

Regional Energy Expert Roudi Baroudi Earns Award from Washington Think Tank



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

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

Although circumstances relating to the conflict in the Gaza Strip prevented Baroudi from attending the event, both he and Joshua Volz – the Deputy Assistant Secretary for Europe, Eurasia, Africa, and the Middle East and the Office of International Affairs at the US Department of Energy – were

recognized by the Transatlantic Leadership Network (TLN). Each was cited at a gala dinner on Monday for his “valuable contribution in building a peaceful and prosperous Eastern Mediterranean” as part of the TLN’s 2nd Annual Conference on Freedom of the Media.

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

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

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

The TLN describes itself as “a nonpartisan, independent, international network of practitioners, private sector leaders and policy analysts dedicated to strengthening and reorienting transatlantic relations to the rapidly changing dynamics of a globalizing world.”

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

UAE’s ADNOC Gas to Start Trading in \$2.5bn IPO. International Energy Expert, Roudi Baroudi told AFP: “LNG is Most Important Transition Fuel in the move away from hydrocarbons”.



UAE state energy company ADNOC's recently formed gas unit will launch on the Abu Dhabi stock market on Monday in a \$2.5 billion initial public offering aimed at tapping high demand for the fuel.

Shares in ADNOC Gas, which only became operational at the start of this year, were heavily oversubscribed even after the offering was expanded from 4.0 to 5.0 percent of issued share capital in response to strong interest.

The final price was set at 2.37 dirhams (\$0.65) per share, towards the top of its range, raising about \$2.5 billion and implying a market capitalisation of around \$50 billion.

ADNOC Gas is the biggest flotation yet on the Abu Dhabi stock exchange, which opens at 9:30 am (0530 GMT).

At more than 50 times oversubscribed, it is the biggest demand ever seen for an initial public offering in the Middle East and North Africa, outstripping oil firm Saudi Aramco's world-record \$29.4 billion listing just over three years ago.

The rapidly organised IPO from ADNOC, one of the world's biggest oil firms, follows last year's scramble for alternative gas resources after Russia's invasion of Ukraine,

and comes as countries search for cleaner fuels to mitigate global warming.

Energy consultant Roudi Baroudi, who heads the Qatar-based Energy and Environment Holding firm, said he expected brisk demand when the shares start trading.

“There is every reason to expect that the massive oversubscription we saw will carry over into strong interest when the shares are floated publicly,” Baroudi told AFP.

– ‘Transition fuel’ –

Abu Dhabi National Oil Company, the United Arab Emirates’ key revenue-earner, retains a 90 percent stake in the subsidiary formed from its former gas processing, LNG and industrial gas units.

Gas is being touted as cleaner than other fossil fuels as countries around the world strive to reduce their emissions.

Baroudi said Liquified Natural Gas (LNG) was “the most important transition fuel in the move away from hydrocarbons”.

In 2021, the UAE produced 57 billion cubic metres (bcm) of natural gas, or about 1.4 percent of global output, according to the BP Statistical Review of World Energy.

That same year, the Emirates exported 8.8 bcm of LNG, 1.7 percent of world LNG exports, the Statistical Review said.

“As global efforts to battle climate change gain pace, the role of natural gas in general... is widely expected to grow,” Baroudi said.

“ADNOC enjoys a solid reputation, so it was to be expected that the ADNOC Gas IPO would attract strong interest.”

ADNOC Gas could be the first in a series of share offerings in Abu Dhabi this year.

At least eight companies are expected to follow in fields ranging from technology to asset management and regenerative medicine, Bloomberg said, citing Sameh Al Qubaisi, director general of economic affairs at Abu Dhabi's Department of Economic Development.

<https://www.digitaljournal.com/business/uaes-adnoc-gas-to-start-trading-in-2-5bn-ipo/article>

Sweden Sets Up \$23 Billion Emergency Backstop for Utilities



Niclas Rolander

Want the lowdown on European markets? In your inbox before the open, every day.

Sweden's government will provide Nordic and Baltic utilities as much as 250 billion kronor (\$23.2 billion) in credit guarantees as it seeks to prevent Russia's energy curbs from setting off a financial crisis.

The measure is aimed at helping companies struggling to meet the surging collateral requirements needed to trade electricity, and avoid the threat of some going into technical defaults as soon as Monday, Finance Minister Mikael Damberg said at a news conference in Stockholm. Utilities registered with Nasdaq Clearing AB are eligible for the guarantees.

"The issue is currently isolated to energy producers, but unless we act, it could have contagion effects on the rest of the financial market," the minister said on Sunday. "Ultimately, it could lead to a financial crisis."

The surging price of energy in Europe has made it more expensive for utilities to buy and sell electricity, because of the collateral required to guarantee trades on power markets facing unprecedented turbulence. Fortum Oyj of neighboring Finland said Aug. 29 its collateral rose by 1 billion euros (\$1 billion) in a week to 5 billion euros, excluding funds posted by its German subsidiary Uniper SE.

**Germany agrees \$65bn
inflation relief package**



AFP / Berlin

The German government yesterday unveiled a new multi-billion euro plan to help households cope with soaring prices, and said it was eyeing windfall profits from energy companies to help fund the relief.

German businesses and consumers are feeling the pain from sky-high energy prices, as Europe's biggest economy seeks to extricate itself from reliance from Russian supplies in the wake of Moscow's invasion of Ukraine.

Rapid measures to prepare for the coming cold season will ensure that Germany would "get through this winter," Chancellor Olaf Scholz said at the unveiling of the €65bn (\$65bn) package.

The latest agreement, which brings total relief to almost €100bn since the start of the Ukraine war, was hammered out overnight into Sunday by Germany's three-way ruling coalition of Scholz's Social Democrats, the Greens, and the liberal FDP. Among the headline measures are one-off payments to millions of vulnerable pensioners and a plan to skim off energy firms' windfall profits. The government's latest relief package came two days after Russian energy giant Gazprom said it would not restart gas deliveries via the Nord Stream 1 pipeline on

Saturday as planned after a three-day maintenance.

The government had made “timely decisions” to avoid a winter crisis, Scholz said, including filling gas stores and restarting coal power plants. But preventative measures, including a drive to reduce consumption, have done little to break a sharp increase in household bills.

The latest announcement follows two previous relief packages totalling €30bn, which included a reduction in the tax on petrol and a popular heavily subsidised public transport ticket.

But with the expiration of many of those measures at the end of August and consumer prices soaring, the government has been under pressure to provide new support. Inflation rose again to 7.9% in August, after falling for two straight months thanks to previous government relief measures.

The take-off in energy prices is expected to push inflation in Germany to around 10% by the end of the year, its highest rate in decades. Scholz said however that not everyone is suffering from the high consumer prices.

Some energy companies which may not be using gas to generate electricity were “simply using the fact that the high price of gas determines the price of electricity and are therefore making a lot of money,” he said.

“We have therefore resolved to change the market organisation in such a way that these random profits no longer occur or that they are skimmed off.” The trimming of windfall profits would create “financial headroom that should be used specifically to relieve the burden for consumers in Europe,” the government said in its policy paper.

The move could potentially bring “double-digit billions” of euros in relief, finance minister Christian Lindner estimated in the press conference. The government said it would push for the move to be implemented across the European Union, before going ahead with the measure on its own.

Brussels on Monday said it would prepare “emergency” action to reform the electricity market and bring prices under control. Scholz said he expected the EU to “deal quickly” with the

issue, adding that it was “very clear that we need rapid changes in this area”.

Repeating his mantra that Germans will “never walk alone” through the energy crisis, the chancellor unveiled a raft of measures, including a one-off payment of €300 to millions of pensioners to help them cover rising power bills.

The government will also target students with a smaller one-time transfer of €200, and an heating cost payment for people receiving housing benefits.

Berlin also set aside €1.5bn for work on a successor to the wildly popular nine-euro monthly ticket on local and regional transport networks. The relief package as a whole should be financed without planning to take on further debt, Lindner said.

“These measures are included within the government’s existing budget plans,” covering 2022 and 2023, he said, with the remainder covered by the windfall energy profit measures.

France faces uncertain winter as nuke power shortage looms



By Forrest Crellin, Silvia Aloisi And Nina Chestney/Paris

France, once Europe's top power exporter, may not produce enough nuclear energy this winter to help European neighbours seeking alternatives to Russian gas, and may even have to ration electricity to meet its own needs.

France has for years helped to underpin Europe's electricity supply, providing about 15% of the region's total power generation.

But this year, for the first time since French records began in 2012, France has become a net power importer as its own production of nuclear energy hit a 30-year low, based on data from consultancy EnAppSys.

The supply squeeze, caused by a wave of repairs at the country's nuclear power stations, couldn't have come at a worse time. Europe is in the grip of an energy crisis as Russian gas supplies plummet in the wake of the Ukraine conflict and France, which derives 70% of its electricity from nuclear energy, has lost its edge.

French power prices have hit a string of all-time highs – topping 1,000 euros (\$1,004.10) per megawatt hour earlier this month – on expectations the country will not have enough electricity to meet domestic demand. That surge, from prices

of around €70 a year ago, has added to a cost-of-living crisis.

“Sky-high electricity prices are an economic threat, with France’s nuclear issues seemingly turning into a greater challenge than Russian gas flows,” said Norbert Rücker, head of economics and next generation research at Julius Baer.

A record number of France’s 56 nuclear reactors have gone offline for overdue maintenance and checks related to corrosion issues that first surfaced last December. Some reactors have had to cut production during the summer to prevent rivers used to cool reactors from overheating.

As of August 29, 57% of nuclear generation capacity was offline, based on data provided by state-controlled nuclear power group Electricite de France, or EDF.

EDF’s current outage schedule sees production levels returning to around 50 gigawatts (GW) daily by December from around 27 GW now as reactors gradually come back for the winter season.

But the market, analysts and union officials think that forecast is too optimistic.

In a normal year, France produces around 400 terawatt-hours (or 400,000 GWh) of nuclear electricity and exports about 10% of it in warmer months. But during winter consumption peaks, France imports power from its neighbours, particularly Germany.

This year, EDF forecasts French nuclear production at 280-300 terawatt-hours, the lowest since 1993. France has imported power from the likes of Germany and Belgium during the summer, when it would usually be exporting it.

“That makes for scary winter prospects,” said Paris-based nuclear energy consultant Mycle Schneider.

Six analysts polled by Reuters estimated that France’s power capacity during the winter will fall below EDF’s forecasts, by 10 to 15GW a day until at least late January. This means France will need to import more power when the rest of Europe will also be facing an energy crunch, or risk blackouts.

Last week, EDF – which this year has cut its nuclear output forecasts several times and issued four profit warnings –

delayed the restart of several reactors to at least mid-November, fuelling more uncertainty.

Current power market prices reveal a lack of confidence in EDF's ability to put all its reactors back online in time for the cold season, a parliamentary source close to government said, although this source also said the availability of the fleet should improve from current low levels.

"We should be able to recover a large part of the reactors which are currently offline," the source said. "We can also ask the French to make efforts, especially to reduce consumption peaks."

The measures the French government could take include forced interruption of power supply to industrial and commercial consumers, reduced heating in public buildings, turning off street lights and controlled power cuts, he said.

French Prime Minister Elisabeth Borne has urged companies to draft energy savings plans by next month, warning they would be hit first if France has to ration gas and electricity.

The CGT union, France's biggest, is bracing for some rolling blackouts this winter.

"The situation is really worrying... to say that there won't be power cuts is a very optimistic gamble, unless one already knows for sure that the winter will be warm," said Virginie Neumayer, who follows nuclear issues at CGT.

Even if EDF can boost nuclear production, analysts say France will still not have spare power to sell to neighbours starved of Russian gas, with Italy, Britain and Switzerland seen as the countries worst hit.

"We have seen some effects over the last months already, as Spain, the UK and Italy all have had to increase their domestic production, since export volumes from France have been much lower than normal," said Fabian Ronningen of consultancy Rystad Energy.

"I think Italy would be the most affected country (if France stopped exporting electricity), as they are Europe's overall largest power importer."

EDF CEO Jean-Bernard Levy said on Monday that among the

reactors that are closed, 12 were for corrosion problems and the rest were either shut for routine maintenance delayed by the pandemic or taken off-line to prepare them for winter. Levy said the company was “totally mobilised” to avoid more outages.

“These works are heavy, we will need hundreds and hundreds of very skilled people, we are making them come from abroad, the US in particular,” he told a business conference. He said corrosion issues required workers to operate in a part of the reactor where radiation is high, meaning exposure had to be limited.

For the coming winter, meteorologists often look at how the La Niña weather pattern develops over the summer as an indicator of a colder than average winter.

Currently, the odds of that happening are at 60% during December-February 2022-23, US government weather forecaster the National Weather Service’s Climate Prediction Center said. Longer term, questions remain over whether EDF, which is in the process of being fully nationalised, can maintain its ageing fleet of existing power stations – mostly build in the 1980s – or build new ones quickly enough to replace them.

France’s nuclear safety watchdog ASN said in May that fixing the corrosion issues affecting EDF’s reactors could take years.

The next generation nuclear reactors EDF has built – including one in Flamanville in France, and another at Hinkley Point in England – have run billions over budget and several years beyond schedule. – Reuters

بارودي يؤكد صوابية طلب لبنان

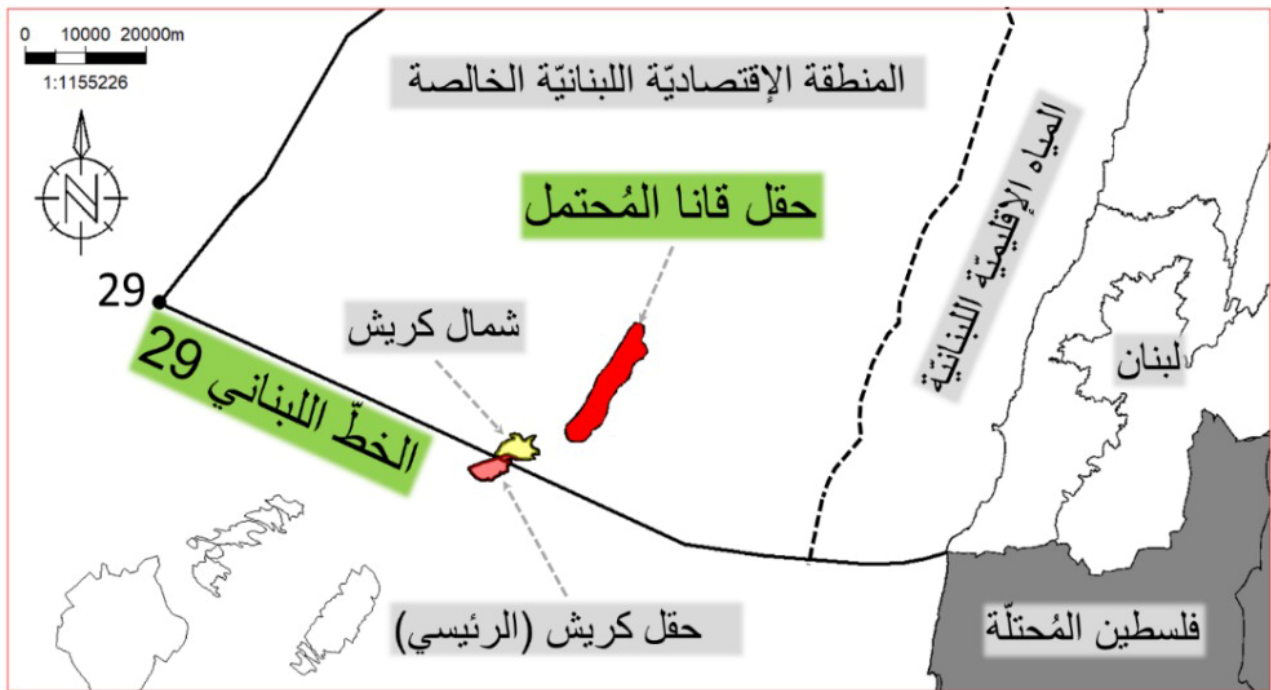
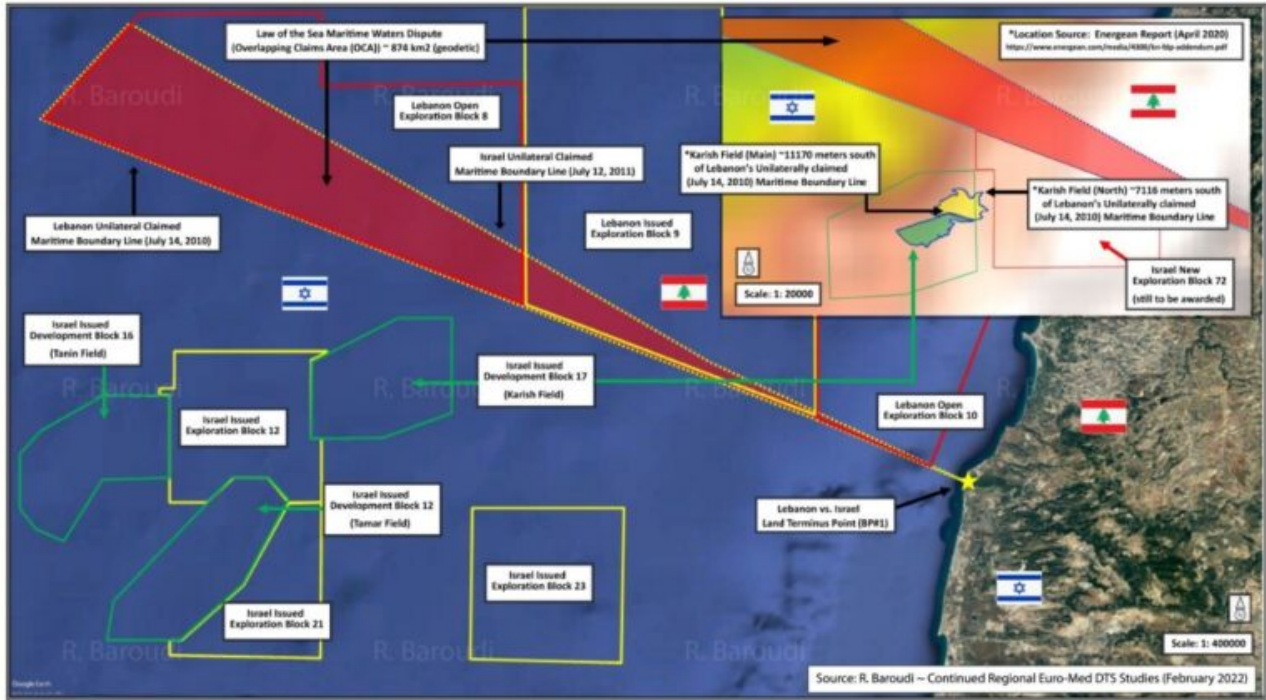
الخاص بالمباحثات والمفاوضات على الحدود البحرية



بارودي يؤكد صوابية طلب لبنان الخاص بالمباحثات والمفاوضات على الحدود البحرية ويؤكد صوابية طلبه مستعيناً بقضايا مماثلة حصلت في السابق وتم البت بها من قبل محكمة العدل الدولية

ثروة "كاريش" بين 22 و 25 مليار دولار

Lebanon vs. Israel: Karish Field Exploratory Drilling vs. Contested Waters



كَثُرَت في الفترة الأخيرة الخيارات المتاحة في نظر بعض المسؤولين في لبنان، لتأمين مصادر يتم عبرها تسديد أموال المودعين... فما أن طرِح إنشاء الصندوق السيادي، حتى ارتأى البعض اللجوء إلى رهن جزء من احتياطي الذهب... لكن ما لم يكن في الحسبان أن يقترح أحدهم استخدام أموال ثروة لبنان النفطية لتسديد الودائع ولتغطية كلفة الدين العام! علماً أن مفاوضات ترسيم الحدود البحرية بين لبنان

وإسرائيل عالقة منذ أيار 2021، ولا تزال الضبابية تلف هذا الملف محلياً ودولياً.

الخبير الدولي في مجال الطاقة رودي بارودي يعلق، في حديث إلى موقع القوات اللبنانية الإلكتروني، على الفائدة المالية من حقول النفط التي يؤمل أن تشكل الثروة النفطية للبنان، ليؤكد أنه "في حال حصول لبنان على جزء من حقل كاريش، فإن حصته لا تكفي لتغطية الدين العام اللبناني حتى وفق أسعار النفط والغاز المعتمدة حالياً"، ويقول "ربما قد تغطي حصّة لبنان من حقل كاريش أو غيره، جزءاً ضئيلاً فقط من الدين العام".

ويعتبر أنه "من غير المؤكد ما إذا كان لبنان سيتمكّن من الحصول على الخط 23، من دون معالجة مجموعة من الأخطاء الجسيمة التي ارتكبت عند البدء بوضع الخطوط من 1 إلى 23 قبل نحو 12 عاماً".

ويكشف بارودي عن أن حقل "كاريش" المكتشف العام 2013 يحتوي على 2.5 ترليون قدم مربع من الغاز. وهذا الحقل تم اكتشافه من قبل الشركة الإسرائيلية "ديليك" العام 2013 والتي باعتها بدورها إلى "إينيرجيان".

ويقول، إذا تم احتساب الكمية على أساس أسعار الغاز والنفط الحالية، فإن المردود المتوقع من حقل "كاريش" يتراوح ما بين 22 و25 مليار دولار أميركي. لكن لا يمكن تقدير مردود حقل "قانا" لأنه قد يكون ممتداً إلى إسرائيل، كما أن حقل "كاريش" متداخل بين لبنان وإسرائيل.

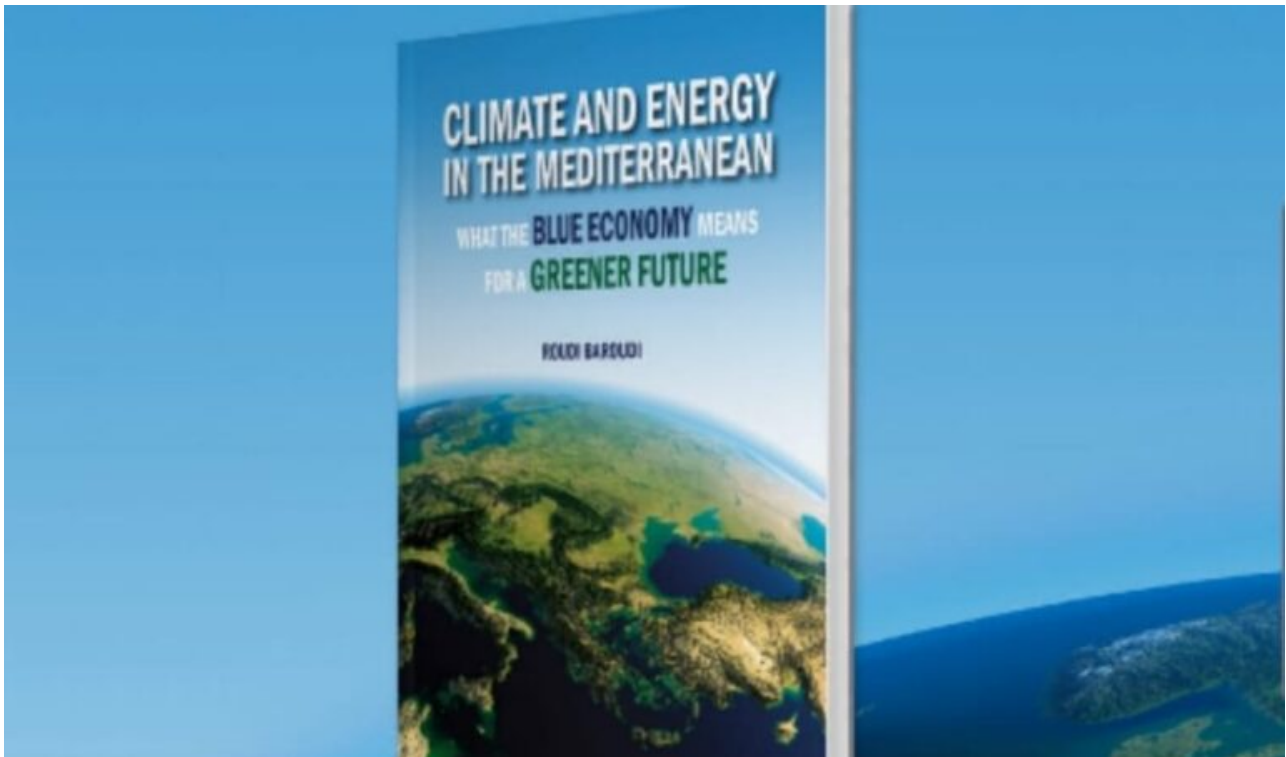
ويُلفت إلى أن إسرائيل أنجزت التحضيرات اللازمة لبدء الإنتاج النفطي وذلك بعد أعوام عدة من الدراسات وعمليات الاستكشاف، فقد عاودت شركة "إينيرجيان" المطورة لحقل "كاريش" الحفر في الحقل ذاته بحثاً عن المزيد من الغاز والنفط، ويوضح أن "إسرائيل تقوم حالياً بالحفر في محاذة الخط اللبناني التفاوضي "29" لتنتقل بعد ذلك إلى شمال "كاريش".

ويُذكر في السياق بأن "لبنان أعلن في رسالته إلى الأمم المتحدة الأولى في 22 أيلول 2021 والثانية في 28 كانون الثاني 2022، أن حقل كاريش يقع في منطقة متنازع عليها... لكن على الرغم من ذلك، يتم التنقيب في المياه المتنازع عليها عموماً، ولا سيما في البلوك رقم "9" المٌعطّل حالياً إلى أن تُحل قضية الترسيم بين لبنان وإسرائيل".

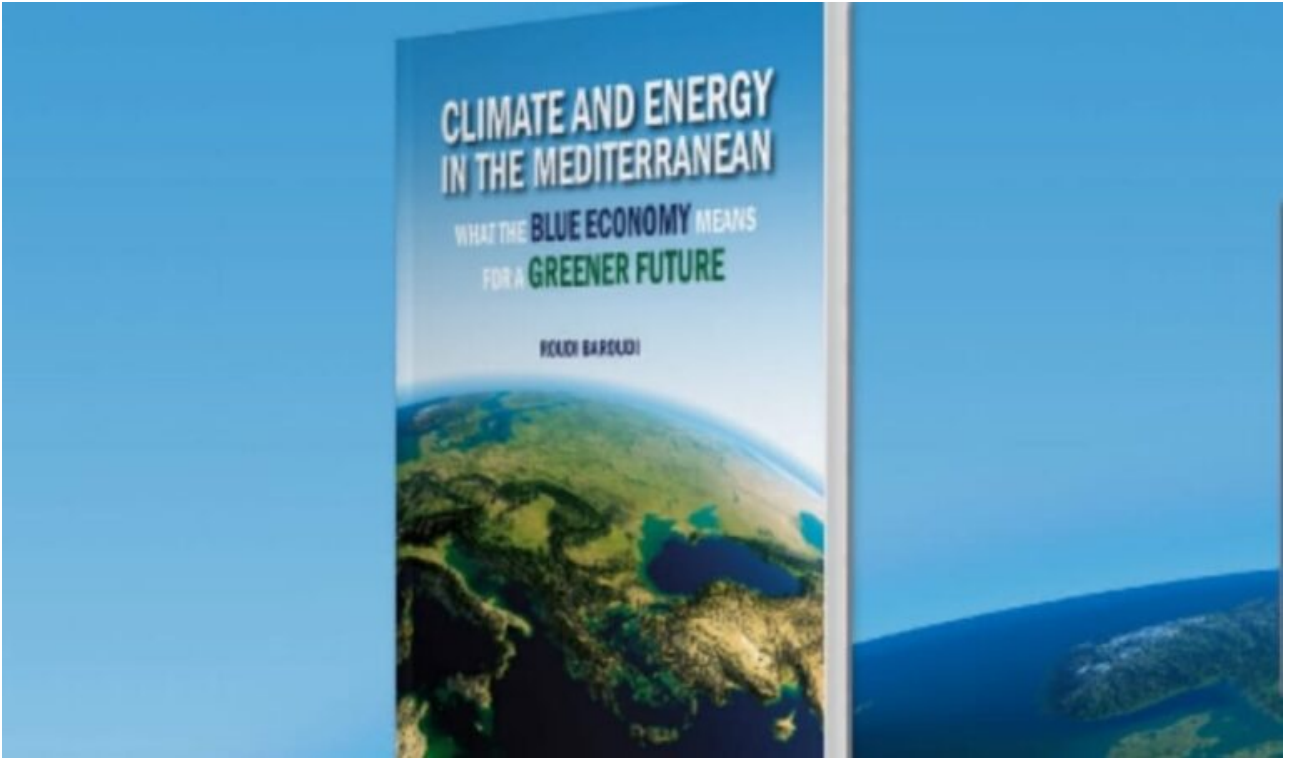
أما بالنسبة إلى الموقع الجغرافي لحقل "كاريش" المكوّن من جزءين: شمالي وجنوبي (الخريطة مرفقة)، يؤكد بارودي من خلال الدراسة التي أعدّها خلال السنوات الممتدة من العام 2011 إلى العام 2021، أن "حقل كاريش الشمالي يبعد عن الخط المقترح من قبل لبنان في 14 تموز 2010 (الخط 23) حوالي 7 كلم و116 متراً، كما أن حقل كاريش الجنوبي يبعد عن الخط نفسه، حوالي 11 كلم و170 متراً جنوباً، وذلك بحسب الخريطة المرفقة والتي تؤكد المواقع والبُعد عن الحقلين".

أما بالنسبة إلى البلوك الإسرائيلي الرقم "72" والمتداخل في الأراضي اللبنانية، فهو ملاصق بشكل مباشر للخط "23"، بحسب بارودي.

رياح المتوسط تنتج طاقة تضاوي طاقة المفاعات النووية في العالم



رياح المتوسط تنتج طاقة تضاوي طاقة المفاعلات النووية في العالم



في الوقت الذي يفتش فيه لبنان عن وسائل ليست مكلفة لإنتاج الطاقة الكهربائية تأتي الأدلة تباعا التي تشير إلى أن استغلال الشمس والرياح في حوض البحر الأبيض المتوسط هي وسائل قادرة على تأمين الطاقة لدول عديدة في المنطقة ومن ضمنها لبنان الذي يتخبط منذ ٢٥ عاما من أجل تأمين الكهرباء من خلال الطاقات البديلة ورغم هذا التخبط يبقى الأمل موجودا إن وجدت الإدارة والإرادة لتفعيل هذا الملف، وفي هذا الإطار أتى الكتاب الجديد لرودي بارودي الرئيس التنفيذي لشركة استشارات الطاقة والبيئة القابضة ومقرها في الدوحة.

وقال الكتاب إن إنتاج الطاقة بواسطة رياح البحر الأبيض المتوسط الساحلية يمكنه أن يضاوي إنتاج الطاقة من المفاعلات النووية في العالم أجمع، و أنه إذا اتخذت الدول الأورو-متوسطية الخيارات

الصحيحة، فإن الطاقة المتجددة بالإضافة لأنشطة "الاقتصاد الأزرق" الأخرى المتعلقة بالبحر يمكن أن تشكل الأساس لنهضة اقتصادية إقليمية.

الكتاب وهو بعنوان "المناخ والطاقة في البحر الأبيض المتوسط:" ما يعنيه الاقتصاد الأزرق لمستقبل أكثر خضرة"، وقد نُشر هذا الكتاب من قبل شبكة القيادة عبر الأطلسي، وهي مؤسسة فكرية مقرها واشنطن العاصمة، بالتعاون مع مطبعة معهد بروكينغز.

يحث الكتاب صانعي السياسات على اغتنام فرصة تاريخية أصبحت ممكنة من خلال التقدم التكنولوجي السريع، ويدعو بارودي الحكومات المتوسطة للتعامل مع البحر ككنز مشترك عابر للأجيال، من خلال الاستفادة بشكل أساسي من التقنيات الجديدة لإدارة موارده واستغلالها بأمان وبشكل مستدام لتحقيق أقصى فائدة ممكنة منه على المدى الطويل. ويحتوي الكتاب على دراسة حصرية أجرتها شركة فوغرو Fugro، المزود الرائد عالميًا للذكاء الجغرافي، والتي تقدر إمكانات طاقة الرياح البحرية في منطقة البحر المتوسط بحوالي 500 مليون ميغاواط - أو ما يعادل تقريبًا إنتاج الطاقة من جميع المفاعلات النووية البالغ عددها 440 على الكوكب.



و قال بارودي، الذي عمل في مجال الطاقة لمدة أربعة عقود، إنه في حين أن تغير المناخ وتلوث الهواء والحاجة إلى تقليل انبعاثات الكربون هي في حد ذاتها أسباب قوية للاستثمار في الطاقة الخضراء، فإن النتائج ستتجاوز بكثير الفوائد البيئية.

ولفت في خلال مؤتمر حوارات أثينا للطاقة، حيث تم إطلاق الكتاب بشكل مبدئي قبل طرحه الرسمي في وقت لاحق من هذا العام في واشنطن، إلى أن تقديرات قوة الرياح التي استخدمتها تستند إلى التقنيات القياسية الحالية المستخدمة في يومنا هذا و لن تحصل البلدان التي سوف تبني طاقة الرياح على الأسبقية في التحول من الوقود العادي إلى الطاقة النظيفة فحسب، بل ستكسب أيضًا مزايا اقتصادية واجتماعية ومزايا أخرى.

وأكد بارودي إن طاقة الرياح ستوفر على تلك البلدان المليارات من واردات النفط والغاز، وستزيد من أمن الطاقة لديها، وتجعل اقتصاداتها أكثر قدرة على المنافسة و سوف يجنب الهواء النظيف سكان تلك البلدان الأمراض والأوبئة، وسيوفر التطور والتنمية

الصاعدة وطائف أكثر وأفضل لسكانها، ويحد من الفقر وعدم المساواة. وفي كثير من الحالات، ستوفر صادرات الطاقة المزيد من الإيرادات للاستثمارات في مجالات التعليم والنقل والبنية التحتية.

وقال بارودي: أشجع بقوة على الاستفادة القصوى من فرصنا كم منطقة واحدة، وكذلك على الحفاظ على موارد الطبيعة للأجيال القادمة. أردت أن يساعد الكتاب في جعل أكبر عدد ممكن من الأشخاص يفهمون القرارات المعروضة علينا ويفعلون كل ما في وسعهم - سواء أكانوا صانعي سياسات، أو مستثمرين أو أصحاب أعمال صغيرة أو مهندسين أو مواطنين، أو ما إلى ذلك - لضمان اتخاذ القادة وغيرهم من صناع القرار الخيارات الصحيحة.

وأضاف بارودي: ما أقترحه هو أنه يمكننا ويجب علينا استخدام جميع الوسائل المتاحة لدينا، ليس فقط لإنتاج الطاقة النظيفة باستخدام الرياح البحرية، والطاقة الشمسية، والأمواج، والمد والجزر، والطاقة الحرارية الجوفية تحت سطح البحر، ولكن أيضًا لإعادة اختراع الركائز الأخرى للاقتصاد الإقليمي، من تربية الأحياء المائية ومسايد الأسماك التقليدية إلى السياحة والنقل البحري.

وختم بارودي كلامه بالقول يمكن للمعدات الحديثة والتطبيقات المبتكرة أيضًا أن توسع اقتصادنا الأزرق ليشمل مجالات مثيرة مثل الأبحاث البيولوجية لاكتشاف أدوية جديدة، أو التعدين الآمن والمسؤول في أعماق البحار للتنقيب عن المواد الحيوية المستخدمة في صناعة الهواتف المحمولة والبطاريات المتطورة التي ستساعدنا على الابتعاد عن الوقود العادي.

Sun-starved Sweden turns to solar to fill power void



Bloomberg

Sweden, known for its long dark winters with barely any daylight, is seeing a solar power boom.

Harnessing whatever sunshine the country gets is emerging as the quickest solution to fill part of the void left by two closed nuclear reactors in southern Sweden, where the biggest cities and industries are located. With shortages piling up in the region and consumers keen to secure green energy at stable prices, solar is quickly catching up with wind as developers put panels on rooftops and underutilised land in populated areas.

While the lack of sunlight is a hindrance, every bit of new electricity capacity will lower imports from Europe where prices are more than three times higher than in the rest of Sweden. Projects are also getting built quickly because developers are directly getting into power sales deals with consumers and aren't dependent on government support, said Harald Overholm, CEO of Alight AB, which started Sweden's biggest solar plant this month.

Companies are targeting a quick ramp-up, pushing total

capacity in the country to 2 gigawatt this year. That's more than the two nuclear reactors in Ringhals that were halted in 2020, and will close the gap with Denmark, an early mover in the industry in the region.

"We are very good at creating contracts directly with commercial partners that use power, and that is what drives our development," said Harald Overholm, CEO of Alight.

The past winter has demonstrated the hole left behind by the two atomic reactors, with the government facing the task of resolving a divergent market. While vast hydro and wind projects have kept the cost of electricity in the sparsely populated north in check, a lack of generating capacity and congested grids have forced the south at times to import power.