### اتفاية ترسيم الحدود البحرية مع قبرص



https://euromenaenergy.com/wp-content/uploads/2025/11/WhatsApp-Video-2025-11-05-at-21.02.16 2f318946.mp4

#### What Africans want from COP30



The upcoming UN Climate Change Conference (COP30) will be the first to take place in the Amazon, sending a powerful symbolic message about the central role developing economies must play in the global response to the climate crisis. But at a time of geopolitical fragmentation and low trust in multilateralism, symbolism is not enough. Developing economies must plan and propel the green transition. Africa is no exception.

So far, Africa's climate narrative has been one of victimhood: the continent contributes less than 4% of global greenhousegas emissions, but it is highly vulnerable to the effects of climate change. This disparity fuelled the calls for "climate justice" that helped to produce ambitious climate-financing pledges from the industrialised economies at past COPs. But with those pledges going unfulfilled, and Africa's climate-finance needs rising fast, moral appeals are clearly not enough.

A shift to a more strategy-oriented discourse is already underway. The Second Africa Climate Summit (ACS2), which took place in Addis Ababa last month, positioned the continent as a

united actor capable of shaping global climate negotiations. It also produced several initiatives, such as the Africa Climate Innovation Compact and the African Climate Facility, that promise to strengthen Africa's position in efforts to ensure a sustainable future.

Instead of continuing to wait for aid, Africa is now seeking to attract investment in its green transition, not because rich countries "owe" Africans — though they do — but rather because Africa can help the world tackle climate change. But success will require progress on four fronts, all of which will be addressed at COP30.

The first is the cost of capital. Because systemic bias is embedded in credit-rating methodologies and global prudential rules, African countries face the world's highest borrowing costs. This deters private capital, without which climate finance cannot flow at scale. While multilateral development banks (MDBs) can help to bridge the gap, they typically favour loans — which increase African countries' already-formidable debt burdens — rather than grants.

At COP29, developed economies agreed to raise "at least" \$300bn per year for developing-country climate action by 2035, as part of a wider goal for all actors to mobilise at least \$1.3tn per year. If these targets are to be reached, however, systemic reform is essential. This includes changes to MDB governance, so that African countries have a greater voice, and increased grant-based financing. Reform also must include recognition of African financial institutions with preferred creditor status, and the cultivation of a new Africa-led financial architecture that lowers the cost of capital.

The second area where progress is essential is carbon markets. Despite its huge potential for nature-based climate solutions, Africa captures only 16% of the global carbon-credit market. Moreover, the projects are largely underregulated and poorly priced, with limited community involvement. Africa is now at

risk of falling into a familiar trap: supplying cheap offsets for external actors' emissions, while reaping few benefits for its people.

While some African countries are developing their own carbon-market regulations, a fragmented system will have limited impact. What Africa needs is an integrated carbon market, regulated by Africans, to ensure the quality of projects, set fair prices, and channel revenues toward local development priorities, including conservation, renewable energy, and resilient agriculture. This system should be linked with Article 6 of the Paris climate agreement, which aims to facilitate the voluntary trading of carbon credits among countries.

The third imperative for Africa at COP30 is to redefine adaptation. Rather than treating it primarily as a humanitarian project, governments must integrate adaptation into their industrial policies. After all, investment in climate-resilient agriculture, infrastructure, and water systems generates jobs, fosters innovation, and spurs market integration.

By linking adaptation to industrialisation, Africa can continue what it started at ACS2, shifting the narrative from vulnerability to value creation. Africa should push for this approach to be reflected in the indicators for the Global Goal on Adaptation, which are set to be finalised at COP30. The continent's leaders should also call for adaptation finance to be integrated into broader trade and technology frameworks.

The final priority area for Africa at COP30 is critical minerals. Africa possesses roughly 85% of the world's manganese, 80% of its platinum and chromium, 47% of its cobalt, 21% of its graphite, and 6% of its copper. In 2022, the Democratic Republic of the Congo alone accounted for over 70% of global cobalt production.

But Africa knows all too well that natural-resource wealth does not necessarily translate into economic growth and development. Only by building value chains on the continent can Africa avoid the "resource curse" and ensure that its critical-mineral wealth generates local jobs and industries. This imperative must be reflected in discussions within the Just Transition Work Programme at COP30.

These four priorities are linked by a deeper philosophical imperative. The extractive logic of the past — in which industrialisation depended on exploitation and destruction — must give way to a more holistic, just, and balanced approach, which recognises that humans belong to nature, not the other way around. Africa can help to lead this shift, beginning at COP30.

The barriers to progress are formidable. China likes to tout South-South solidarity, but it does not necessarily put its money where its mouth is. The European Union is struggling to reconcile competing priorities and cope with political volatility. The US will not attend COP30 at all, potentially emboldening others to resist ambitious action. If consensus proves elusive, parties might pursue "mini-lateral" deals, which sideline Africa.

When it comes to the green transition, Africa's interests are everyone's interests. If the continent is locked into poverty and fossil-fuel dependency, global temperatures will continue to rise rapidly. But if Africa is empowered to achieve green industrialisation, the rest of the world will gain a critical ally in the fight for a sustainable future. — Project Syndicate

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# بارودي يهنئ باتفاق الترسيم ويدعو لتعاون لبناني ــ قبرصي في الحقول البحرية



قال الخبير في شؤون الطاقة رودي بارودي في مقابلة حصرية مع إن اتفاقيـة الحـدود البحريـة بين لبنـان وقـبرص خطـوة" LebTalks: رائعة وضرورية وتعطينا الأمل، لأنها لا تقتصر على تحديد أساس للتعاون بين الفريقين، بل تسهم أيضا ً في تقليص المخاطر عليهما، "وت ُظهر للمنطقة والعالم مدى فاعلية الحوار والديبلوماسية

ولفت بارودي إلى أن "هذه الخطوة تُتوسّج مساراً تأخر بلا داع لما يقارب العقدين أذ كان مجمسّداً منذ العام 2007، ما يجعل الإنجاز أكثر قيمة،معتبرا أن رئيس الحكومة نواف سلام وفريقه قاموا بدورهم من خلال دعم الاتفاق، لكن الفضل في تحريك الملف من الجانب اللبناني يعود بالدرجة الأولى إلى الرئيس عون، ولذلك يُعتبر هذا إنجازا شخصياً له،وينطبق الأمر ذاته على الرئيس القبرصي نيكوس شخصياً له،وينطبق الأمر ذاته على الرئيس القبرصي نيكوس معاً

وعن أهمية هذه المعاهدة، أوضح بارودي أن "تسوية الحدود البحرية أمر بالغ الأهمية في الوقت الراهن، لأنها تفتح الباب أمام فرص جديدة، فالاتفاق يجعل لبنان أكثر جاذبية للشركاء الدوليين الكبار الذين يحتاج إليهم لتطوير قطاع النفط والغاز البحري الناشئ. وإذا تمكلن هذا القطاع من ان يحقق جزء بسيط من إمكاناته، فإن الفوائد ستصل إلى كل الاقتصاد اللبناني تقريبا ، ما يجعل من هذا الاتفاق على قبرص . "سببا للاحتفال الوطني. والأمر نفسه ينطبق على قبرص

و هناً بارودي الحكومة اللبنانية على قرار منح حقوق الاستكشاف في البلوك البحري رقم 8 إلى ائتلاف دولي قوي وذو سمعة ممتازة يضم شركات توتال اينرجي الفرنسية وإيني الإيطالية وقطر للطاقة القطرية، لافتا الى أن هذين القرارين يمه دان الطريق أمام مستقبل يصبح فيه لبنان دولة منتجة ومصد رة للغاز، ما يوفر زخما غير يصبح فيه لبنان دولة منتجة ومصد رة للغاز، ما يوفر زخما غير

لكن بارودي حذ ّر من أن الطريق لا يزال طويلا ً أمام التنفيذ الفعلي، قائلا ً: "الخطوة الأهم الآن هي المتابعة فعلى الحكومة أن ت ُنفّذ سلسلة من الإصلاحات المطلوبة منها، وأن تستثمر في بناء القدرات، وت ُبقي على الكفاءات والخبرات لإدارة الموارد البحرية وصونها كما أن لبنان يحتاج إلى اتفاق لترسيم الحدود البحرية والبرية مع سوريا، و تحديد نقطة ثلاثية على ذلك الجيانب بين لبنان وقبرص وسوريا، وهناك مؤشرات إيجابية مع الحكومة السورية ."الجديدة

وتابع بارودي قائلا ً إن على بيروت أيضا أن تضع خطة واضحة لتطوير قطاع النفط والغاز البحري: و"أغتنم هذه المناسبة لأقترح أن تبادر الحكومة اللبنانية فورا ً إلى دعوة نظيرتها القبرصية للتفاوض حول اتفاق تطوير مشترك، ينظ م تقاسم أي موارد نفطية أو غازية مشتركة تقع على جانبي الحدود البحرية، فإبرام اتفاق بهذا الخصوص سيجعل قطاعي الطاقة البحريين في كلا البلدين أكثر جاذبية للمستثمرين". وختم بارودي بحماسة قائلاً: "هذه هي الأبواب التي ف تحت أمامنا بفضل اتفاق ترسيم الحدود البحري . لذا، مرة أخرى، نتقد م بالشكر والتهنئة إلى الرئيس عون والرئيس خريستودوليدس على حكمتهما في ."السعي وراء هذا الاتفاق، وشجاعتهما في المثابرة حتى النهاية ."

# Baroudi congratulates Lebanese government on boundary deal with Cyprus



The decision of the Council of Ministers to approve Lebanon's maritime boundary agreement (MBA) with Cyprus is a genuine tour de force, a feather in the cap for President Joseph Aoun and his government.

This step caps a process that was unnecessarily delayed for almost two decades, but that only makes this achievement more gratifying.

Having settled maritime boundaries is crucial right now because of the opportunities it opens up. The agreement makes Lebanon much more attractive to the major international partners it needs to develop its nascent offshore oil and gas sector. If and when that sector reaches even a small fraction of its potential, the benefits should flow to virtually every corner of the Lebanese economy, so everyone in the country should really celebrate this.

As if to punctuate the moment, the Council of Ministers also awarded the rights to a key offshore area, Block 8, to a reputable international consortium consisting of France's TotalEnergies, Italy's ENI, and Qatar's QatarEnergy.

Together, these moves help to pave the road toward a future in which Lebanon becomes an energy producer and exporter, adding unprecedented momentum to an economy that desperately needs it.

These are both major milestones, and the government — along with President Joseph Aoun, whose own leadership on the border deal was crucial to initiating the negotiations — deserves plenty of credit.

The important part now is the follow-up. The government still needs to implement a long list of reforms, invest in capacity building, and retain competent personnel and managers to steward and safeguard the country's offshore resources. It also will need to do its homework on how best to nurture that offshore business.

There is so much to be done — but so much to be claimed by doing it! Getting the MBL with Cyprus finalized was at the top of the list, and resolving Block 8 was not far down, so the government deserves congratulations for both.

And since I mentioned nurturing, I also take this opportunity to propose that the Lebanese government immediately invite its Cypriot counterpart to negotiate another crucial deal: a joint development agreement, or JDA, which would govern the sharing of any oil and/or gas resources which straddle their border at sea. Setting up a JDA now would not only prevent possible delays in the future — it also would make both countries' offshore energy sectors even more attractive to investors.

# Σε συνομιλίες η Κύπρος για την ΑΟΖ με τον Λίβανο. Οι επαφές που κάνει ο πρόεδρος της Κύπρου



Οι τεταμένες σχέσεις Ισραήλ-Λιβάνου και οι ραγδαίες εξελίξεις στη Μέση Ανατολή έχουν κινητοποιήσει τη Λευκωσία για επαφές υψηλού επιπέδου για την επικύρωση της ΑΟΖ με το Λίβανο. Ετσι ο πρόεδρος της Κύπρου Νίκος Χριστοδουλίδης συναντήθηκε με τον εμπειρογνώμονα περιφερειακής πολιτικής Ρούντι Μπραούντι, μακροχρόνιος υποστηρικτής του διαλόγου, της διπλωματίας και της ειρηνικής ανάπτυξης, ως προς τις ασφαλέστερες διαδρομές

προς μεγαλύτερη σταθερότητα για ολόκληρη την Ευρω-Μεσογειακή περιοχή και άτυπο διαμεσολαβητή των δύο χωρών. Μάλιστα έχει γράψει και σχετικά βιβλία, όπως την «οριστικοποίηση θαλάσσιων Συνόρων στην Ανατολική Μεσόγειο: Ποιος θα Ειναι ο Επόμενος;» και «Ένα Κλειδί, Πολλαπλά Έπαθλα: Οριστικοποίηση θαλάσσιων Συνόρων ανάμεσα στην Κύπρο, το Λίβανο και τη Συρία».

0 κ. Χριστοδουλίδης και ο ομόλογός του από το Λίβανο, ο πρώην Γενικός Τζόζεφ Αουν, συμφώνησαν τον Ιούλιο να διαπραγματευτούν και να οριστικοποιήσουν μια γραμμή θαλάσσιων συνόρων . Και οι δύο χώρες αναμένουν ότι θα αποκομίσουν πολλά οφέλη από μια τέτοια συμφωνία, και η κατοχύρωση εδαφικών συνόρων στη θάλασσα θα καταστήσει ευκολότερη την προσέλκυση ξένων επενδυτών για την ανάπτυξη των ενεργειακών πηγών τους.

«Η επίτευξη συμφωνίας θα ανοίξει όλες τις πόρτες για την Κύπρο και το Λίβανο», δήλωσε ο κ. Μπαρούντι μετά από τη συνάντηση. «Οι τάσεις πηγαίνουν στη σωστή κατεύθυνση, και όχι μόνο σε σχέση με το Λίβανο. Ο πρόεδρος της Κύπρου έχει φιλόδοξα σχέδια εξωτερικής πολιτικής, ιδιαίτερα σχετικά με τις δραστηριότητες της Κύπρου τους πρώτους έξι μήνες του 2026, όταν θα έχει την προεδρία του συμβουλίου της Ευρωπαϊκής Ένωσης».

«Εκμεταλλεύτηκα επίσης την ευκαιρία να ευχηθώ στο πρόεδρο της Κύπρου καλή επιτυχία σε αυτή την αποστολή», πρόσθεσε, «ειδικά καθώς αναμένεται να εστιάσει όχι μόνο στην ενίσχυση της συνοχής της Ευρώπης, αλλά και στην ενίσχυση του ρόλου της Κύπρου ως γέφυρα μεταξύ Ευρώπης και γειτονικών χωρών.»

Πράγματι, η Λευκωσία έχει ένα φιλόδοξο πρόγραμμα για την προεδρία της και συνεργάζεται στενά με τη Δανία, που ασκεί την προεδρία αυτό το εξάμηνο , και την Πολωνία, που θα διαδεχθεί την Κύπρο. Η λεγόμενη«τριπλή προεδρία» βοηθά στη διασφάλιση συνέχειας από τη μία προεδρία στην επόμενη.

Ο κ. Μπαρούντι έχει γράψει αρκετά βιβλία και μελέτες σχετικά με το πώς τα υπάρχοντα εργαλεία του ΟΗΕ μπορούν να βοηθήσουν τις παράκτιες χώρες να συμφωνήσουν δίκαια και ισότιμα θαλάσσια

σύνορα, να μειώσουν τις εντάσεις και να αποκομίσουν σημαντικά οικονομικά και κοινωνικά οφέλη. Έχει επίσης γράψει και μιλήσει δημόσια για διάφορες ευκαιρίες περιφερειακής συνεργασίας, από διασυνδεδεμένα ενεργειακά δίκτυα και υπεράκτια αιολικά πάρκα μέχρι κοινή διαχείριση θαλάσσιων προστατευόμενων περιοχών.

Το 2023, απονεμήθηκε στον κ. Μπαρούντι το Βραβείο Ηγεσίας από το Transatlantic Leadership Network, ένα think-tank της Ουάσινγκτον, για τη «πολύτιμη συμβολή του στην οικοδόμηση μιας ειρηνικής και ευημερούσας Ανατολικής Μεσογείου».

Σε δεκάδες άρθρα, μελέτες, εμφανίσεις στα μέσα ενημέρωσης και ομιλίες, για παράδειγμα, ο βετεράνος της κλάδου έχει τεκμηριώσει την επιχειρηματική βάση για το νησιωτικό κράτος να γίνει κέντρο επεξεργασίας και διανομής φυσικού αερίου για τους γείτονές του. Αυτό θα περιελάμβανε την Κύπρο να δημιουργήσει έναν υπόθαλάσσιο αγωγό φυσικού αερίου προς την ευρωπαϊκή ενδοχώρα, ένα εργοστάσιο υγροποιημένου φυσικού αερίου (LNG) που θα ήταν το μεγαλύτερο έργο που έχει ποτέ η χώρα, ή και υπεράκτια πλωτά συστήματα αποθήκευσης και υγροποίησης για την εξυπηρέτηση απομακρυσμένων χωρών δια θαλάσσης.

«Όλες αυτές οι μελέτες και οι παράγοντες που ανέδειξαν παραμένουν επίκαιροι σήμερα», δήλωσε ο κ. Μπαρούντι. «Η Κύπρος διαθέτει την εγγύτητα, τις τιμές γης και τις σχέσεις με τους γείτονές της για να γίνει ο συνεταιριστής όλων στις εξαγωγές ενέργειας, αλλά και να λειτουργήσει ως θεμέλιος λίθος για μια πιο σταθερή και ευημερούσα περιοχή.»

#### **Amid Maritime Boundary Talks**

# in the Region, Cypriot President Receives International Energy Expert, Roudi Baroudi, on UN Demarcation Tools



NICOSIA - 29, September 2025: Cypriot President Nikos Christodoulides met today with the international energy policy expert, Roudi Baroudi, who presented copies of his two latest books, "Settling Maritime Boundaries in the Eastern Mediterranean: Who Will Be Next?" and "One Key, Multiple Prizes: Settling Maritime Boundaries Among Cyprus, Lebanon, and Syria".

Baroudi, a long-time advocate of dialogue, diplomacy, and

peaceful development as the surest routes to greater stability for the entire Euro-Med region, said he felt "honored to have been received by the President."

Christodoulides and his Lebanese counterpart, former General Joseph Aoun, agreed in July to have their respective teams negotiate and finalize a maritime boundary line (MBL). Both countries expect to derive numerous benefits from such a pact, and having treatied borders at sea will make it easier to attract the foreign investors required to develop their respective offshore oil and gas resources.

Reaching a deal "will open up all sorts of doors for Cyprus and Lebanon," Baroudi said after the meeting. "The trends are going in the right direction, and not just vis-à-vis Lebanon. The President has ambitious foreign-policy plans, particularly with regard to Cyprus' activities for the first six months of 2026, when it will hold the rotating presidency of the European Union."

"I also took the opportunity to wish His Excellency every good fortune on that mission," he added, "especially since it is expected to focus not only on shoring up Europe's cohesion, but also on beefing up Cyprus' role as a bridge between Europe and its neighbors."

Indeed, Nicosia does have an ambitious agenda for its time in the presidency, and is working closely with Denmark, the current holder, and Poland, which will follow Cyprus' term. The so-called "trio presidency" helps to ensure continuity from one presidency to the next.

Baroudi has published several books and studies on how existing United Nations tools can help coastal states to agree fair and equitable maritime boundaries, reduce tensions, and reap significant economic and social rewards in the bargain. He also has written and spoken publicly about a variety of opportunities for regional cooperation, from interconnected

power grids and offshore wind farms to joint management of marine protected areas. In 2023, he was awarded the Transatlantic Leadership Award by the Transatlantic Leadership Network, a Washington think-tank, for what it described as "his valuable contribution in building a peaceful and prosperous Eastern Mediterranean."

In addition to these works, ever since 2011, when the full potential of the East Med's offshore hydrocarbon deposits began to emerge, Baroudi's advocacy role has seen him provide thought leadership for a variety of projects and proposals that would transform Cyprus into a regional energy hub. In dozens of articles, studies, media appearances, and speaking engagements, for example, the industry veteran has made the business case for the island nation to become a gas processing and distribution center for its neighbors. This would include Cyprus hosting one end of an undersea gas pipeline to the European mainland, a liquified natural gas (LNG) plant that would be the country's largest-ever project, and/or offshore floating storage and gasification units(s) to serve more distant customers by ship.

"All of these studies and the factors they highlighted are still relevant today," Baroudi said. "Cyprus has the proximity, the land prices, and the relationships with its neighbors to make it everyone's partner for energy exports, but also to serve as the bedrock for a stabler and more prosperous region."

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 .

### 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.

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# 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

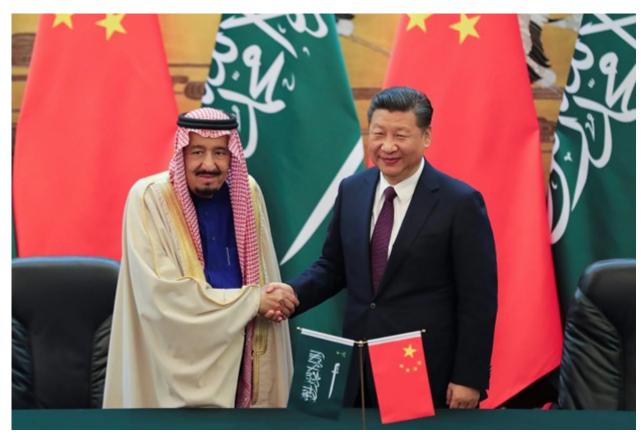
years investigating how these hazardous substances make their way into the seas and oceans bordering Europe. The mission plans to share its findings soon.

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.

# 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 recordsetting 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.