# بعد البحر… نفط في البر "؟

کتب نادر حجاز فی موقع mtv:

أعاد الأمين العام لحزب الله السيد حسن نصرالله الى الواجهة الحديث عن استخراج النفط في البر "بعد اكتشافه في البحر، جازما أن لبنان يملك ثروة نفطية في اليابسة وأن السياسة عطلّت أن لبنان يملك ثروة نفطية في اليابسة وأل السنوات السابقة

تصريح نصرالله يذكر بدراسات عدة أشارت الى هذا الأمر، بدءا من العالم غسان قانصوه وصولا ً الى المسوحات التي سبق وأجريت في مهل زمنية مختلفة ومتباعدة. فهل لبنان يملك فعلا ً ثورة نفطية في البر"؟ وما الطريق الذي يجب أن تسلكه الدولة لاستخراجه؟ والسؤال الأهم هو أي فائدة لهذا الاستخراج وهل العالم لا زال في عصر النفط؟ الخبيرة في شؤون النفط والغاز لوري هايتيان ذكر ت بالمحطات التاريخية التي برز فيها الحديث عن النفط في البر، بدءا من الفترة الممتدة بين 1947 و1967، حيث حصلت محاولات للبحث عن النفط في البنان في البنانية، وخلصت الى أنه يوجد نفط في لبنان لكن الاستخراج مكلف جدا ً. وأ قفل الملف حتى العام 1993 حين حصلت محاولات أبريت من مرحلة ما بعد العام 2000 حتى اليوم، مشيرة الى مسوحات أجريت من مرحلة ما بعد العام 2000 حتى اليوم، مشيرة الى مسوحات أجريت من مرحلة ما بعد العام 2000 حتى اليوم، مشيرة الى مسوحات أجريت من مرحلة ما بعد اللبنانية في هذه الفترة ولكن لم ي عل كميات كبيرة نملكها قبل الدولة اللبنانية في هذه الفترة ولكن لم ي عل كميات كبيرة نملكها .

الى وجوب القيام بالدراسات mtv وأشارت هايتيان في حديث لموقع اللازمة ولاحقاً بدء الحفر للتأكد من وجود النفط في البر من عدمه، موضحة أنه "لا يوجد اليوم أية خطة لاستخراج النفط في البر" وكل ما نملكه هو مسوحات موقعية حصلت أخيرا ، وكان هناك قانون للتنقيب عن النفط في البر قيد الدرس في البرلمان لكنه لم ي ُقر"". واعتبرت هايتيان أنه "بناء على هذه المعطيات لا يمكن الجزم بوجود نفط في البر"، وما يمكننا القيام به هو التخطيط واتخاذ القرار

وتعليقا ً على طرح نصرالله، قالت هايتيان: "نصرالله يتحدث عن زمن ولسّى، فالاعتماد على النفط والغاز والسعي للتحوسّل الى دولة نفطية أصبح "دقسّة قديمة" في الاقتصاد، ونمط اقتصادي قديم لا يصلح ولا يتماشى مع التطور العالمي في زمن البحث عن الطاقات المتجددة. وإذا كانوا يعتبرون أن هذا النهج سينقذ لبنان، فلن يكون له مكان في العالم".

وفيما وصفت هذا التفكير بالبالي والقديم الذي لا مكان له في العالم، شددت هايتيان على أنه "يجب التطلّع الى الأمام وكيفية الاتجاه نحو الطاقة المتجددة"، مقترحة أن تقوم وزارة الصناعة بمسح حول ما يملكه لبنان من معادن يمكن استخراجها واستثمارها في صناعة الطاقة المتجددة"، مضيفة "إذا كنا نريد فعلا ً أن يكون لنا دور في الاقتصاد العالمي فالأجدى التفكير بهذا الاتجاه وهذا ما يمكن أن ."يساهم في تطوير المجتمع وحجز مكان للبنان في الاقتصاد العالمي

النفط ليس الحل السحري للبنان… جملة قالها بيار دوكان في السابق، فعودة النهوض الاقتصادي يحتاج الى نمو والى استعادة الدورة الاقتصادية لحيويتها ودعم القطاعات المنتجة، وكل هذا لن ينفع إذا لم يقم لبنان بالاصلاحات وتحصين مؤسساته في وجه الفساد، وإلا لن تحمل الأيام المقبلة ما هو أفضل من واقع حالنا حتى ولو كانت .نفطية

# Lebanon-Israel deal counts as big win for both parties — and for US diplomacy



The United States accomplished a diplomatic tour de force in October when Lebanon and Israel agreed to settle most of their maritime boundary.

Of course, credit for this achievement is also due to the principals, but U.S. mediation was essential to setting the stage for the mostly indirect negotiations, regaining momentum when it looked like the process might be permanently stalled, and keeping the parties on-course until they reached agreement. Simply put, in this instance, the U.S. really was the "indispensable nation" it has so often strived to be.

The very fact that an agreement was reached is itself a remarkable departure from decades of mutual enmity between Lebanon and Israel. After all, the deal is anything but the usual sort between two sides that have recently been at odds over one or more particular issues.

Instead, from the moment of Israel's establishment in 1948, a state of war has existed between it and Lebanon. A cease-fire was agreed to the following year, but since then there have been countless confrontations between the two sides, including at least three full-scale wars (1978, 1982, 2006), multiple smaller conflicts, a 22-year occupation of South Lebanon

ending (for the most part) in 2000, and hundreds of skirmishes. Although the Lebanese have sustained far more than their share of losses in blood and treasure alike, the Israelis also have paid a painful price. Each side has plenty of reasons to distrust the other, and any Lebanese or Israeli advocating accommodation between the two risks running afoul of powerful domestic constituencies bent on continued mutual hatred.

It took more than a decade of intermittent contacts, virtually all of them consisting of messages exchanged through American intermediaries, but eventually logic prevailed, and the deal got done. And it's a good deal for both sides. The Israelis extracting offshore qas since and exporting some of it to Jordan since 2017, but the agreement enhances their ability to expand production and tap enormous markets in Europe. Lebanon's gas industry is far less advanced, so recognition of its maritime boundaries is even more important: Recognition of its Exclusive Economic Zone (EEZ) makes it a viable destination for the foreign investment required for offshore hydrocarbon activities, country's crippling economic and financial crises make the chance to become energy self-sufficient and even earn badly needed export revenues even more attractive.

If it was patience that kept hope alive despite repeated periods of soaring tensions threatened to derail the process, it was creative diplomacy that proved the wisdom of that patience by identifying practical compromises both sides could see as fair and equitable.

For one thing, the agreement bridged proverbial gaps between the two sides' positions by leaving actual gaps in the line separating their respective maritime zones. One of these is at the western end of the agreed boundary, where it stops just under a kilometer short of the line established bilaterally by Israel and Cyprus in 2010. This leaves for future negotiation the precise location of the "trijunction" point where the Israeli and Lebanese zones will meet up with that of Cyprus. The other gap is at the eastern end, leaving a much longer (approximately 5 kilometers) stretch of open water between the agreed maritime boundary and the land terminus point (LTP) of the two countries' terrestrial border. Since Lebanon and Israel have yet to agree on a location for that LTP, and since the most promising resource areas — in particular the Qana Prospect thought to constitute a significant reservoir of natural gas — lay much farther offshore, it made sense to lock in the rest of the line now and leave this coastal section for later.

A similarly pragmatic approach was applied to the Qana Prospect itself, believed to straddle the agreed boundary between Lebanon's Block 9 and adjacent Israeli waters. Here the challenge stemmed from Lebanon's longstanding withholding of diplomatic recognition from Israel and, therefore, its refusal to engage directly with its neighbor. The solution was to have an independent third party — specifically the international company, France's Total Energies, licensed to act as the Block 9 operator — handle any necessary communications with, and prospective financial compensations of, the Israeli side.

For all of these (and other) reasons, the Lebanon-Israel agreement is nothing short of remarkable, not only because of what it says about the principals and their intermediary, but also because of the example it sets for the resolution of other maritime disputes around the world.

With a lot of effort, both Lebanon and Israel demonstrated politico-diplomatic maturity by recognizing that their interests were best served by embracing dialogue (however indirect) and accommodation, not the bombast and self-defeating dogmatism that only deepen divisions without solving problems.

Arriving at such an agreement required each side to exercise a

measure of strategic empathy toward the other, no small feat for parties so accustomed to viewing one another as enemies. It is fair to predict, too, that if and when the parties decide to settle other aspects of their dispute, or even when they just need to defuse some future crisis without bloodshed, this experience will be a useful touchstone.

For the U.S., its successful stewardship of the Israeli-Lebanese negotiations proves that it still matters in the Middle East and North Africa region, and comes at a time when some Arab capitals have been questioning American reliability and resolve. Washington's performance shows that it can get things done without having to take or threaten military action.

For parties to maritime disputes worldwide, the Lebanon-Israel agreement offers proof that even sworn enemies can find mutually acceptable outcomes on at least some of the issues that divide them.

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### EU countries agree gas price

#### cap to contain energy crisis



BRUSSELS, Dec 19 (Reuters) — European Union energy ministers on Monday agreed a gas price cap, after weeks of talks on the emergency measure that has split opinion across the bloc as it seeks to tame the energy crisis.

The cap is the 27-country EU's latest attempt to lower gas prices that have pushed energy bills higher and driven recordhigh inflation this year after Russia cut off most of its gas deliveries to Europe.

Ministers agreed to trigger a cap if prices exceed 180 euros (\$191.11) per megawatt hour for three days on the Dutch Title Transfer Facility (TTF) gas hub's front-month contract, which serves as the European benchmark.

The TTF price must also be 35 eur/MWh higher than a reference price based on existing liquefied natural gas (LNG) price assessments for three days.

"We have succeeded in finding an important agreement that will shield citizens from skyrocketing energy prices," said Jozef Sikela, industry minister for the Czech Republic, which holds the rotating EU presidency.

The cap can be triggered starting from Feb. 15, 2023. The deal will be formally approved by countries in writing, after which it can enter into force.

Once triggered, trades would not be permitted on the front-month, three-month and front-year TTF contracts at a price more than 35 euros/MWh above the reference LNG price.

This effectively caps the price at which gas can be traded, while allowing the capped level to fluctuate alongside global LNG prices — a system designed to ensure EU countries can still bid at competitive prices for gas in from global markets.

Germany voted to support the deal, despite having raised concerns about the policy's impact on Europe's ability to attract gas supplies in price-competitive global markets, three EU officials said.

An EU official told Reuters Germany agreed to the price cap after countries agreed changes to another regulation on speeding up renewable energy permits, and stronger safeguards were added to the cap.

Those safeguards include that the cap will be suspended if the EU faces a gas supply shortage, or if the cap causes a drop in TTF trading, a jump in gas use or a significant increase in gas market participants' margin calls.

Soaring power and gas prices have rocked energy companies across Europe, forcing utilities and traders to secure extra funds from governments and banks to cover margin call requirements.

Germany's Uniper (UN01.DE) has booked billions of euros of losses on derivatives, exacerbating a crisis as it rushed to fill the gap left after Russia cut supplies.

Jacob Mandel, senior associate at Aurora Energy Research, said the TTF front-month contract has rarely closed above 180 eur/MWh, noting this has occurred on 64 days in its history. All of those were in 2022.

Two EU officials said only Hungary voted against the price cap.

The Netherlands and Austria abstained. Both had resisted the cap during negotiations, fearing it could disrupt Europe's energy markets and compromise Europe's energy security.

Dutch energy minister Rob Jetten said: "Despite progress the last couple of weeks, the market correction mechanism remains potentially unsafe."

"I remain worried about major disruptions on the European energy market, about the financial implications and, most of all, I am worried about European security of supply," he added.

The EU proposal has also drawn opposition from some market participants, who have said it could cause financial instability.

The Intercontinental Exchange (ICE) (ICE.N), which hosts TTF trading on its Amsterdam exchange, last week said it could move TTF trading to outside of the EU if the bloc capped prices.

On Monday, it said it will assess whether it can continue to operate fair and orderly markets for TTF gas hub trading. For now, ICE TTF markets will continue trading as normal.

The front month TTF gas price closed trading on Monday 9% lower, at 107 euros/MWh, Refinitiv Eikon data showed.

The contract hit a record high of 343 euros in August — a price spike that prompted the EU to move ahead with its price cap.

Italy's energy authority ARERA expects further increases in gas prices as the winter season kicks in, its President Stefano Besseghini said on Monday.

Meanwhile, Russia's Kremlin spokesman Dmitry Peskov said the cap was an attack on market pricing, and unacceptable, Russia's Interfax news agency reported.

The deal follows months of debate on the idea and two previous emergency meetings that failed to clinch an agreement among EU countries that disagreed on whether a price cap would help or hinder Europe's attempts to contain the energy crisis.

Roughly 15 countries, including Belgium, Greece and Poland, had demanded a cap below 200 euros/MWh — far lower than the 275 euros/MWh trigger limit originally proposed by the European Commission last month.

Poland's prime minister said the price cap would end Russia and Gazprom's ability to distort the market.

"At the recent meetings in Brussels, our majority coalition managed to break the resistance — mainly from Germany," Mateusz Morawiecki wrote on Twitter. "This means the end of market manipulation by Russia and its company Gazprom."

#### Wars aren't won with

#### peacetime economies



By Joseph E Stiglitz/New York

Politically, the G7 and likeminded countries around the world have adopted a war footing to stop Russian aggression. Russian President Vladimir Putin violated the most fundamental principle of international law by launching an unprovoked attack on another member of the United Nations — an institution created explicitly to prevent such aggression. The dangers of appeasement should be obvious. Even a little empathy should make us shudder in horror at the prospect of having to live under Putin's rule.

It is a peculiar war. While Putin has described his project as a confrontation with the entire West, Ukrainians alone are doing all the fighting and bearing the full brunt of Russian attacks on civilians and civilian infrastructure. Meanwhile, Europe and America have provided economic and military assistance, and the rest of the world has been dealing with the war's fallout, including higher energy and food prices.

But it is a mistake to think that the war can be won with a peacetime economy. No country has ever prevailed in a serious war by leaving markets alone. Markets simply move too slowly

for the kind of major structural changes that are required. That's why the United States has the Defence Production Act, which was enacted in 1950 and invoked recently in the "war" against Covid-19, and again to address a critical shortage of baby formula.

Wars inevitably cause shortages and generate windfall gains for some at the expense of others. Historically, war profiteers have typically been executed. But today, they include many energy producers and traders who, rather than being marched to the gallows, should be subjected to a windfall profits tax. The European Union has proposed such a measure, but it would come too late, and it is too weak and too narrow for the challenge at hand. Similarly, while several members of Congress have put forward bills to tax Big Oil's superprofits, the Biden administration has so far failed to move on the issue.

That is understandable, given that US President Joe Biden has been busy enlisting support for signal achievements like the Inflation Reduction Act and the CHIPS Act. Moreover, in seeking the private sector's cooperation in limiting price increases, he has been at pains not to appear "anti-business." But taxing windfall profits and using the proceeds to finance the necessary war spending and support for those hurt by high prices is not anti-business; it is responsible wartime governance, which is necessary to maintain popular support for the war effort. Such temporary taxes hurt neither investment nor employment, and there is nothing unjust about taxing exceptional gains that companies did nothing to deserve. (Besides, more generally, taxes on corporate profits are not distortionary, because costs, including capital, are deductible.)

Even more comprehensive measures are needed in Europe, where today's electricity market was not designed to deal with wartime conditions. Instead, it follows the principle of marginal-cost pricing. That means the electricity price reflects the highest-cost source of production needed to meet current demand. As gas prices have soared, marginal costs have

risen far above average costs. The cost of renewable energy has, for instance, changed little.

As such, many sellers of low-cost electricity are making a killing, as are the traders who bought energy at the lower pre-war prices. While these market players reap billions of euros in profits, consumers' electricity bills are soaring. Electricity prices in energy-rich Norway, with its enormous gas and oil reserves and hydro capacity, have increased nearly tenfold.

Meanwhile, households and small businesses are being pushed to the brink, and even some big companies have already gone bankrupt. Last month, Uniper, a large company supplying onethird of Germany's gas, was "nationalised," effectively socialising its massive losses. The European principle of "no state aid" has been thrown aside, mainly because European leaders moved too slowly in changing a market structure that was not designed for war.

Economists love marginal-cost pricing because it provides appropriate incentives, and because its distributive consequences tend to be small and easily manageable in normal times. But now, the system's incentive effects are small and its distributive effects are enormous. In the short run, consumers and small businesses will have to turn down their thermostat in the winter and turn it up in the summer, but comprehensive energy-saving investments take time to plan and implement.

Fortunately, there is a simpler system (already under discussion in some countries, and already being partly implemented in others) that would retain most of marginal-cost pricing's incentive effects without the distributive effects. Under a non-linear pricing framework, households and firms could be allowed to purchase 90% of their previous year's supply at the previous year's price, and 91-110% of supply at, say, 150% of the previous year's price, before the marginal-cost price kicks in.

While non-linear pricing can't be used in many markets — owing to the possibility of "arbitrage" (buying a good at a low

price and immediately reselling it at a much higher price) — electricity is not one of them. That is why some economists (like me) have long advocated its use in cases where large market failures are having important distributive effects. It is a powerful tool that governments can and should use, especially when confronting wartime conditions.

Something also must be done about soaring food prices. After a half-century of paying US farmers not to farm (an old method of agricultural price support), we now should pay them to produce more.

Such changes have become imperative. As the Vietnamese understood, wars are won as much on the political front as on the battlefield. The purpose of the 1968 Tet Offensive was not to gain territory but to change the political calculus of the war, and it worked. Defeating Russia obviously will require more help for Ukraine. But it also will require a better economic response on the part of the West more broadly. That starts with sharing more of the burden through windfall profit taxes, controlling key prices — such as those for electricity and food — and encouraging government interventions where necessary to alleviate critical shortages.

Neoliberalism, based on simplistic ideas about how markets should operate that fail to comprehend how they actually operate, didn't work even in peacetime. It must not be allowed to stop us from winning this war. — Project Syndicate

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## هوكشتاين: لبنان وإسرائيل لم يحصلا على ما يريدانه من إتفاق الترسيم البحري



أكد الوسيط الأميركي لترسيم الحدود البحرية بين لبنان وإسرائيل آمـوس هوكشتـاين، أن "الاتفـاق البحـري بيـن الجـانبين مفيـد لأمـن إسرائيل".

وأضاف في تصريحات لقناة 13 الإسرائيلية، نقلتها "روسيا اليوم"، "لم تحصل إسرائيل على كل ما تريده، ولم يحصل لبنان على كل ما يريده. هكذا تجري المفاوضات عادة"، متابعا ً "كانت مفاوضات استمرت لما يقرب من 11 عاما ً، وقررت تغيير المعادلة. غيرنا المحادثة حتى ."يخرج الجميع منتصرين

وأشار إلى أن "إسرائيل تريد حصتها الاقتصادية بالطبع، لكنها تريد حقا استقرارا في البحر الأبيض المتوسط، وهيمنة إسرائيل على البحر هي نتيجة لنجاحها الهائل في تطوير مثل هذه⊡الأبيض المتوسط ."الكمية الكبيرة من الغاز الطبيعي

وتابع "خط الحماية لم يكن الحدود الرسمية بين إسرائيل ولبنان،

والآن وافق لبنان على الاعتراف به كوضع قائم بينه وبين إسرائيل، وهذا يتيح لإسرائيل القيام بدوريات على طول هذا الخط وإمكانية ."الإشراف عليه. هذا أمر عظيم بالنسبة لإسرائيل

وعن تأثير تهديدات حزب الله على المفاوضات البحرية، قال هوكشتاين، "أوضحت لي إسرائيل أنه لن تكون هناك مفاوضات تحت "التهديد

وفي إشارته إلى انتقاد إسرائيل لتوقيت الاتفاق قبل الانتخابات مباشرة، علق هوكشتاين قائلاً، "كانت لدينا فترة زمنية حرجة، لو انتظرنا لما تم الاتفاق". [

## Israel's Karish Offshore Gas Field: Facts and Figures



The country and its energy partners have found a more efficient way to exploit smaller offshore reserves, though Western officials should temper any expectations that such developments will help ease the global energy crisis.

Amid a verbal row between Israel and Lebanon, developing the Karish natural gas field represents a way forward for exploiting smaller offshore hydrocarbon discoveries in Israel's exclusive economic zone (EEZ). The field's 1.75 trillion cubic feet (tcf) of reserves are much less than the estimated volumes in Israel's two producing fields, Leviathan (35 tcf) and Tamar (7.1 tcf). But even before the recent sharp increase in gas prices, Energean, the Greek-British license

holder for Karish, decided the best way to exploit the field was by linking its development to two other small fields in the area, Karish North and Tanin.

Key to this task is the *Energean Power*, a floating production storage and offloading vessel (FPSO) that took up position fifty miles off Israel's northern coast last week and is due to start production in the third quarter of this year. The vessel will use multiple anchors in water 5,500 feet deep to maintain its position. Seabed equipment linking to the gas field below will then be connected by hoses to the FPSO. Once gas is flowing to the vessel, it will be processed onboard, cleaning it of oil products and water before it descends by other hoses to the seafloor and connects with a pipe that takes it ashore. Using a pressure control device close to the beach, it will then enter Israel's gas grid to supply power stations. Meanwhile, the separated oil products and waste will be collected by a small tanker mooring alongside the FPSO every two weeks or so, and the separated water will be cleaned and pumped back into the sea.

In Israeli domestic political terms, the crucial advantage of the *Energean Power* is that it is not visible to local residents (read: voters). In contrast, the production platform for the Leviathan field is visible just a few miles offshore from the hilltop resort of Zichron Yaakov south of Haifa, leading to protests—though the tall chimneys of the nearby Hadera power station have escaped such complaints. As for Tamar, its platform is located out of sight thirteen miles off the coast of Ashkelon far to the south, but its gas still needs additional processing at the Ashdod onshore terminal. In terms of potential security threats, the existing facilities for Leviathan and especially Tamar are closer to the Hamas-controlled Gaza Strip.

Another plus for the *Energean Power* is that it can be connected with relative ease to additional fields in the area for which Energean holds the license, without the vessel

needing to change location. The Karish North field is due to come online in the second half of 2023. Energean also judges that reserves in the "Olympus" area of Block 12 slightly further south will be commercially exploitable, though its latest drilling suggested only 0.28 tcf of reserves rather than the hoped-for 0.7 tcf. By carefully phasing such exploitation, the company hopes to maintain a steady production stream and offset the decline that occurs over the usual fifteen-year lifespan of an individual field.

In total, the *Energean Power* can handle 8 billion cubic meters (bcm) of gas per year. Setting aside the sometimes-confusing mix of metric and U.S. units of measurement represented by such figures, this amount will help meet Israel's expanding demand for energy. For example, desalination alone consumes 10 percent of the country's electricity. Eventually, surplus gas will be available for export, with Egypt as the first customer—though the purchase terms for Karish and Tanin do not permit Energean to export from those two fields.

#### The Lebanese Angle

Energean's planning seems unaffected by Lebanon's expanding claims for its EEZ, which encroaches on the Karish field. When tugboats moved the *Energean Power* into position last week, Hezbollah issued threats, and U.S. special envoy Amos Hochstein quickly visited Beirut to calm tempers.

From Israel's point of view, Karish is firmly in its EEZ. Moreover, dealing with threats against its gas installations is nothing new—the Leviathan platform is in range of both missiles from Lebanon and rockets from Gaza. Israel's main answer to this problem is deterrence, the implication being that any action or immediate threat against such installations would be dealt with either preemptively or through massive retaliation.

#### Israel and European Energy Demand

The volumes achievable from Karish and similar gas fields are significant for Israel but not in global terms. For comparison, Leviathan produces about 12 bcm per year and Tamar less than 10 bcm, while Europe's annual demand for gas was around 400 bcm even before the Ukraine crisis, with Russia supplying more than 40 percent of that amount. Clearly, increased Israeli exports would have minimal impact on this imbalance.

Nevertheless, planners are considering ways to increase Israeli production. Leviathan volumes can grow, albeit with a commensurate increase in the size of its controversial offshore platform. Israel may also be able to export gas more widely than its current arrangements: by pipeline to Jordan (where 80 percent of electricity is produced by Israeli gas) and Egypt (whose apparently insatiable domestic energy market is not sufficiently fed by the country's 75 tcf of gas reserves and estimated annual production of 65 bcm).

Currently, any exports further afield would need to be funneled via one of Egypt's liquefied natural gas plants on the Nile Delta coast. Israel may eventually be able to use a floating LNG platform off its own coast to load specially built tankers with Leviathan gas, though rough seas in winter could make this approach infeasible. Another consideration is a potential pipeline to Cyprus, where an LNG vessel moored in port could supply the island's modest domestic market while still leaving most of the Israeli product available for export further abroad. A proposal for a seabed line to take Israeli gas to Greece is effectively dead after the U.S. government signaled that the plan was logistically and commercially impractical.

Meanwhile, Israel, Egypt, and the European Union are expected to sign a memorandum of understanding on increasing gas

exports, though it is difficult to see what immediate practical effect this will have. Israel's Ministry of Energy will also open another round of bidding for licenses to explore in its EEZ. The degree of interest shown in this round will indicate how international energy companies currently regard the attractiveness of Israeli prospects.

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## Qatari Minister: No 'Quick Fix' to EU Gas Crisis



There is not much Qatar can do to alleviate Europe's gas crisis in the short term due to contractual commitments, Qatari Energy Minister Saad al-Kaabi tells Energy Intelligence - but further out, in five to seven years, new Qatari LNG exports to Europe should be significant. In an exclusive interview, al-Kaabi said production from the Golden Pass LNG project in the US, where QatarEnergy partners with Exxon Mobil, is due on stream in 2024 and is "already earmarked for Europe." Up to half of new output from Qatar's 48 million ton per year North Field mega-expansion could also go West of Suez when it starts up from 2026. Al-Kaabi also serves as head of state-owned QatarEnergy, which is in active discussions with customers for the new supplies. Significantly, targeted contract durations are shorter than the 20-year deals seen in Qatar's original LNG expansion, reflecting European reluctance to lock into gas supplies long-term. "I think 10-15-year deals are probably what are most acceptable to both sides. But for us, the long-term deal, it's not just about duration, it's about price," he said. Even with such supplies, al-Kaabi expressed skepticism about Europe's ability to completely wean itself off Russian gas. Europe will find it "very difficult" to completely forgo Russian pipeline gas for more than two winters. Despite storage, fuel switching and active efforts to expand LNG imports, "a quick fix" to the EU's dependency on Russian gas does not exist.

Qatar's North Field expansion is attracting enormous interest from foreign investors, with TotalEnergies tipped to become the first of the Phase-2 partners to be selected later this month. But investors in existing Qatari projects face a rocky ride when contracts on current joint ventures expire, as Exxon and Total discovered when their prized Qatargas-1 contract was not renewed last year. Al-Kaabi revealed that QatarEnergy came close to going it alone on the North Field expansion, too. Qatar, which is generating around 1 million barrels of oil equivalent per day of net output for Exxon, Total and Shell alone, is critical for the majors. However, "if there is no value, there is no partnership, very plain and simple," al-Kaabi said. Even if joint ventures are maintained after expiry, terms will be tougher. For Exxon, which has stakes in

nine of Qatar's 14 trains, these contract renewals are especially strategic. Qatar knows the value of its LNG will likely drive a hard bargain. "An investment in Qatar is really an important downside-risk revenue maker" for partners, al-Kaabi said.

LNG is only part of a multifront, international investment drive now under way at QatarEnergy. Downstream, petrochemicals is a priority, with al-Kaabi touting QatarEnergy's planned US project with Chevron Phillips Chemical as "the largest polyethylene plant." It recently awarded construction contracts for a 1.2 million ton/yr blue ammonia project, also tipped to be the biggest of its kind. But its global upstream drive is most significant. There were doubters when the strategy launched, but QatarEnergy has been vindicated over the past year by major exploration success in Namibia. QatarEnergy, by virtue of sizable stakes in both Total and Shell discoveries, is poised to be the largest reserves holder in a significant new oil province — Total's Venus discovery is described as the largest deepwater find ever. There have also been offshore gas discoveries in Cyprus and South Africa. And in Brazil, output at QatarEnergy's offshore Sepia field is set to more than double to 400,000 barrels per day in the next couple of years.

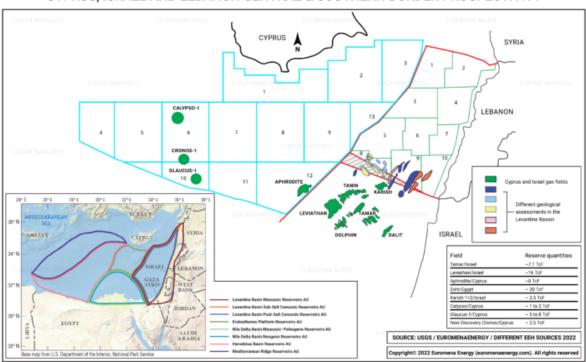
Despite confidence in long-term gas demand, QatarEnergy is taking steps to ensure its place in the energy transition. It is investing heavily in greenhouse gas emission mitigation technology at projects. Over \$250 million is being spent on such measures at the LNG expansion alone — principally carbon capture and storage (CCS) and solar power. Some 11 million tons/yr of CCS is planned by 2035. "From an overall value chain, Qatari LNG will be the least carbon footprint LNG you can get," al-Kaabi said. "We think that our buyers, and our investors that have joined us in [North Field East expansion], see this as the Rolls-Royce of projects." Transition pressures are feeding into the urgency for developing projects. "I am a

believer that you need to monetize what you can because the market conditions change, and there is a competitive advantage to go ahead of others," al-Kaabi stated.

## خرائط تؤكد توفُّر الغاز في مياه لبنان الإقليمية

#### LEVANTINE BASIN

#### CYPRUS, ISRAEL AND LEBANON CENTRAL & SOUTHERN BORDER PROSPECTIVITY





مع وصول مفاوضات ترسيم الحدود البحرية إلى خواتيمها على الرغم من ضبابية الجواب الإسرائيلي الذي سيحمله آموس هوكشتاين إلى الدولة اللبنانية، يؤكد الخبير الدولي في شؤون الطاقة رودي بارودي لموقع "القوات اللبنانية" الإلكتروني، أن "منطقة حوض شرقي المتوسط التي هي بقعة مثيرة ومعقدة للغاية لأسباب جيو \_ "Levantine basin" سياسية، تحتوي على آفاق إمكانية وجود كميات كبيرة من البترول والغاز لم يتم اكتشافها واستغلالها بعد، خصوصا أن المنطقة تحتوي منها واستغلالها بعد، خصوصا أن المنطقة تحتوي من الاحتياطي النفطي الممكن الاستفادة منه

وي ُضيف أن ما يؤكد هذا الأمر، هو نتائج مسح أكثر من 60 ألف كم من الخطوط الزلزالية الثنائية والثلاثية الأبعاد في منطقة حوض شرقي وتحديدا في لبنان، قبرص، إسرائيل "Levantine basin" المتوسط فقط حتى حدود مصر البحرية، وهي البلدان الموجودة حولٍ حوض بلاد الشام، وذلك بين الأعوام 2002/2008 وأيضا في العام 2016 والتلك في العام 2016 والتلك في العام approximately 60,000km of 2D and 3D seismic lines) أظهرت أن هناك أكثر من 150 احتمالاً لوجود مكامن بترولية داخل

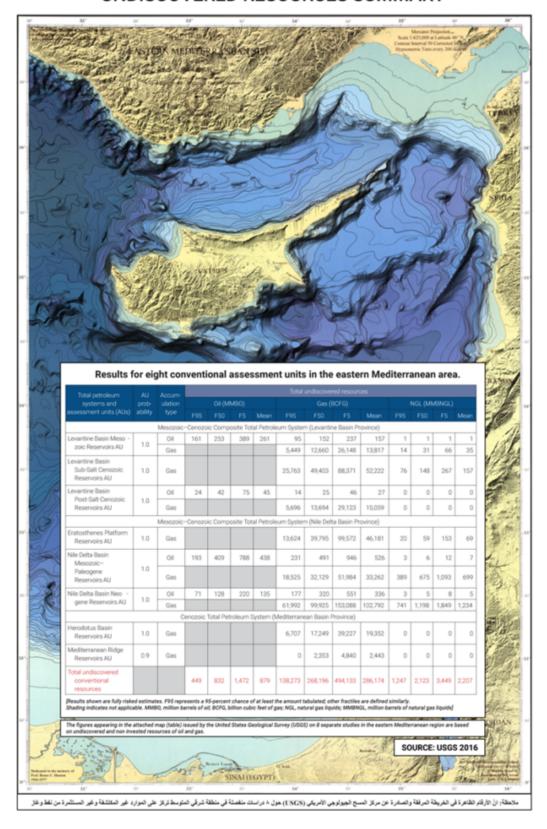
PGS وفي هذا الاطار، أثبتت الدراسات التي أجرتها شركات TGS وNEOS ولا يزال يتعيّن إثباتها في NEOS ولا يزال يتعيّن إثباتها في NEOS نجاحها أحواض أخرى. ففي العامين 2008/2009، تم اكتشاف كميات من الغاز في المياه الإسرائيلية في حقلي تمار وليفياثان وأيضا في حقل أفروديت القبرصي كما في حقل زهر في مصر العام 2015؛ علما أن دراسات مركز المسح الجيولوجي الأميركي والتي أجريت في العام 2016 & 2010 خلصت إلى أن الإمكانات غير المكتشفة تبلغ ضعف إجمالي ما تم (USGS)

ويتابع، مع كل الاكتشافات الحديثة بما في ذلك الاكتشاف الذي أعلن عن عقل "كرونوس" في قبرص الأسبوع الماضي، يمكن ان نتحدث عن تقدير للكميات بأكثر من 52 تريليون قدم مكعب. كل هذه الاكتشافات التي تحيط بلبنان تؤكد أن هناك احتمالية عالية لاستخراج كميات تجارية من الغاز، وهذا ما تشير إليه وبشكل واضح العديد من التقييمات العالمية في هذه التقييمات الجيولوجية التي أجرتها أهم الشركات العالمية في هذه الصناعة

ويؤكد بارودي أنه "بناءً على العديد من النماذج المستقاة من الدراسات الجيولوجية الهيدروكربونية، كما على تحليل طبيعة باطن الأرض الصخرية، يمكن الجزم أنه يوجد ما يكفي من الموارد الطبيعية وبكميات كبيرة في شرقي المتوسط لا تزال غير مكتشفة وغير مستثمرة، لا سيما في المياه اللبنانية.

ويعتبر أن "الأهم في الموضوع أنه بعد 20 عاماً تقريباً توح ّدت القيادة اللبنانية حول كيفية التعامل مع ملف يمكنه إنقاذ لبنان من المعاناة الاقتصادية والمالية التي يمر "بها وأعني بذلك موقفهم الموح د حول ترسيم الحدود البحرية مع إسرائيل". ويشدد في السياق، على أن "لبنان يحتاج في أسرع وقت ممكن إلى إجراء العديد من الإصلاحات المطلوبة لإعادة إنتاج نظامه المالي والقضائي والاقتصادي، وفي حال ترافق الإصلاحات مع إبعاد ملف النفط عن المناكفات السياسية، سيعرف لبنان نهضة اقتصادية ومالية أكيدة ما يساعد على تطوير البنى التحتية التي هو في أمس الحاجة إليها وي ُعيد الأمل إلى الشعب اللبناني وتزدهر قطاعات عدة ومنها القطاع المصرفي إلى الشعب اللبناني وتزدهر قطاعات عدة ومنها القطاع المصرفي

## LEVANTINE BASIN UNDISCOVERED RESOURCES SUMMARY



ويضيف، إذ إن كل هذه التطورات، ولا سيما التوصل مع إسرائيل إلى ترسيم واضح للحدود البحرية يحافظ على المصالح اللبنانية، يمكنه أن يساهم في معاودة شركات النفط التنقيب في البحر اللبناني، كما يساعد على تشجيع الشركات العالمية على التقدم إلى عمليات الاستكشاف النفطي سواء في البحر أو البر"، ما يساعد في خلق جو" القتصادي مُريح يحتاجه لبنان.

ويقول في هذا الإطار، لا بد من شكر الجهود الحثيثة التي تقوم بها الإدارة الأميركية من أجل إيجاد حل عادل للنزاع الحدودي البحري مع اسرائيل.

ويتابع بارودي، على لبنان وفور الانتهاء من المفاوضات غير المباشرة مع إسرائيل، أن يعد ّل إحداثيات المرسوم 6433 ويودعها كي ،DOALOS لدى الأمم المتحدة ـ قسم شؤون المحيطات وقانون البحار . يحافظ على حقوقه المكتسبة كما على إسرائيل أن تفغل الشيء نفسه

أما بخصوص انسحاب الشركة الروسية "نوفاتيك" من تحالف شركات "إيني" و"توتال"، فيؤكد أنه "أمر طبيعي مع وجود العقوبات الأميركية على الشركة الروسية، إذ لا تستطيع الأخيرة أن تستقبل أو ."أن تحو ل أموالاً طالما أن نظام العقوبات يطاولها

ويؤكد بارودي، "نعم يستطيع لبنان الخروج من النفق المظلم، شرط أن [...] تتكاتف الإرادات الحسنة للعمل على إنقاذه

## Russian gas cuts will not kill German economy



By Daniel Gros/Brussels

Much of the conventional wisdom about Europe's current natural-gas crisis — triggered by reduced deliveries from Russia — rests on two assumptions: that the German economy depends on cheap Russian gas, and that this bet has gone spectacularly wrong. But while German industry is strong, and the country imports a lot of natural gas from Russia, a closer inspection of the numbers and economics involved does not support the prevailing narrative.

For starters, natural gas does not play a large enough role to drive an industrial economy. In 2019, gas imports via pipeline cost Germany \$30 billion, representing only 0.75% of its GDP, and the overall value of the country's gas consumption was below 2% of GDP. These modest ratios are similar across industrialised economies and suggest that cheap gas imports are highly unlikely to be a major growth factor. Moreover, even though gas consumption has stagnated in Germany and most of Western Europe over the past two decades, the economy grew, albeit slowly.

The argument that cheap Russian gas might have favoured Germany more than other countries also is not backed up by the numbers. In 2019, Germany accounted for only about 2.3% of

global natural-gas consumption, but 4.5% of world GDP. Germany's gas intensity per unit of GDP is thus about one-half of the global average, much lower than that of the United States and many other industrialised countries, including Japan and South Korea.

European economies tend to be thriftier in their energy use than the rest of the world. But even within Europe, Germany performs well, with lower gas consumption per unit of GDP than other large European economies, such as Italy and Spain. This is surprising since these two Mediterranean countries have much less need for heating in winter (and air conditioning in summer requires an order of magnitude less power than heating). Only France, with its large nuclear-power sector, is less dependent on gas.

A similar picture emerges from related metrics, such as the value of energy imports as a percentage of GDP, or gas usage for industrial purposes as a share of industrial value added. All these indicators show that the German economy uses energy less intensively than most others.

The idea that German industry gained an advantage from access to cheap Russian gas ignores the reality that there is a European gas market with, up to now, only small differences in wholesale prices across countries. One could of course argue that Russia sold its energy cheaply to Germany to make the country dependent. But the data challenge the common perception that Germany receives cheap gas.

Over the past decade, German industry has paid about 10% more for natural gas than its competitors in other major European economies. Supplies from North Sea fields have enabled British industrial firms to pay even less than their continental peers, but this does not appear to have helped them much.

The implication is that Russia obtained a non-economic benefit (German dependence on its gas supplies) for almost no cost. The inverse of this is that Germany experienced a loss of energy independence without gaining a noticeable economic advantage.

The one large economy that is both energy-intensive and has

cheap natural gas is the United States. The average US citizen uses more than twice as much natural gas as a European — 25 megawatt-hours per year for the US, compared to about 10MWh for European countries. Moreover, US natural-gas prices have been somewhat lower than German or EU prices for most of the past two decades, and are now only a fraction of the European price, as European prices have increased by a factor of five, whereas US prices have changed little. Despite this cost advantage, however, the manufacturing industry of the US — and that of the United Kingdom — has not grown particularly strongly.

Adjusting to a world without Russian gas is of course a major problem for Europe. Yet, although Germany seems more vulnerable because it used to receive a large share of its gas from Russia, this can change quickly. Germany is building new regasification capacity in record time to allow the country to import the quantities of liquefied natural gas needed to fill the gap between lower Russian supplies and domestic demand, which is already falling because of high prices.

Once this import capacity has been constructed, Germany will be in the same situation as its European neighbours, which also have to bid for LNG. Prices are likely to stay high for some time. But with an energy intensity below the EU average, Germany should be able to bear the burden slightly better than Italy, Spain, and some Eastern European countries. France, of course, will be much less affected, at least if its nuclear reactors can resume full production.

We should also not forget the global picture. Bottling up a large percentage of Russian gas (which is what will happen if Europe no longer buys from Russia) increases the global gas price, which affects Asian countries as well, because they compete with Europe on LNG. South Korea and Japan have a higher energy intensity than Europe, and even China imports large quantities of LNG, at a price similar to what European countries pay.

Expensive energy, particularly natural gas, poses a difficult economic and political challenge for all energy-importing

industrialised countries. Only the US and some other smaller energy producers such as Norway, Canada, and Australia benefit from this situation. But the data suggest that Germany is better placed to weather this crisis than most of its main competitors. — Project Syndicate

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بارودي: الجهود الأميركية بدأت تتسـم بالإيجابيـة مـا سـيمك<sup>ّ</sup>ن لبنان خلال شهر من بدء التنقيب عن النفط والغاز



، "الجهود□رودي بارودي□ثمّن الخبير الدّولي في مجال الطّاقة، الخارجية□ ولا سيّما □الولايات المتحدة الأميركية□الّتي تقوم بها ، عبر الوسيط آموس هوكستين، من أجل تسوية النّزاع□الأميركية

"، لافتًا إلى أن" "هذه ||سرائيل | و |البنان |الحدودي البحري بين الجهود بدأت تتسم بالإيجابية، ما سيمكن لبنان في خلال شهر على النفط عن التنقيب أبعد تقدير من الد خول فعلي ًا في عملية ، ولا سيسما في البلوكات الجنوبية، وتحديدًا البلوك رقم 9 ||والغاز . " | قانا ||حيث حقل

وأشار، في تصريح، إلى أن "الطبّرح الإسرائيلي للمرور بالبلوك اللهّبناني رقم 8، هو مجرد مناورة ذكيدة لهدف آخر، ذلك أن النفاقية الغاز بين إسرائيل وقبرص واليونان، التّبي تمتد إلى إيطاليا وكانت قد و ُق عت في 3 كانون الثّاني من العام 2020، لن ترى النّور، باعتبار أن لا جدوى اقتصادية منها، لأنه مهما كانت كمية الغاز المنت َجة حاليًّا، فلن تكون مبرّرًا لإنفاق من 12 إلى 1125 مليار يورو، لبناء خط أنابيب بقطر 48 إنشًا لمسافة 1125. "ميلاً

وجد "د بارودي الإشادة بـ"إيجابي"ة المفاوضات الجارية حالي"ًا، وبالجهود المبذولة لحماية حقوق لبنان على الصّعيد الد ولي"، الدولة مركّزًا على أن "أكثر الأخبار إيجابي"ة ً، هي أن "أركان مت فقون على التوج "ه ذاته". وأعرب عن تفاؤله بأن "اللبنانية . ""الات فاق سيصل إلى خواتيم مشج عة ترضي جميع الجهات .""الات فاق سيصل إلى خواتيم مشج عة ترضي جميع الجهات