.

So what might cause such an interruption? There are several possibilities, including the accidental sinking or crippling of a supertanker or two in just the right (i.e., wrong) place(s). Even if one or more accidents did not make Hormuz physically impassable, they could make insurance rates prohibitively expensive, causing many would-be off-loaders to decide against hazarding their ships amid the crossfire. Alternatively, Iran could decide to close the strait in order to punish the "international community" in general, for not

doing enough to rein in the Israelis.

Whatever the rationale, the potential for global economic ruin — not to mention the ecological and public health risks posed by leaks of oil, nuclear materials, and/or other toxins into the environment — is simply not a risk that most intelligent people want to run. It therefore behooves those with the power to change the situation to do everything they can to end the conflict before its costs become more than a fragile world economy can bear.

Another is how to get Iran to behave itself, and that, too, shapes up as a difficult task. The Islamic Republic has spent most of the past half-century seeking to undermine US and Israeli influence over the region, and its substantial investments in proxy militias abroad and its own military at home may be skewing high-level decision-making. As the saying goes, when all you have is hammer, everything starts to look like a nail.

Despite these obstacles, it remains a fact that war is almost never preferable to negotiation. Iran and Israel agree on very little, their objectives are often in direct opposition to one another, and each views the other as a murderous and illegitimate state. Nonetheless, whether they realise it or not, both sides have a vested interest in ending the current conflict. Given the massive disparities in their respective strengths and weaknesses, this conflict could turn into a long-term bloodletting in which the value of anything achieved will be far outstripped by the cost in blood and treasure.

But who will get the two sides to so much as consider diplomacy when both of them are increasingly committed to confrontation? Although several world leaders have offered to act as mediators, the belligerents don't trust very many of the same people. To my mind, this opens a door for Qatar, which has worked assiduously to maintain relations with all parties — and which already has a highly impressive record as

a peacemaker — to step up in some capacity.

Whether it provides a venue for direct talks, a diplomatic backchannel for exchanging messages, or some other method, Doha has proved before that it can be a stable platform and a powerful advocate for peaceful negotiations. Let us hope it can do so again.

• Roudi Baroudi is a four-decade veteran of the oil and gas industry who currently serves as CEO of Energy and Environment Holding, an independent consultancy based in Doha.

## The true cost of ocean plastic pollution



The problem of maritime plastic-waste pollution first became apparent in the 1970s. In the half-century since then, the problem has become ever more widespread, as scientific expeditions conducted by the Tara Ocean Foundation (of which I am executive director) have shown. Large pieces of debris, such as fishing nets, and their disastrous effects on marine life, are the most visible symptom. Such waste is estimated to kill more than one million seabirds and over 100,000 marine mammals annually, often through entanglement or suffocation, and promotes transport of invasive species, triggering a cascading effect on the ecosystems in which they play a central role.

Less visible, but more pervasive, are microplastics, which have been found in the deepest ocean trenches and all types of marine life. Microplastics can, among other things, modify bacterial and viral communities and disperse chemical toxins in food chains (often after being ingested by marine organisms). Some of these toxins, such as phthalates, are

associated with the chemistry of plastics, while others, such as pesticides and heavy metals, are absorbed by the plastic before it reaches the ocean and enters the food chain.

How these toxic substances interact with plastics has been the subject of much study. Plastic is comprised of monomers that have been chemically bonded to form long chains of polymers — ethylene, styrene, and propylene become polyethylene, polystyrene, and polypropylene. But the process of polymerisation is often imperfect, and some of the unpolymerised monomers that remain in plastic, like different types of styrene and bisphenol, pose major environmental and health risks.

Moreover, other chemical additives, including plasticisers, fillers, colorants, flame retardants, and antioxidants, are incorporated into polymer formulations to modify their properties. And non-intentionally added substances (NIAS) impurities, raw materials used in manufacturing, byproducts, and degradation products — bind to finished plastics. In most cases, because free monomers, additives, and NIAS are simply trapped within the tangle of polymer chains, rather than being chemically bound to them, they are more likely to leach out during the production, use, and disposal of plastic, migrating into liquids, gases, and solids. Some 16,000 such molecules have been identified, but their effects are still not fully known, nor is their toxicity, which can change depending on how they are combined. What we do know is that one-quarter of these 16,000 molecules are pose a hazard to human health or the environment by disrupting biochemical processes in living organisms.

Halting the flow of microplastics and toxic pollutants into the world's bodies of water is a Sisyphean task. Nevertheless, scientists are trying to stem the problem. For example, the Tara Europa expedition, in coordination with the European Molecular Biology Laboratory and more than 70 scientific institutions across the continent, has spent the past two

years investigating how these hazardous substances make their way into the seas and oceans bordering Europe. The mission plans to share its findings soon.

But the generation of toxic waste and debris is not the only way that plastic can harm ocean health. The plastics industry has been a major driver of climate change, accounting for an estimated 3.4% of global greenhouse-gas (GHG) emissions. Plastic production is on track to contribute 15% of GHG emissions by 2050, exacerbating global warming and thereby increasing the threats to marine life, which is sensitive to rising water temperatures.

Because plastic degrades the entire biosphere, not just the ocean, it is not a waste problem that can be solved by a few sustainability-minded citizens' recycling efforts. This is a systemic crisis that requires an economy-wide solution. A better approach is to understand plastic as one of the "new entities" that must not leak into the environment, a view initially formulated by the Stockholm Resilience Centre in its work on planetary boundaries and later endorsed by the United Nations. While acknowledging the impossibility of defining a precise threshold for harm, such an approach highlights the need for a drastic reduction in plastic use.

Research suggests that it would be economically feasible to halve global plastic production at a cost which would almost surely be less than the cost of inaction. But, according to a recent study by researchers at the University of California, Berkeley, even this reduction would not be enough to limit global warming to 1.5° Celsius above preindustrial levels, the target set by the Paris climate agreement. Instead, they found that meeting this goal would require a 75% reduction in plastic production compared to 2015.

# 'THE POSSIBILITIES ARE ENDLESS': ENERGY EXPERT LAUNCHES NEW BOOK ON RESOLVING MARITIME BOUNDARIES



**ZOUK MOSBEH, 23-04-2025:** Energy expert Roudi Baroudi signed copies of his latest book during a launch event at Notre Dame University — Louaize on Wednesday.

The book, "Settling Maritime Boundaries in the Eastern Mediterranean: Who Will Be Next?", is part of Baroudi's yearslong effort to promote regional energy cooperation. In it, the author makes the case that if East Med countries are serious about exploiting their offshore hydrocarbons, they need to settle their maritime borders in order to attract the major energy companies whose technical and financial muscle are virtual prerequisites for undersea oil and gas activities.



Co-hosted by the Office of NDU Publications (which published the book) and the university's Office of Research and Graduate Studies, the signing event took place at NDU's Pierre Abou Khater Auditorium. All proceeds from sales of the book will go toward Student Financial Aid at NDU.

Inspired by the landmark US-brokered October 2022 agreement that saw Lebanon settle most of its maritime boundary with old foe Israel, the new tome stresses the need to define other East Med borders as well, including those between Lebanon and Cyprus, Lebanon and Syria, Syria and Cyprus, Cyprus and Turkey, and Turkey and Greece.

Publication was delayed by the outbreak of the Gaza war in October 2023, but the author says that conflict — which also led to massive destruction and loss of life in Lebanon — only underlines the need for regional players to find a new modus vivendi.



"We can't keep doing the same things over and over again, and then expecting a different outcome," Baroudi said during the NDU event. "For the first time in many years, all of Lebanon's branches of government — Parliament, Cabinet, and Presidency — are fully functional. We have to start thinking of ways to reduce the scope for friction, to open the way for foreign investment, and hopefully start producing offshore gas."

"Almost all of Lebanon's energy needs are met by imported hydrocarbons; imagine if we discover enough gas to provide 24/7 electricity to all Lebanese," he added. "And what if we had enough to start exporting it, too? Lebanon's coast is less than 100 kilometers from Cypriot waters: this means that once the island and its partners have built a pipeline and/or a liquified natural gas plant, Lebanese gas could flow straight into the entire European Union, one of the world's largest energy markets. The possibilities are endless. And now imagine all of the countries of the region having similar prospects — just because they finally got around to figuring out where their national waters begin and end."

In addition to the manifold benefits of energy security and lucrative export revenues to fund domestic investment in things like education, healthcare, fighting poverty, and transport, Baroudi said the exercise of negotiating sea borders could help build trust and good will.

"There isn't enough of those commodities in the East Med region, and often for good reason," he explained. "But we have to start somewhere, and maritime boundaries are a great place to do that because they open the way for investment and various forms of cooperation, direct or indirect, including fisheries monitoring and regulation, marine protected areas, tourism, weather forecasting, search and rescue, etc."

With more than 47 years of experience, Baroudi has worked in multiple fields, from electricity, oil and gas, petrochemicals to pipelines, renewables, and carbon pricing mechanisms. He also has led policy and program development with, among others, the World Bank, the US Agency for International Development, the International Monetary Fund, and the European Commission. The author of several books including "Climate and Energy in the Mediterranean: What the Blue Economy Means for a Greener Future" (2022) - as well as numerous studies and countless articles, his expertise has made him a highly sought-after speaker at regional energy and economic conferences. Currently serving as CEO of Energy and Environment Holding, an independent consultancy based in Doha, he is also a Senior Fellow of the Transatlantic Leadership Network, a Washington think-tank. In 2023, he received the TLN's Leadership Award in recognition of his efforts to promote peace.

## ENERGY EXPERT'S NEW MARITIME BOUNDARY BOOK ARRIVES AMID

## WAVE OF EAST MED BORDER DIPLOMACY



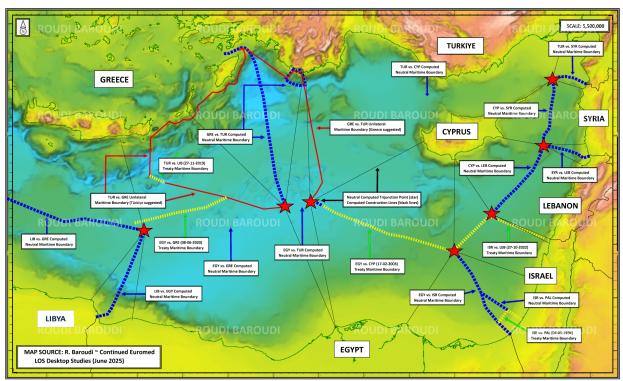
Recent weeks have been multiple contacts among several countries including — Cyprus, Greece, Lebanon, and Syria — aimed at increasing cooperation among East Mediterranean

#### countries.

This flurry of diplomatic activity provides the perfect backdrop as Notre-Dame University — Louaize is pleased to announce that it will host a book launch and signing on April 23rd, welcoming international energy expert Roudi Baroudi as he releases his latest work, "Settling Maritime Boundaries in the Eastern Mediterranean: Who Will Be Next?"

The book outlines the need for countries in the region to resolve their maritime boundaries, the energy and other economic opportunities that doing so could open up, and the legal, scientific, and technical means of ensuring that delimitation is fair and equitable. The volume even carries exclusive, high-precision maps indicating with unprecedented accuracy where the negotiated or adjudicated sea borders of several East Med countries would be, as per United Nations rules.

### EURO MED RESOLVED & UNRESOLVED MBL 2025



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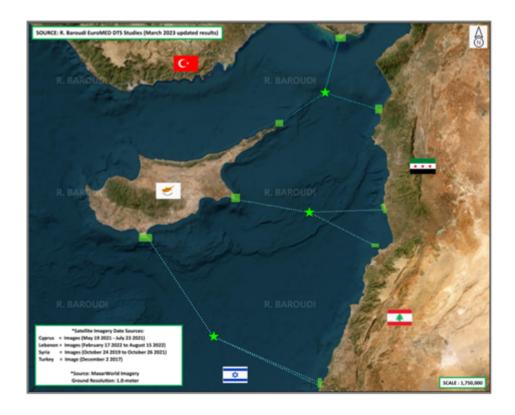
Dark Blue dashed lines - 100% neutral strict equidistance lines (unresolved/disputed)

Red solid lines - Unilateral Claimed MBL

The book emphasizes that settling these unresolved boundaries — including those between Lebanon and Cyprus, Lebanon and Syria, Greece and Turkey, Turkey and Syria, Syria and Cyprus, and Turkey and Cyprus — is a necessary first step for those seeking to develop offshore energy resources. The advent of energy security and possible lucrative exports could have a profound effect on several states, allowing them to make historic investments in schools, hospitals, and transport infrastructure, all while creating well-paying jobs and reducing poverty and inequality. Baroudi also highlights a series of cross-border benefits, including reducing potential irritants between neighbors, building trust, and opening up new avenues for cooperation.

As a 47-year veteran of the energy industry, Baroudi has a wealth of experience to share, and does so frequently as an author and speaker, promoting energy as a catalyst for dialogue and peace wherever and whenever he can. He will be on hand for the launch at NDU's Pierre Abou Khater Auditorium beginning at 12:00 noon, answering questions and signing copies of the book for anyone who purchases one.

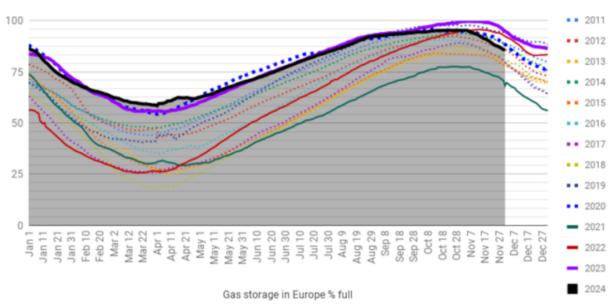
All sale proceeds will go toward Student Financial Aid at NDU.



# Europe gas storage concerns fuel market uncertainty

### European gas storage % full

source: GIE AGSI



The gas held in storage covers about 30% of the EU's daily needs during the winter, rising to 50% on the chilliest days

The relatively low amount of gas in storage in the European Union — with levels 36% below where they were this time last year — is putting upward pressure on prices, according to the International Energy Agency.

Europe's stockpiles of natural gas have been a closely watched metric since the invasion of Ukraine triggered a dramatic downturn in Russian supply to the region.

The network of gas storage sites across the European Union is the second largest in the world after the US and has become an increasingly important buffer against supply shocks and price spikes.

As Moscow squeezed the flow of pipeline gas, the EU had managed to avoid a winter supply crunch by curtailing overall gas demand and boosting its imports of liquefied natural gas. But 2025 could up the pressure.

Europe leans on its gas inventories in the winter, when average consumption doubles as the heating is turned up.

While the continent's gas suppliers — from Norway and Algeria to Qatar and the US — typically boost their production to maximum levels, it's not enough to meet the increased demand.

As a result, the gas held in storage covers about 30% of the EU's daily needs during the winter. This proportion can top 50% on the chilliest days, especially if wind speeds are low and electricity output from renewable sources slumps.

The energy crisis sparked by Russia's invasion of Ukraine saw the EU introduce legally binding targets for gas storage across the bloc from 2022. This was to ensure security of supply.

Inventories must be at least 90% full by November 1 and there are also interim milestones to be met in February, May, July and September. Some countries fell short of their goals in February 2025.

The five-year agreement allowing Russian gas to transit through Ukraine and into Europe expired at the end of 2024. Prior to the deal coming to an end, the route had accounted for less than 5% of Europe's gas needs, down from more than 15% at the start of the accord.

Moscow didn't completely turn off the taps to the region; Russian pipeline gas is still flowing via the TurkStream line through Turkiye.

If US President Donald Trump succeeds in brokering a peace deal between Russia and Ukraine, there's a possibility that the transit agreement could be revived.

The EU's gas stockpiles quickly depleted over the 2024-25 heating season. Colder weather than a year earlier and more windless days increased demand for gas and forced countries to tap their storage.

Combined with the loss of Russian pipeline gas via Ukraine, the bloc's depots were only 44% full in mid-February, well below the 65% seen a year prior and the lowest level for this time of year since the 2022 energy crisis.

There's no immediate threat of Europe running out of gas, but there are concerns about the pace of storage refills needed to be ready for the next winter.

Fears over how Europe will replenish its storage stoked a surge in the price of summer gas contracts and drove near-term prices to a two-year high on February 10. In turn, energy bills have remained elevated, prolonging pain for Europe's households and businesses, just as recession risks are back in focus for the likes of Germany and the UK.

European consumers and governments are now entering their fourth year of high and volatile gas prices.

If a peace deal is reached between Russia and Ukraine, it could revive the transit of gas via that route into Europe. Whether the EU would return to importing Russian pipeline gas remains to be seen.

It's unlikely the bloc would want to relinquish control of its energy security back to Moscow.