بارودي في مؤتمر أثينا: يمكن لأوروبا أن تخفف من أزمتها عبر الطاقة النظيفة في البحر الأبيض المتوسط



المركزية- حاضر الخبير الدولي في شؤون الطاقة رودي بارودي عن صناعة الطاقة العالمية خلال مؤتمر أثينا الذي انعقد الأسبوع الفائت تحت عنوان "حوارات الطاقة 2022″، حيث لفت إلى أنه "يمكن لأوروبا أن تخفف من أزمتها في مجال الطاقة من خلال الدعم والاستثمار في طفرة الطاقة النظيفة في منطقة البحر الأبيض المتوسط".

وجاء في مداخلته: "خلال السنوات الأخيرة، دارت كل المناقشات العلمية في صناعة الطاقة العالمية حول موضوعين: تغيّر المناخ وتقلبات أسعار السوق.

هناك، بالطبع، ضغوطات متزايدة لاستبدال الوقود الأحفوري بموارد الطاقة الشمسية، والهدف من ذلك هو الجمع بين موارد طاقة جديدة مستدامة بيئيًا وقابلة للاستمرار اقتصاديًا، كذلك الدمج بين زيادة الوعي وتحسين التكنولوجيا

يجعلنا أقرب إلى تحقيق كلا الهدفين.

لطالما كانت إحدى المشاكل الرئيسية تكمن في أن هذا التغيير لا يمكن أن يتم بين ليلة وضحاها. إن إنتاج وأداء وحجم الاتكال على المصادر النظيفة والصديقة للبيئة ليس كافيا بعد لتلبية الطلب بالكامل، وسيتطلب الوصول إلى تلك المرحلة سنوات طويلة من التخطيط والاستثمار والبناء. إذا أخذنا التقنيات المتوفرة في وضعها الحالي قبل أن يتم استبدالها بالتقنيات الحديثة، فإن النقص الناتج سيؤدي إلى ارتفاع الأسعار، مما سيزيد من تكاليف المعيشة والتسبب في انهيار الاقتصادات بأكملها. من ناحية أخرى، إذا انتظرنا وقتًا طويلاً قبل التخلي عن موارد الطاقة العالمية المنتجة لانبعاثات الكربون، فإن التغيرات المناخية تهدد بإلحاق أضرار أكبر من سابقها.

من البديهي القول إنه كانت هناك دائمًا عملية موازنة دقيقة في هذا المنحى، فقد أجبرت تقلبات الأسواق صانعي السياسات مراراً على إعادة النظر في خططهم وإعادة التفكير فيها وإعادة ضبطها. ثم جاءت جائحة كورونا (كوفيد — 19) التي تسببت بضغط غير مسبوق على الإنتاج والاستهلاك على حد سواء، وقد نجحت مجموعة حلول من الفئات العامة والخاصة في التغلب على أسوأ ما في تلك العاصفة بشكل مثير للدهشة. لكن التعافي العالمي لا يزال هشا وغير متوازن لا سيما في ضوء الانتشار الواسع للتضخم وانهيار خطوط الإمداد.

أما الآن تلوح أمامنا أزمة جديدة تهدد موارد الطاقة وتتسبب بصدمات قوية قد تؤدي الى انهيار معاييرنا الجديدة والتسبب بأسوأ موجة كساد في التاريخ الحديث. أشير بالطبع إلى الحرب في أوكرانيا والتي لم تكشف فقط عن اعتماد أوروبا المفرط والخطير على الغاز الطبيعي وواردات الطاقة الأخرى من روسيا، ولكنها كشفت أيضا إلى اي مدى يمكن أن يسبب اختلال هذه العلاقة من فوضى في العالم أجمع، منذ أن شنت موسكو غزوها للأراضي الأوكرانية في أواخر شباط / فبراير، كان الاتحاد الأوروبي متردد ًا في فرض عقوبات على قطاع صناعة الطاقة الروسية لأنه يفتقر إلى بدائل أخرى بسبب عدم امتلاكه لمصادر متنوعة من الطاقة ومورديها بشكل كاف.

تجري في العديد من البلدان بعض التحركات التي طال انتظارها لزيادة قدرتها على التكيف، لكن التوقيت يزيد من التحديات بطرق عدة. فعلى سبيل المثال تم رفض أو تأخير المقترحات المختلفة لمد خطوط أنابيب الغاز من شمال إفريقيا وآسيا الوسطى، والتي قد تمر بالأراضي الروسية. بالإضافة إلى ذلك، قررت بعض الحكومات الأوروبية في السنوات الأخيرة، إغلاق محطات الطاقة لديها التي تعمل على الفحم و / أو الطاقة النووية، ما جعلها تفتقد إلى المرونة والقابلية في التعويض عن الغاز الطبيعي الروسي واستبداله بموارد وأنواع أخرى من الوقود. كما تعاني القارة أيضًا من عجز في القدرة على إعادة معالجة الغاز ليكون قابلا للاستهلاك، ما يعني أنها لا تستطيع الاستغناء كليا عن الغاز المستورد عبر الأنابيب الروسية، واستبدالها بشحنات الغاز الطبيعي المسال المنقولة بحراً من دول أخرى.

هناك حلول لكل هذه المشاكل، وبعضها قيد التنفيذ بالفعل:

- تقوم ألمانيا حاليا ببناء محطتين جديدتين لاستقبال الغاز الطبيعي المسال، وتقوم هولندا بتوسيع طاقتها الاستيعابية الحالية، كذلك أكدت اليونان مؤخرا أن لديها خططا في نفس الاتجاه.
- تمتلك إسبانيا خطوط انابيب غاز داخلية وكذلك تمتلك القدرة الاحتياطية لإعادة تحويل الغاز المسال إلى غاز قابل للاستهلاك، لكنها تفتقد إلى القدرة على زيادة الإنتاج والضخ إلى باقي الدول الأوروبية. لذلك فإنه من المنطقي القول إن الوقت قد حان لربط شبكة الأنابيب الإسبانية بفرنسا، ما يتيح للغاز أن يتدفق إلى الشبكة الأوروبية.
- من المنطقي أيضًا الإسراع في وضع الخطط لإنشاء خط أنابيب جديد آخر و / أو زيادة القدرة على نقل الغاز من أذربيجان ومناطق أخرى في آسيا الوسطى إلى تركيا، ما يُتيح لإمدادات الغاز هذه أن تدخل الأسواق الأوروبية.
- يمكن أيضا ً لأوروبا أن تعزز أمنها في الطاقة من خلال المساعدة على تطوير حقول الغاز ألغنية بشكل متزايد في شرق البحر الأبيض المتوسط □□، والتي يمكن بعد ذلك ربط إنتاجها عن طريق خط أنابيب تحت البحر و / أو فوق الأرض إلى البر الرئيسي الأوروبي.
- سيتم أيضًا تعزيز الفائدة من هذه الخطوات وغيرها بشكل كبير من خلال بناء مرافق تخزين جديدة لكل من الغاز الطبيعي المسال والغاز التقليدي، مما سيجعل أوروبا أكثر صلابة أمام انقطاع إمدادات الغاز في المستقبل.
- نظرًا لقرار الاتحاد الأوروبي الجاد في فك قيود سياسته الخارجية

والتوقف عن اعتماده على الغاز الروسي، فمن الممكن أيضًا تأجيل إغلاق محطات الإنتاج التي تعمل على الفحم والطاقة النووية والإسراع بتنفيذ مشاريع الطاقة النظيفة، حقول الطاقة الشمسية، ومزارع الرياح على وجه الخصوص.

- بالإضافة إلى الغاز الذي يجري ضخه عبر الأنابيب، تتلقى إسبانيا الكهرباء المولدة من مزارع الطاقة الشمسية في شمال إفريقيا، كما أن هنالك مجال كبير جدا لإنشاء شبكات مشتركة مماثلة عبر المنطقة الأورو- متوسطية.
- لعل الحل الأفضل على المدى الطويل هو أن تغتنم أوروبا الفرصة من خلال استثمارها في مجالات انتاج الطاقة ذات الإمكانيات الكبيرة بواسطة الرياح البحرية في منطقة المتوسط.

تجدر الإشارة هنا إلى أنني نشرت منذ مدة وجيزة كتابًا جديدًا بعني بعنوان "المناخ والطاقة في منطقة البحر الأبيض المتوسط: ماذا يعني الاقتصاد الأزرق لمستقبل أكثر خضرة؟". لقد أكملت كتابته قبل اندلاع الحرب في أوكرانيا، وكان هدفي من وراء كتابته التركيز على خفض انبعاثات الكربون أكثر من التقليل على الاعتماد على الغاز الروسي. لكن الأزمة الحالية تجعل موضوع الكتاب أكثر أهمية من أي وقت مضى. وتذهب التوصية الأساسية للكتاب إلى أنه يمكن لأوروبا أن تستفيد بشكل كبير من برنامج لتوليد الطاقة عبر تطوير مرافق استفادة من الرياح البحرية في حوض المتوسط. كما يتضمن الكتاب تقديرات البحرية، والارقام في تزايد.

أساسا ، فإن الاستفادة الكاملة من هذه الإمكانات - في المياه الساحلية وحدها - يمكن أن توليد ما لا يقل عن 500 مليون ميغاواط من الكهرباء، بمعنى آخر ما يعادل مجموع إنتاج مولدات الطاقة النووية في العالم أجمع! ويجدر الإشارة أن هذه التقديرات واقعية، وقد تم التوصل إليها من خلال دراسات شاملة وحثيثة للغاية تستند إلى التكنولوجيا القياسية المستخدمة في أيامنا هذه.

يعيدنا هذا إلى موضوعنا الأساسي، فنظريا، كل ما سبق ذكره من محطات الغاز الطبيعي المسال، وخطوط الأنابيب الجديدة، وأعمال التطوير لزيادة عمر محطات توليد الطاقة التي تعمل على الفحم وتلك التي تعمل على الطاقة النين تعمل على الطاقة النووية، وتسخير الإمكانات الهائلة للبحر الأبيض المتوسط □□- كل هذا سيتطلب أموالا طائلة. ستكون السنوات الثلاث إلى

الخمس المقبلة حاسمة، ليس فقط من أجل تقليل الاعتماد على الغاز الروسي، وبالتالي استعادة استقلالية السياسة الخارجية للاتحاد الأوروبي، ولكن أيضًا لتكثيف مصادر الطاقة المتجددة التي ستساعد في الحفاظ على تغيرات المناخ ضمن حدود يمكن التحكم فيه.

يمكن لمنطقة البحر الأبيض المتوسط □ ابما في ذلك الدول المطلة عليها من مكونات الاتحاد الأوروبي وتلك غير التابعة له – أن تكون جزءًا كبيرًا من هذا المسعى لتحقيق قابلية مزدوجة لمواجهة التحديات الاقتصادية والبيئية على حد سواء. تعتبر الاستثمارات الأوروبية في إنتاج الطاقة في بلدان الشرق الأوسط وشمال إفريقيا منطقية لعدة أسباب ومنها، انخفاض قيمة اليد العاملة وتكاليف البناء الأخرى، فضلاً عن إمدادات طاقة أكثر تنوءًا والتي يمكن الاعتماد عليها بشكل أكبر. ناهيك عن المزايا المساعدة على تطوير اقتصادات أقوى واستقرار سياسي أكبر على أطراف أوروبا. ستساعد هاتان النتيجتان على تحسين الفقر واليأس، وتحد من تدفق المهاجرين غير الشرعيين، الذين لقي الآلاف منهم حتفهم أثناء محاولتهم عبور غير المتوسط □في القوارب المتهالكة والمثقلة بالأعباء التي البحر المتوسط □في القوارب المتهالكة والمثقلة بالأعباء التي

سيداتي وسادتي، أعتقد أنه يمكننا أن نتفق جميعًا على أن هذه ليست أولويات ثانوية. على العكس من ذلك، فهي أولويات استثنائية تتطلب اتخاذ تدابير استثنائية، وقد تكون الآثار المترتبة على عدم التصرف كارثية في السنوات القادمة. وبالتالي، فإن المطلوب ليس فقط أن تتعاون الدول الأعضاء في الاتحاد الأوروبي لتحقيق هذه الأهداف، كما يفعل البعض منها حاليا ُ، ولكن المطلوب من جميع الهيئات ذات الصلة أن تتقدم وتتدخل وتشارك كما لم تفعل من قبل.

حول هذا الموضوع بالذات، تلقينا بعض الأخبار الجيدة جدًا مؤخرًا. فقبل حوالي أسبوع، حددت المفوضية الأوروبية خطة جديدة لإنهاء اعتماد أوروبا على الغاز الروسي، خطة تتطلب إنفاق أكثر من 200 مليار يورو على مدى السنوات الخمس المقبلة. هذا رقم كبير، لكن الخطة تحتاج الآن إلى التمويل.

ستتطلب المشاريع المعنية دعما هائلا، سواء المباشر منها أو غير المباشر، وذلك إذا أريد لها أن تبدأ في العمل بسرعة، وإذا كانت ستفعل ذلك دون أن تخضع لفرض ضرائب غير مستدامة و / أو دون أن تتأتى منها أعباء ديون على الاقتصادات الفردية. هذا يعني أنه ليس فقط على الاتحاد الأوروبي نفسه أن يبدأ بالتمويل، ولكن على كل من

بنك الاستثمار الأوروبي والبنك الدولي وصندوق النقد الدولي — أن يبدأوا بالتمويل كذلك. كما يجب على القطاع الخاص إن يشارك في هذا الإجراء أيضا.

ستكون هناك فوائد كبيرة إذا اعتمدنا على مثل هذا البرنامج، وبالمقابل ستكون هناك أزمات أكبر إذا لم نفعل ذلك. لذلك لا يمكن اعتبار الحلول المذكورة انفاقا منتظما ، بل هي بدلا من ذلك ترقى لتكون استثمارات ضرورية وتاريخية في مستقبل أفضل للقارة بأكملها ولجيرانها في الشرق الأوسط وشمال إفريقيا، وبإمكاني أن أقول وكذلك الأمر بالنسبة للعالم أجمع.

لسوء الحظ، لقد فات الأوان لمنع الحرب في أوكرانيا. لكن كلما تحركت أوروبا بشكل أسرع وفعال لإنهاء اعتمادها على الغاز الروسي، وتبنت شراكة أوثق مع جيرانها في البحر الأبيض المتوسط، والتي ستحقق الاستقلالية الكاملة لسياستها الخارجية، كلما تمكنت من المساعدة في استعادة السلام — ومنع حدوث كوارث مماثلة في المستقبل".

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.

Urgent efforts needed to ensure global food security



Food price increases are having devastating effects on the poorest and most vulnerable around the world.

People most impacted by higher food prices live in the developing world, where a larger percentage of incomes is spent on food.

Global food prices started to rise in mid-2020 when businesses shut down due to the Covid-19 pandemic, straining supply chains.

The pandemic has had effects on global supply chains. In the early phase, lockdowns and mobility restrictions led to severe disruptions in various supply chains, causing supply shortages.

Farmers dumped out milk and let fruits and vegetables rot due to a lack of available truckers to transport goods to supermarkets, where prices spiked as consumers stockpiled food. A shortage of migrant labour was felt as lockdowns restricted movement across the world.

Since then, there have been problems with key crops in many parts of the world. Brazil, the world's top soybean exporter, suffered from severe drought in 2021.

China's wheat crop has been among the worst ever this year. Concerns about food security, heightened during the pandemic,

have led some countries to hoard staples to ward off future shortages, limiting supplies on the global market.

Food prices have also jumped. Russia's invasion of Ukraine in late February dramatically worsened the outlook for food prices.

According to the International Monetary Fund, the Russian invasion of Ukraine has led to rising energy and food prices, which will inevitably mean higher inflation globally. Both Russia and Ukraine are exporters of major commodities, and the disruptions from the war and sanctions have caused global prices to soar, especially for oil and natural gas.

Wheat prices are at record highs — Ukraine and Russia account for 30% of global wheat exports. These effects will lead inflation to persist longer than previously expected. The impact will likely be bigger for low-income countries and emerging markets, where food and energy are a larger share of consumption (as high as 50% in Africa).

The World Bank forecasts wheat prices could rise more than 40% in 2022. The Bank expects agricultural prices to fall in 2023 versus 2022. But that depends on increased crop supplies from Argentina, Brazil and the United States — by no means guaranteed.

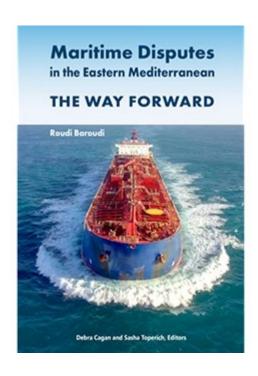
The World Bank is working with countries on the preparation of \$12bn of new projects for the next 15 months to respond to the food security crisis. These projects are expected to support agriculture, social protection to cushion the effects of higher food prices, and water and irrigation projects, with the majority of resources going to Africa and the Middle East, Eastern Europe and Central Asia, and South Asia.

In addition, the World Bank's existing portfolio includes undisbursed balances of \$18.7bn in projects with direct links to food and nutrition security issues, covering agriculture and natural resources, nutrition, social protection, and other sectors.

Altogether, this would amount to over \$30bn available for implementation to address food insecurity over the next 15 months.

It is time countries made concerted efforts to increase the supply of energy and fertiliser, help farmers increase plantings and crop yields, remove policies that block exports and imports and ensure global food security.

Dr. Roudi Baroudi's "Climate and Energy in the Mediterranean: What the Blue Economy Means for a Greener Future" book launched at the Athens Energy Dialogues in Athens, Greece.





Dr. Baroudi: "The war in Ukraine has exposed not only Europe's dangerous over-reliance on natural gas and other energy imports from Russia, but also the extent to which disrupting that relationship could wreak havoc around the world. Ever since Moscow launched its invasion in late February, the European Union has been hesitant to impose sanctions on Russia's energy industry because it lacks other alternatives, and it lacks those alternatives because of a years-long hesitance to maintain a sufficiently diverse basket of sources and suppliers. The continent also suffers from inadequate regasification capacity, which means it cannot fully replace piped gas from Russia with seaborne loads of LNG from other countries.

Mr. Baroudi highlighted that there are solutions for all of these problems, and some are already under way. "Europe could also bolster its energy security by helping to develop the increasingly promising gas fields of the Eastern Mediterranean, the output of which could then be linked by undersea and/or overland pipeline to the European mainland. The utility of these and other moves would also be significantly enhanced by building new storage facilities for both LNG and conventional gas, which would make Europe a lot more resistant to future supply disruptions," said Mr. Baroudi.

But most importantly in the long term, Europe needs to seize the opportunity presented by the great potential for offshore wind energy in the Mediterranean, since making full use of this potential — just in the coastal waters — could generate at least some 500 MILLION megawatts of electricity: in other words, the same as the entire global nuclear industry".

Full press release available here: https://lnkd.in/gUTi4zT6

Dr. Baroudi's book available here: https://lnkd.in/gp8ePj2j

R. Baroudi (CEO Energy & Environment Holding): "Key" to Europe's energy independence, Eastern Mediterranean deposits of hydrocarbons and offshore wind farms





 $A\theta \dot{\eta} \nu \alpha$, 27.05.2022 — "Climate change and market instability are the two main parameters in recent years for the global energy market," highlighted Mr. Roudi Baroudi, CEO of Energy & Environment Holding at his speech on the second day of the 10th Athens Energy Dialogues conference on May 26-27.

According to Mr. Baroudi the goal is a new energy mix that is both environmentally sustainable and economically viable.

Another crucial point is that reliability of cleaner and greener sources are not yet sufficient to fully meet demand, and getting there will require years of planning, investment, and construction. If we take existing technologies offline before newer ones can replace them, the resulting shortages will cause prices to spike, driving up the cost of living and

causing whole economies to collapse. On the other hand, if we wait too long to decarbonize the global economy, climate change threatens to inflict even greater damage.

The Russian invasion to Ukraine has changed the geopolitical status quo, according to Mr. Baroudi.

The war in Ukraine, has exposed not only Europe's dangerous over-reliance on natural gas and other energy imports from Russia, but also the extent to which disrupting that relationship could wreak havoc around the world. Ever since Moscow launched its invasion in late February, the European Union has been hesitant to impose sanctions on Russia's energy industry because it lacks other alternatives, and it lacks those alternatives because of a years-long hesitance to maintain a sufficiently diverse basket of sources and suppliers.

The continent also suffers from inadequate regasification capacity, which means it cannot fully replace piped gas from Russia with seaborne loads of LNG from other countries.

Mr. Baroudi highlighted that there are solutions for all of these problems, and some are already under way.

"Europe could also bolster its energy security by helping to develop the increasingly promising gas fields of the Eastern Mediterranean, the output of which could then be linked by undersea and/or overland pipeline to the European mainland. The utility of these and other moves would also be significantly enhanced by building new storage facilities for both LNG and conventional gas, which would make Europe a lot more resistant to future supply disruptions," said Mr. Baroudi.

But most importantly in the long term, Europe needs to seize the opportunity presented by the great potential for offshore wind energy in the Mediterranean, since making full use of this potential — just in the coastal waters — could generate at least some 500 MILLION megawatts of electricity: in other words, the same as the entire global nuclear industry.

The Mediterranean region — including both its EU and non-EU components — can and should be a huge part of this drive for a dual resiliency against economic and environmental challenges alike. European investments in MENA countries' energy output makes sense for several reasons, including lower labor and other construction costs, as well as more diversified — and therefore more reliable — energy supplies.

About a week ago, the European Commission outlined a new plan to end Europe's dependence on Russian gas, one that envisions spending of more than 200 billion Euros over the next five years. That is a significant number, but now the plan needs to be funded.

This means that not just the EU itself but also the European Investment Bank, the World Bank, and the IMF — all need to open up their vaults. Needless to say, the private sector would do well to get in on the action as well.

Unfortunately, it is too late to prevent war in Ukraine. But the faster Europe moves effectively to end its reliance on Russian gas, embraces closer partnership with its Mediterranean neighbors, and achieves the full independence of its foreign policy, the sooner it can help to restore the peace — and prevent similar calamities in the future.

#athensenergydialogues #energy #climate #climatechange
#renewableenergy #sustainability #climateaction
#energyindustry #tsomokos
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R. Baroudi: «Απόλυτα εφικτό η Ελλάδα να αποτελέσει στρατηγικό ενεργειακό κόμβο για την Ευρώπη»



newmoney

Ένα από τα σημαίνοντα στελέχη της παγκόσμιας ενεργειακής αγοράς εξηγεί πώς προέκυψε η τέλεια ενεργειακή καταιγίδα — Τι λέει για τις άστοχες πολιτικές της Ευρώπης

Ο Roudi Baroudi έχει 40 χρόνια διεθνή εμπειρία στους τομείς

του πετρελαίου και του φυσικού αερίου, των ανανεώσιμων και πράσινων πηγών και των ενεργειακών υποδομών. Η καριέρα του ξεκίνησε από τις Ηνωμένες Πολιτείες το 1978, πέρασε από την Παγκόσμια Τράπεζα, το ΔΝΤ και την Ε. Επιτροπή και τον έφερε στην περιοχή της Ανατολικής Μεσογείου, περιοχή που έχει μελετήσει βαθιά και για την οποία έχει γράψει το βιβλίο με τίτλο «Maritime Disputes in the Eastern Mediterranean: The Way Forward».

Διευθύνων σύμβουλος, πλέον, της Energy & Environment Holding του Κατάρ μετέχει στο 10ο «Athens Energy Dialogues» και μιλώντας στο newmoney επιμένει ότι μία συνεργασία Ελλάδας και Τουρκίας στον χώρο της ενέργειας είναι και δυνατή και αμοιβαία επωφελής, αν και όχι απολύτως ανώδυνη. Επίσης, προκαλεί αισιοδοξία η πεποίθησή του ότι έχει ξεκινήσει η διαδικασία αποκλιμάκωσης του κόστους της ενέργειας στην Ευρώπη.

-Ποια είναι η εκτίμησή σας για την ενεργειακή κρίση; Πόσο θα κρατήσει; Υπάρχει διέξοδος από αυτή χωρίς τη Ρωσία;

«Προφανώς είναι ένα πολύ σοβαρό πρόβλημα, όχι μόνο για την Ευρώπη, αλλά και για ολόκληρο τον κόσμο, καθώς επηρεάζει τόσες πολλές πτυχές της καθημερινότητας, από την τιμή του ηλεκτρικού ρεύματος έως τη βενζίνη, τις μεταφορές γενικότερα, την τροφική αλυσίδα κ.λπ. Είναι πολύ δύσκολο να προβλέψουμε πόσο θα διαρκέσει, καθώς ο πόλεμος μόλις ξεκίνησε. Η πρόβλεψη μιας ημερομηνίας λήξης είναι δύσκολο εγχείρημα, καθώς τόσο τα προβλήματα όσο και οι λύσεις έχουν πολλά κινούμενα μέρη.

Καταρχάς, το πρόβλημα είναι προϊόν πολλών παραγόντων, όπως:

- •οι παλαιότερες αποφάσεις για σταδιακή κατάργηση της χρήσης άνθρακα και πυρηνικών σε ορισμένες ευρωπαϊκές χώρες
- η αποτυχία αποτελεσματικής διαφοροποίησης του συνολικού ενεργειακού καλαθιού της Ευρώπης (που οδηγεί άμεσα στην υπερβολική εξάρτηση από τις ρωσικές προμήθειες, ιδίως από το φυσικό αέριο που μεταφέρεται με αγωγούς)

• οι επακόλουθες επιπτώσεις της πανδημικής κατάρρευσης των τιμών του πετρελαίου και του φυσικού αερίου, που ανάγκασε πολλούς παραγωγούς σε όλο τον κόσμο να κλείσουν, οδηγώντας με τη σειρά του σε ανοδικές πιέσεις στις διεθνείς τιμές όταν η ζήτηση ανέκαμψε.

Ο συνδυασμένος αντίκτυπος όλων αυτών έγινε ακόμη πιο βαρύς από τη συγκυρία: η κρίση έρχεται ακριβώς τη στιγμή που αγωνιζόμαστε να πετύχουμε με τους στόχους απαλλαγής από τις εκπομπές άνθρακα, καταργώντας τα ορυκτά καύσιμα. Έτσι οι ευρωπαϊκές αγορές ενέργειας έμειναν εξαιρετικά ευάλωτες σε διακοπές εφοδιασμού — ή ακόμα και στην πιθανότητα διακοπής.

Το να ξεσπάσει ο πόλεμος στην Ουκρανία, όταν αυτό έγινε, ήταν από πολλές απόψεις το χειρότερο σενάριο, και αυτό είναι που έχουμε να αντιμετωπίσουμε.

Δεύτερον, η αποτελεσματικότητα των λύσεων θα καθοριστεί από πολλαπλές μεταβλητές που εξαρτώνται από τη σωστή λήψη και εφαρμογή των αποφάσεων, την επαρκή χρηματοδότηση τόσο από τις κυβερνήσεις όσο και από διάφορους χρηματοπιστωτικούς οργανισμούς και τη συνεργασία μεταξύ των χωρών της ΕΕ και με τους γείτονές τους στη Βόρεια Αφρική και την Ανατολική Μεσόγειο.

Η Ευρώπη έχει πολλά κουμπιά που μπορεί να πατήσει και όσο περισσότερα πατήσει, τόσο καλύτερα θα είναι τα αποτελέσματα. Μερικά από αυτά θα ήταν:

- •η καθυστέρηση της σταδιακής κατάργησης του άνθρακα/πυρηνικής ενέργειας
- •η ριζική αύξηση των επενδύσεων σε ανανεώσιμες πηγές ενέργειας όπως η αιολική και η ηλιακή ενέργεια
- •η επέκταση των δυνατοτήτων της Ευρώπης να δέχεται και να επεξεργάζεται μεταφορά μέσω πλοίων υγροποιημένου φυσικού αερίου
- •η καλύτερη αξιοποίηση τέτοιων λύσεων στην Ισπανία, με σύνδεση μέσω αγωγών με τη Γαλλία και επομένως με την

υπόλοιπη Ευρώπη

- ■εγκατάσταση κοινών δικτύων ηλεκτρικής ενέργειας με γειτονικές περιοχές
- •η στήριξη στην αξιοποίηση υποθαλάσσιων κοιτασμάτων φυσικού αερίου στην Ανατολική Μεσόγειο και
- •η κατασκευή νέων αγωγών που συνδέουν τις αγορές της ΕΕ με τους παραγωγούς φυσικού αερίου στην Κεντρική Ασία.

Όσο περισσότερα από αυτά τα πράγματα κάνουμε -και κάνουμε καλά- τόσο πιο γρήγορα θα υποχωρήσει η κρίση. Όσο επιτρέπουμε να καθυστερεί η εφαρμογή τέτοιων μέτρων, τόσο περισσότερο θα διατηρηθεί η κρίση -και η ευπάθεια της Ευρώπης σε παρόμοια προβλήματα στο μέλλον.

Σε τελική ανάλυση, λοιπόν, ναι, μπορούμε να βγούμε από την κρίση, αλλά δεν υπάρχει ένα μόνο μονοπάτι που θα οδηγήσει εκεί. Και ναι, μπορούμε να το κάνουμε με ή χωρίς τη συμμετοχή των Ρώσων, αλλά φυσικά η διαδικασία θα ήταν πολύ πιο εύκολη αν με κάποιο τρόπο συμμετείχαν σε αυτή».

-Πιστεύετε ότι οι τιμές της ενέργειας είναι δυνατό να επιστρέψουν ξανά στα επίπεδα του 2020; θα πρέπει οι Ευρωπαίοι να προσαρμοστούν στο να ζουν με ακριβό ηλεκτρικό ρεύμα και καύσιμα; Τι θα σήμαινε αυτό για την ευρωπαϊκή οικονομία;

«Μεσομακροπρόθεσμα, με την προϋπόθεση ότι θα λάβουμε όλα ή τα περισσότερα από τα μέτρα που ανέφερα προηγουμένως, οι τιμές της ενέργειας σίγουρα θα επιστρέψουν μια μέρα στα επίπεδα του 2020, αλλά όχι στις αρνητικές τιμές που παρατηρήθηκαν για σύντομο χρονικό διάστημα, όταν ο COVID-19 κατακρήμνισε τη ζήτηση.

Όπως είμαι βέβαιος ότι γνωρίζετε, οι τιμές πετρελαίου και φυσικού αερίου συνδέονται όχι μόνο με τις αντίστοιχες καταστάσεις προσφοράς και ζήτησης, αλλά και μεταξύ τους. Οι συνθήκες που προκάλεσαν αρνητικές τιμές ήταν εξαιρετικά ασυνήθιστες, και ακόμη κι αν προσεγγίζαμε ξανά αυτά τα επίπεδα, από τη φύση τους δεν θα μπορούσαν να διαρκέσουν πολύ.

Ωστόσο, οι τιμές μπορούν να μειωθούν και η διαδικασία βρίσκεται ήδη σε εξέλιξη.

Ήδη σήμερα, πολλές υπεύθυνες χώρες αυξάνουν την παραγωγή πετρελαίου και φυσικού αερίου για να βοηθήσουν στην ηρεμία των αγορών στην Ευρώπη και αλλού. Ωστόσο ορισμένες άλλες χώρες αρνούνται να το κάνουν, ενώ κάποιες άλλες βρίσκονται υπό κυρώσεις, που τις εμποδίζουν να φέρουν στην αγορά αρκετά εκατομμύρια βαρέλια που είναι απαραίτητα για να πέσουν οι τιμές.

Προς το παρόν, οι Ευρωπαίοι δυσκολεύονται πολύ να αντιμετωπίσουν το κόστος ηλεκτρικής ενέργειας και καυσίμων, ειδικά εδώ στην Ελλάδα, όπου οι τιμές της ενέργειας είναι απίστευτα υψηλές. Η Γερμανία είναι ένα άλλο παράδειγμα.

Δεδομένης της κατάστασης, και επειδή είναι η ταχύτερη διαθέσιμη μέθοδος, ορισμένες ευρωπαϊκές χώρες πρέπει να αναστείλουν ή να ανακαλέσουν τις αποφάσεις τους να κλείσουν τους πυρηνικούς σταθμούς και τους σταθμούς ηλεκτροπαραγωγής με άνθρακα. Πρέπει να καθυστερήσουν το κλείσιμο για άλλα πέντε έως επτά χρόνια και ίσως να κατασκευάσουν επίσης ένα ή δύο νέα εργοστάσια άνθρακα, για να αντιμετωπίσουν την αυξανόμενη ζήτηση και να περιορίσουν την ανοδική πίεση στις τιμές μέχρι να προστεθούν στο δίκτυο άλλες πηγές ενέργειας.

Παρά την πιθανότητα οι τιμές να υποχωρήσουν τελικά, βραχυπρόθεσμα έως μεσοπρόθεσμα, οι Ευρωπαίοι πρέπει οπωσδήποτε να προσαρμοστούν. Μελέτες έχουν δείξει ότι οι αυξημένες τιμές της ενέργειας θα σημαίνουν μειωμένη οικονομική ανάπτυξη, ειδικά στη Γερμανία.

Αυτό σημαίνει ότι περισσότεροι άνθρωποι θα έχουν λιγότερα μέσα για να αντεπεξέλθουν στις υψηλότερες τιμές ενέργειας και αυτό καθιστά καθήκον των ηγετών της ΕΕ και των εθνικών κυβερνήσεων να αναπτύξουν πολιτικές και μηχανισμούς για να αμβλύνουν το πλήγμα, ειδικά για τις οικογένειες με χαμηλότερο εισόδημα».

-Η ελληνική κυβέρνηση ζητά από την ΕΕ «στοχευμένη και

προσωρινή παρέμβαση» στη χονδρική αγορά φυσικού αερίου για τη μείωση των τιμών. Πιστεύετε ότι μια τέτοια παρέμβαση είναι εφικτή, και αν ναι, τι αντίκτυπο θα μπορούσε να έχει;

«Είναι σίγουρα εφικτή. Υπάρχουν περιστάσεις όπου η ΕΕ θα πρέπει να βοηθήσει τα κράτη-μέλη, όπως σε περιόδους πολέμου, και η τρέχουσα κατάσταση είναι εξαιρετική, πρωτοφανής μετά τον Β' Παγκόσμιο Πόλεμο. Με αυτήν την εξαιρετική κατάσταση πραγμάτων, η ελληνική κυβέρνηση —όπως κάθε άλλο κράτος μέλος—μπορεί και πρέπει να προτείνει βιώσιμους δρόμους προς τα εμπρός, π.χ. ανώτατα όρια στο αυξανόμενο κόστος ηλεκτρικής ενέργειας, πετρελαίου ή/και άλλων ενεργειακών δαπανών. Με τη βοήθεια της ΕΕ, η κυβέρνηση θα πρέπει να μπορεί να επιδοτεί ορισμένους καταναλωτές χαμηλού επιπέδου, για παράδειγμα νοικοκυριά των οποίων η κατανάλωση είναι μικρότερη από 100 ΚWh την ημέρα».

-Έχετε γράψει ένα βιβλίο με τίτλος «Ναυτιλιακές διαφορές στην Ανατολική Μεσόγειο: Ο δρόμος προς τα εμπρός». Πιστεύετε ότι υπάρχει περιθώριο για ειρηνική συνεργασία Ελλάδας, Κύπρου και Τουρκίας στον ενεργειακό τομέα και εάν ναι, ποια θα ήταν τα μέσα για να επιτευχθεί;

«Ναι, πιστεύω ακράδαντα ότι η Ελλάδα, η Κύπρος και η Τουρκία θα μπορούσαν και θα έπρεπε να βρουν τρόπους συνεργασίας στον ενεργειακό τομέα, και υπάρχουν αρκετοί τρόποι με τους οποίους η συνεργασία θα προσφέρει πολλά πλεονεκτήματα.

Το ένα είναι η εξερεύνηση και η εκμετάλλευση κοιτασμάτων πετρελαίου ή/και φυσικού αερίου κάτω από τον βυθό της Ανατολικής Μεσογείου, όπου τα μέρη θα μπορούσαν να μοιραστούν το κόστος, να μοιραστούν δεδομένα, να μειώσουν τις επικαλύψεις, να επενδύσουν το ένα στα κοιτάσματα του άλλου κ.λπ.

Το ίδιο θα μπορούσε να ισχύει και για τα υπεράκτια αιολικά πάρκα.

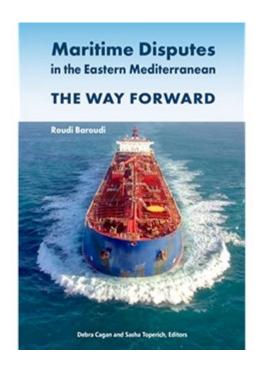
Ένας άλλος τρόπος είναι η κατασκευή ενός ή περισσότερων αγωγών

που θα μετέφεραν αέριο από τη νοτιοανατολική Μεσόγειο στην Ευρώπη χωρίς να χρειάζεται όλη η διαδρομή να γίνεται κάτω από το νερό: ο αγωγός θα μπορούσε να φτάσει έως την τουρκική ακτή και ο υπόλοιπος να συνέχιζε από την στεριά.

Δυνητικά, οι τρεις χώρες θα μπορούσαν επίσης να συνεργαστούν για να κατασκευάσουν μια μονάδα LNG, μια τεράστια επένδυση που γίνεται πιο ελκυστική αν διαμοιραστεί το ρίσκο. Σίγουρα πάντα υπάρχει χώρος για ειρήνη και πάντα υπάρχει χώρος για διπλωματία. Ο δρόμος προς τα εμπρός είναι η Ελλάδα και η Τουρκία να συνεχίσουν τις συζητήσεις τους με βάση τις αρχές της Σύμβασης του ΟΗΕ για το Δίκαιο της Θάλασσας (UNCLOS) που είναι ο Άτλαντας του Παγκόσμιου Ωκεανού. Σε αντίθεση με την Κύπρο, ούτε η Ελλάδα ούτε η Τουρκία έχουν υπογράψει την UNCLOS, αλλά οι κατευθυντήριες γραμμές και τα δεδικασμένα της ισχύουν - και μπορούν να εφαρμοστούν - από όλες τις χώρες. Η UNCLOS παρέχει μια νομική και τεχνική υποδομή με την οποία η Ελλάδα και η Τουρκία, ως κύρια μέρη, θα μπορούσαν να καθίσουν και, με αναφορά σε έρευνες που χρησιμοποιούν την τελευταία λέξη της επιστήμης και τεχνολογίας, να καταλήξουν σε μια δίκαιη και ισότιμη θαλάσσια λύση.

Τόσο ο Πρωθυπουργός Μητσοκάκης όσο και ο Πρόεδρος Ερντογάν έχουν εκφράσει την προθυμία τους να επιλύσουν αυτή τη σύγκρουση και πιστεύω ότι αυτή τη στιγμή είναι η κατάλληλη για να γίνει.

Στο βιβλίο μου, έχω επισημάνει μελέτες που δείχνουν ότι και οι δύο χώρες θα έχαναν ορισμένες θαλάσσιες περιοχές, αλλά και οι δύο χώρες θα κέρδιζαν πολύ περισσότερα: την ομορφιά ενός αποτελέσματος win-win, στο οποίο και οι δύο γείτονες θα μπορούσαν να επωφεληθούν από τον πλούτο του πετρελαίου και του φυσικού αερίου της περιοχής, ενώ και οι δύο λαοί θα μπορούσαν να απολαμβάνουν ειρήνη και ευημερία.



Φυσικά, αυτού του είδους η συνεργασία εξαρτάται από τη φιλική δέσμευση, και αυτή τη στιγμή αυτό ακούγεται δύσκολο, αλλά, όπως εξηγεί το βιβλίο, υπάρχουν τρόποι να επιλυθούν ορισμένες από τις διαφορές μεταξύ των τριών χωρών, ειδικά των διαφορών που σχετίζονται με τα θαλάσσια σύνορα.

Το επόμενο βιβλίο μου, «Κλίμα και ενέργεια στη Μεσόγειο», προχωρά ακόμη περισσότερο προτείνοντας συνεργασία σε όλη την ευρωμεσογειακή περιοχή. Ένα από τα παραδείγματα που μπορούμε να δούμε είναι η Κασπία, όπου πέντε χώρες — Αζερμπαϊτζάν, Ιράν, Καζακστάν, Ρωσία και Τουρκμενιστάν — βρήκαν μια πολύ δημιουργική λύση. Βασικά, συμφώνησαν να εφαρμόσουν ένα σύνολο κανόνων για τον βυθό της θάλασσας και ένα άλλο για το νερό και τους πόρους του. Αυτή η συμφωνία δεν είναι τέλεια, και ορισμένες πτυχές πρέπει ακόμη να αποτελέσουν αντικείμενο διμερών διαπραγματεύσεων, αλλά η συμφωνία επέτρεψε σε κάθε χώρα να πάρει τουλάχιστον μερικά από αυτά που ήθελε και να συνεχίσουν με την εκμετάλλευση των αντίστοιχων μεριδίων τους».

-Η Ελλάδα φιλοδοξεί να γίνει στρατηγικός ενεργειακός κόμβος για την Ευρώπη. Είναι αυτό εφικτό και αν ναι τι οφέλη θα αποφέρει στη χώρα;

«Είναι απολύτως εφικτό. Ανάλογα με τις ποσότητες που

διαθέτουν, κάθε χώρα της Ανατολικής Μεσογείου που καταλήγει να παράγει πετρέλαιο και φυσικό αέριο μπορεί να γίνει τουλάχιστον σε κάποιο βαθμό ενεργειακός κόμβος. Κοιτάζοντας πίσω, πριν από 10 χρόνια, η Κύπρος είχε την ευκαιρία να γίνει ένας ωραίος περιφερειακός κόμβος αγωγών και τερματικού σταθμού LNG, και εάν η ανάπτυξη συνεχίσει να αυξάνεται, έχει ακόμα μια καλή ευκαιρία να πραγματοποιήσει αυτές τις προβλέψεις. Η Ελλάδα θα μπορούσε επίσης να γίνει σημαντικό ενεργειακό κέντρο την επόμενη δεκαετία, εάν επιβεβαιωθούν κοιτάσματα ανάλογα με αυτά που βρέθηκαν σε άλλες χώρες της Ανατολικής Μεσογείου, όπως η Αίγυπτος και το Ισραήλ. Πράγματι, πολλές εταιρείες του ιδιωτικού τομέα ενδιαφέρονται, αλλά αυτό πιθανότατα θα διαρκέσει 5-10 χρόνια αφού η εξερεύνηση επιβεβαιώσει επαρκείς ποσότητες υδρογονανθράκων. Τα οφέλη του κόμβου θα ήταν σημαντικά: περισσότερες καλοπληρωμένες θέσεις εργασίας για τους Έλληνες πολίτες, περισσότερα κέρδη για τις ελληνικές εταιρείες, περισσότερα έσοδα για την ελληνική κυβέρνηση, περισσότερα διαθέσιμα κεφάλαια για δρόμους, σχολεία και νοσοκομεία, μεγαλύτερη επιρροή στην ευρωπαϊκή και παγκόσμια σκηνή, και τα λοιπά».

European Energy Crisis: R. Baroudi: "It is entirely possible for Greece to be a strategic energy hub for Europe"



Roudi Baroudi
CEO, Energy & Environment Holding, Qatar
Interview with Newmoney.gr by Symela Touchtidou

Questions:

1. What is your assessment on the current energy crisis? How long will it last? Is there a way out of it? Is there a way out of it without Russia included?

Obviously it's a very serious problem, not only for Europe, but also for the whole world as this is affecting so many aspects, from electricity crises to petrol prices for vehicles, transportation in general, food chain, etc.

It's very difficult to predict how long it will last as the war has just begun, but four months in, it has already caused so much damage. Predicting an end-date is a difficult ask because both the problems and the solutions have so many moving parts. First, the problem is a product of several

contributing factors, including: earlier decisions to phase out coal and nuclear plants in some European countries; a failure to sufficiently diversify Europe's overall energy basket (leading directly to over-reliance on Russian supplies, especially pipelined natural gas); and the after-effects of the early-pandemic collapse of oil and gas prices, which forced many producers around the world to shut down, leading in turn to upward pressure on international prices when demand recovered. The combined impact of all this was made even heavier by the timing: the crisis comes just as we are struggling to keep up with decarbonization goals transitioning away from fossil fuels and toward cleaner and greener energy, leaving European energy markets extremely vulnerable to supply interruptions — or even the possibility thereof. To have had the Ukraine war break out when it did was in many ways worst-case scenario, and that's what we're dealing with.

Second, the effectiveness and timeliness of solutions will be determined by multiple variables that depend on sound decision-making and dedicated follow-up, adequate financing from both governments and multilateral financial institutions, and cooperation among EU countries and with their neighbors in North Africa and the Eastern Mediterranean. Europe has several buttons it can push, and the more of them it pushes, the better the results will be. Some of these would be to delay the coal/nuclear phaseouts; radically increase investments in renewables like wind and solar; expand Europe's capacity to receive and process shipments of liquefied natural gas; make better use of such capacity in Spain by linking it to France, and therefore the rest of Europe, by pipeline; install shared power grids with neighboring regions; help develop undersea gas resources in the Eastern Mediterranean; and build new pipelines linking EU markets to gas producers in Central Asia. The more of these things we do - and do well - the sooner the

crisis will recede. The more we allow implementation of such steps to be delayed, the longer the crisis — and Europe's vulnerability to similar problems in the future — will persist.

So in the final analysis, yes, we can get out of this crisis, but there is no single path that will get use there. And yes, we can do so with or without the participation of the Russians, but of course the process would be much easier with them somehow included.

2. Do you see energy prices ever going back to the 2020 levels? Will Europeans have to adjust to living with expensive electricity and fuels? What would that mean for the overall European economy?

In the medium/long terms, provided we take all or most of the steps I listed earlier, energy prices will definitely go back one day to the levels for 2020 as a whole, but not to the negative prices seen briefly when COVID-19 caused demand to fall off a cliff before production had been dialed back, causing a sudden glut. As I'm sure you know, commodity prices for oil and gas are connected not only to their respective supply and demand situations, but also to each other. The conditions that caused negative prices were highly unusual, and even if we approached those levels again, by their nature they could not last long.

Nonetheless, prices can be brought down, and the process is already under way. As of today, many responsible countries are increasing their production of oil and gas to help calm markets in Europe and elsewhere, but some countries are refusing to, while several others are under sanctions, preventing them from bringing to the market several million barrels needed to cool off the price hikes. For the time being, Europeans are having a very hard time to cope with

electricity and fuel costs, especially here in Greece, where energy prices are unbelievably high. Germany is another example.

Given the situation, and because it's probably the fastest method available, some European countries need to suspend or reverse their decisions to close their nuclear and coal power plants. Instead, they need to delay closures for another five-to-seven years, and maybe build one or two new coal plants, too, to cope with rising demand and restrain upward pressure on prices until other sources of energy can come online.

Despite the likelihood that prices will eventually retreat, in the short to medium term, Europeans definitely need to adapt. Studies have indicated that elevated energy prices will mean reduced economic growth, especially in Germany, whose importance to the rest of Europe cannot be overstated. That means more people will have less means to cope with higher energy prices, and that makes it incumbent on EU and national leaders to develop policies and mechanisms to cushion the blow, especially for lower-income families.

3. The Greek government asks from the EU "a targeted and temporary intervention" in the natural gas wholesale market to bring prices down. Do you believe such an intervention is possible, and if so, what impact could be?

It is definitely possible. There will be circumstances when the EU has to assist EU members, such as during times of war, and the current situation is an extraordinary one, unseen since World War II. With this extraordinary state of affairs, the Greek government — like any other member state — can and should propose viable paths forward, e.g. caps on rising electricity, petroleum and/or other energy costs. At the very least, with the help of the EU, the government should be able

to subsidize certain low-level consumers, for instance households whose consumption is less than 100 KWh per day.

4. Are you aware of the 'Six-Point Plan' of the Greek government? What is your assessment on it? (available here https://primeminister.gr/en/2022/03/09/28836)

Yes, I am aware of the Six-Point Plan that Prime Minister Mitsotakis has proposed. It's a very positive move forward in order to cushion some of the pain from disastrous price increases, which are driving inflation across the Greek economy. Here, Greece is contributing to the European Union's overall policy formulation, which seeks to provide protection against the major consequences emanating from the Russia-Ukraine war, and the Greek plan is definitely doable. There are other measures, too, that could be taken to shield the country from the continuous negative repercussions of the war in Ukraine. Of course gas supplies could be increased by expanding the Trans-Anatolian gas pipeline (TANAP) to boost imports from Azerbaijan gas, for instance, but keeping coal power plants would also help contain pressure on electricity prices, as would adding a nuclear plant of 4,000-6,000 MW. Moving quickly to promote energy conservation, too, would also help alleviate spiking costs and give Greek households and business sustainable access to more affordable electricity.

5. Greece is the only European country where electricity prices are directly linked to natural gas international stock prices. Do you believe there is a way out of this? What measures could be taken to bring electricity prices in the Greek market down?

Yes, there is definitely a way out. This is the responsibility of the Regulatory Authority for Energy, which controls and regulates energy prices in Greece. Given the circumstances, the RAE certainly has a powerful incentive to propose a different mechanism, one that would follow other European countries in order to help keep energy prices at affordable costs for all.

6. You have written a book on "Maritime Disputes in the Eastern Mediterranean: The Way Forward". Do you believe there is room for peaceful cooperation between Greece, Cyprus and Turkey in the energy field and if so, what would be the means to achieve it?

Yes, I believe very strongly that Greece, Cyprus, and Turkey could and should find ways to cooperate in the energy field, and there several ways in which working together would offer many advantages. One is exploration and development of oil and/or gas deposits beneath the seabed of the Eastern Mediterranean, in which the parties could share costs, share data, reduce duplication, invest in one another's fields, etc. The same could go for offshore wind farms.

Another is the construction of one or more pipelines that could transport East Med gas to the European mainland without having to have the entire route under water: just get it to Turkish coast and run the rest of it overland. Potentially, the three countries also could team up to build an LNG plant, an enormous investment and therefore one for which spreading the risk would be very attractive.

Definitely there is always room for peace and there is always room for diplomacy. The way forward is for Greece and Turkey to continue their discussions based on the principles of the UN Convention on the Law of the Sea (UNCLOS) which is the Atlas of the World Ocean. Unlike Cyprus, neither Greece nor Turkey is a signatory to UNCLOS, but its guidelines and precedents are applicable to — and actionable by — all countries. UNCLOS provides a legal and technical

infrastructure with which Greece and Turkey, as the main parties, could sit down and, with reference to surveys using the latest science and technology, arrive at a fair and equitable maritime solution. Both Prime Minister Mitsokakis and President Erdogan have expressed their willingness to solve this conflict, and I believe that right now, the time is right to get it done. In my book, I have highlighted studies indicating that both countries would lose some maritime areas, but both countries would gain far more: the beauty of a winwin outcome, one in which both neighbors would be able to benefit from the region's oil and gas wealth, and both peoples would be able to enjoy peace and prosperity.

7. Greece aspires to become a strategic energy hub for Europe. Is this possible and if so what benefits will it bring to the country?

Absolutely it is possible. Depending on what quantities they have, every East Med country that ends up producing oil and gas can become an energy hub to some extent at least. Looking back, 10 years ago, Cyprus was slotted to become a nice regional hub for pipelines and an LNG terminal, and if development keeps on growing, it still has a good chance to make those predictions come true. Greece could also become a major energy center in the next decade if their exploration efforts confirm the same kinds of deposits found offshore other East Med countries like Egypt and Israel. Indeed a lot of private sector firms are interested, but this will probably take 5-10 years after exploration confirms sufficient quantities of hydrocarbons.

The benefits of hub status would be significant: more goodpaying jobs for Greek citizens, more profits for Greek companies, more revenues for the Greek government, more funds available for roads, schools, and hospitals, more influence on the European and global stages, etc.

The end of Europe's cleanenergy preaching



By Ana Palacio/ Madrid

Russian President Vladimir Putin's war against Ukraine has served Europe a heaping dose of energy realism. While the European Union was touting a "no pain, all gain" transition to renewable energy, many of its industries — particularly in Germany — had developed a debilitating dependence on cheap Russian gas. This revelation should be the first step toward a more realistic — and less dogmatic — European approach not only to its own energy transition, but also to that in the Global South.

The EU has an action plan for weaning itself off Russian fossil fuels. But, while the details of REPowerEU are still being finalised, it is already clear that, like so many European "solutions," the plan is an exercise in muddling through, exemplified by the fact that it will not be completed

until 2030.

Though REPowerEU aims to accelerate the rollout of renewables and replace gas in heating and power generation, it also depends significantly on the diversification of energy supplies. Already, energy producers in the Global South have received desperate pleas to help meet the EU's energy needs, which has probably prompted more than a few eye rolls. After all, countries across the developing world have endured years of European proselytising about the importance of rapid progress toward a carbon-free energy system.

If the EU cannot achieve this in the short term — in order to avoid funding an unjust war, no less — the Global South most certainly cannot. Europe is worried that economic growth and local livelihoods will suffer if it attempts to move too rapidly to renewables. Developing economies are worried that they will have no path to sustained economic growth and poverty reduction at all.

They are right to worry. The positive correlation between baseload power and prosperity clearly shows that a reliable energy supply is essential to economic progress. But, globally, 770 million people — mostly in Africa and Asia — lack access to electricity. In Sub-Saharan Africa, the pandemic worsened energy poverty, with 77% of the region's people now living without electricity, compared to 74% in 2019.

Given that future population growth — and, thus, growth in energy demand — will be concentrated in the Global South, this problem is set to get much worse. And, for now, renewables cannot solve it, because they do not represent a sufficiently reliable power supply. A scale-up in hydrogen fuel could change this, though this remains a stretch for emerging-market and developing economies.

United States Special Presidential Envoy for Climate John Kerry, for one, has now recognised the folly of attempting to force developing economies to go fully renewable. On March 7, following the Russian invasion of Ukraine, he acknowledged that gas would be crucial to economic development in African

countries. Even the World Bank — without much fanfare — has reversed its moratorium on financing gas projects.

Yes, this new realism implies a near-term increase in African emissions — but starting from a very low level. The 48 countries that comprise Sub-Saharan Africa (excluding South Africa) represent 0.55% of global carbon dioxide emissions. As a whole, Africa consumes less energy than any other continent — far less than Europe, especially if one takes into account historical consumption. Rich countries are well aware of this discrepancy, which is why developing countries have been increasingly critical of the developed world's climate hypocrisy: constant pressure to cut emissions coupled with prolonged refusal to finance climate mitigation and adaptation in the Global South.

The Green Climate Fund embodies this hypocrisy. At the United Nations Climate Change Conference in 2009, developed economies pledged to channel \$100bn per year for mitigation and adaptation efforts in developing countries by 2020. As of January 2022, participating countries' pledges amounted to a measly \$10bn.

Sustainability is vital to our planet's future. But the green transition must be just. And justice demands that the Global South receive the same opportunity to develop as the North had. That will be possible only with energy security for all.

That is why this week's Sustainable Energy for All Forum is so important. Stakeholders from both the public and private sectors will gather in Kigali, Rwanda, to find ways to accelerate progress toward UN Sustainable Development Goal 7: ensure access to affordable, reliable, sustainable, and modern energy for all.

This year's Forum comes at a pivotal time in the global energy transition. Moreover, this is the first time since the Forum was launched in 2014 that it will be held in Africa. One hopes that the continent's centrality to the event — and the harsh realisations that the war in Ukraine has imposed on Europe — will be reflected in its conclusions, which, given the current crisis, will be more consequential than ever.

Europe has always prided itself on being a leader in the green-energy transition. This should not change. But, rather than allowing its vision to become clouded by idealism and ideology, the EU must ensure that its energy ambitions — for itself and for developing economies — are firmly grounded in reality. Europe must support developing countries' efforts to adapt to climate change and achieve net-zero emissions. But it must also help them to achieve energy security. As one African minister succinctly put it, "We will decarbonise, but first we have to carbonise." — Project Syndicate

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Public-private decarbonisation



As we mark the 52nd Earth Day, we must recognise that

achieving net-zero carbon dioxide emissions by 2050 will require significant investment to finance the necessary economic and social transitions. McKinsey estimates that this will take \$9.2tn of annual global investment over the next 30 years — an increase of \$3.5tn per year from what is spent today on clean, renewable energy.

Most of these investments will come from the private sector, which is already leading the charge. The value of assets under management with net-zero commitments is now \$57tn. The 450 members of the Glasgow Financial Alliance for Net Zero, representing more than \$130tn in assets, have pledged to align their portfolios with the Paris climate agreement's 1.5° Celsius warming target. The First Movers Coalition (whose founding members include companies like Amazon, Apple, Boeing, Trane, and Volvo) has pledged to create demand for early-stage clean technologies in "hard-to-abate" sectors like steel, cement, and aviation. In the United States alone, private investment in clean-energy assets reached a record \$105 billion in 2021, 11% higher than in 2020 and up 70% over the previous five years.

Moreover, last fall, the International Financial Reporting Standards Foundation created a new International Sustainability Standards Board to develop industry-specific climate disclosure guidelines that will build on reporting standards developed by the Sustainability Accounting Standards Board. By the end of 2021, 258 institutional investors, representing \$76tn in assets, had adopted the SASB's voluntary standards. And, in a significant policy move, the US Securities and Exchange Commission recently proposed new rules that would require public companies to disclose information about their carbon emissions and their plans for addressing climate-related real asset and transition risks.

As these examples suggest, the net-zero challenge cannot be solved by private actors alone. Public-private co-operation and co-ordination will be critical to deploying private capital at the necessary speed and scale. The public sector — from international organisations like the International

Monetary Fund and the International Bank for Reconstruction and Development to national, state, and municipal governments — must shape incentives and issue regulations to fuel the necessary private investment in clean-energy projects and infrastructure.

In the US, public-private collaboration has already yielded some clean-energy commercial success stories — most notably Tesla, which was created with the help of a US Department of Energy loan. Government-furnished funding for research and development, loans, and tax incentives have accelerated the growth of the electric-vehicle industry and supported a remarkable reduction in the costs of solar and wind energy over the past 15 years.

Publicly funded and directed innovation has a long history of success in the US. In California, standards set by the California Air Resources Board led to the widespread adoption of the catalytic converter, reducing tailpipe emissions in the state by 90% between the mid-1960s and the early 1980s. The technology then became a standard part of all motor vehicles sold in the US, because automakers needed to comply with the regulations set first by California (and then by the newly formed Environmental Protection Agency).

Owing to the size of the California market, the fuelefficiency standards it sets continue to be adopted by major car manufacturers. And within the state, private capital is now being mobilised through public initiatives like the Self-Generation Incentive Program, which provides rebates to organisations that install onsite energy-storage technologies, and through investment tax credits for solar and storage.

As William H Janeway notes in a recent Project Syndicate commentary, the explosion of venture capital in the information-technology and health industries over the past half-century occurred only after the government had invested billions of dollars in upstream R&D and advance-purchase commitments for new products and services. Historically, alternative-energy and decarbonisation technologies have received nowhere near the support provided by the US

Department of Defense and the National Institutes of Health for information-technology and biomedical innovations. Increased government support for R&D of climate technologies would accelerate venture capital investment, which has lately gathered momentum.

Policymakers and business leaders should take advantage of this moment to supercharge public-private partnerships for climate-change adaptation and mitigation. The new \$1tn Bipartisan Infrastructure Deal allocates \$62bn to the DOE to accelerate the developing and scaling up of clean-energy technologies through R&D support, demonstration projects, an expansion of the DOE loan program, and targeted tax credits. These are major first steps. The \$555bn of climate provisions in the Build Back Better bill would provide additional derisking incentives to unlock the private investment required for the net-zero transition.

Although Russia's war in Ukraine has forced the US to look for ways to increase fossil-fuel production in the short run, it has also provided a wake-up call. Domestic clean-energy production will be key not just to mitigating climate change but also to energy security over the long run. The climate policies in the Build Back Better legislation would accelerate progress toward both of these goals.

But regardless of what happens at the federal level, states and cities can follow California's example and implement bold climate policies of their own. California has pledged \$37bn over the next six years — more than most national governments — to combat climate change, and has introduced its own new loan program to encourage innovation in clean-energy technologies.

This is a unique and critical moment for the private sector. It must step up and deploy its capital, building on public-policy catalysts to drive innovation and investment for a sustainable future. — Project Syndicate

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lDaniel Weiss, Co-Founder and Managing Partner of Angeleno Group, is Co-Chair of the UCLA Institute of Environment and Sustainability Advisory Board and serves on the board of the World Resources Institute.

Russia-Ukraine war could delay Europe's decarbonization plans for a decade



Russia's invasion of Ukraine could force Europe to delay key decarbonization efforts for up to a decade, a prominent

regional energy expert has warned in Greece.

"They don't have many choices left," said Roudi Baroudi, CEO of Doha-based Energy and Environment Holding, an independent consultancy. "Unless some European countries pull out all the stops, much of the continent could soon be looking at crippling shortages, prohibitively high prices, or both."

Now that Europe is moving to reduce imports of Russian oil and gas, he explained, some of the measures expected to reduce carbon emissions may have to be put off "for eight, nine, maybe 10 years," as would planned shutdowns of nuclear generating stations.

"The European Union will need to provide the necessary permissions in some cases, plus financing in others," he said. "Eight to 10 nuclear plants and as many as 30 coal stations slated for decommissioning will have to remain online to keep up with electricity demand, and several projects required to replace Russian gas will need to be accelerated with additional funding and/or guarantees."

If and when gas stops flowing through pipelines from Russia, Baroudi told the 7th Delphi Economic Forum last week, "it cannot be replaced by simply ordering more liquefied natural gas from Qatar, the US, and/or other producers. Europe doesn't have enough receiving facilities to re-gasify such huge amounts, which is why efforts to expand capacity in Germany and the Netherlands are so urgent."

Coordinated releases of strategic oil reserves by the US and other countries are helping to contain upward pressure on crude and other energy prices, he said, but reasonable levels "cannot be maintained unless more supply makes it to market and that means oil producers —primarily OPEC but others as well — have to start pumping more."

On yet another front, "Spain has both spare LNG receiving capacity and an undersea pipeline for imports of gas from North Africa — but very little of that can reach the rest of Europe unless and until a new pipeline connects the Iberian

Peninsula to the rest of Europe via France," said Baroudi, who has been advising companies and governments on energy policy for decades. "Paris has recently voiced new openness to that idea, but the EU can and should do more to facilitate it. It should also do more to establish an agreed route for another pipeline to carry gas from the Eastern Mediterranean to Greece and/or Turkey."

Baroudi also argued that the EU would be wise to ensure adequate capital flows into renewables such as wind and solar. "We might have to retain fossil fuels longer than we had planned, but that's no reason to stop funding a cleaner future," he said. "In fact it's a reason to move as quickly as possible."

"The whole situation is very sad," he added. "Ever since the Paris Agreements of 2015, and especially since the Glasgow climate summit last year, Europe had been on the right track to be ready for a decarbonized economy. But now those plans are being pushed temporarily to the back burner. Apart from the lives being lost in the fighting, the energy and economic implications will mean severe hardships across the continent, especially for lower-income people. And much of the cause is due to the fact that Europe had delays to diversify its sources of supply. Now it finds itself scrambling to prevent an economic disaster."