

Prime Minister agrees legally binding net-zero emissions target for 2050



Announced on Tuesday night (11 June), the Prime Minister revealed that the statutory instrument to amend the Climate Change Act of 2008 to account for a net-zero target by 2050 will be laid in Parliament on Wednesday.

Prime Minister Theresa May said: “Now is the time to go further and faster to safeguard the environment for our children. This country led the world in innovation during the Industrial Revolution, and now we must lead the world to a cleaner, greener form of growth.

“Standing by is not an option. Reaching net zero by 2050 is an ambitious target, but it is crucial that we achieve it to ensure we protect our planet for future generations.”

The move comes just over a month after the Committee on Climate Change (CCC) published its recommendations to

Government on legislating for a net-zero carbon economy. The body's advice includes bringing the ban on new petrol and diesel car sales forward to 2035; quadrupling the UK's renewable energy generation capacity; improving biodiversity across 20,000 hectares of land annually and deploying carbon capture and storage (CCS) at scale.

Crucially, the CCC believes that reaching net-zero by 2050 can be done using between 1-2% of GDP in 2050. This is the same level of funding currently allocated to work related to compliance with the Climate Change Act.

Devil in the detail

How the UK actually plans to reach net-zero emissions will need to be set out. Chancellor of the Exchequer Philip Hammond claimed that spending cuts for schools, hospitals and the police force would be needed to fund total decarbonisation of the UK economy, which he estimated at £1trn.

The *Financial Times* reported last week (4 June) that the cabinet has accepted a request by Hammond that 88 megatonnes (million tonnes) of emissions from the 2013 to 2017 carbon budget should be carried forward to give the UK more leeway in meeting future targets. The decision flies in the face of advice issued by the CCC when it urged ministers not to take advantage of the existing rule.

Under the Climate Change Act, the UK is currently targeting an 80% reduction in emissions by 2050 against a 1990 baseline, following similar advice from the CCC in the past. However, the current Act only accounts for international aviation and shipping on a territorial basis. Under the proposed new strategy, the net-zero target would encompass *all* sectors, including shipping and aviation.

One deviation from the recommendations is the use of international carbon credits. The UK Government has confirmed that they will retain the ability to use these credits to

offset emissions within an appropriate monitoring, reporting and verification framework.

The UK Government also looks set to stick with its original phase-out date for new diesel and petrol vehicles. However, MPs have confirmed a bid host COP26.

The Government's target will also tap into the growing influence of youth climate strikes. A Youth Steering Group will be led by DCMS and the British Youth Council to advise the Government on priorities for climate change, waste and recycling and biodiversity loss. They will start their review in July.

The legislation means the UK will become the first G7 nation to enshrine a net-zero target, and will conduct assessments within the next five years to push for other countries to set similar targets. A key ambition of this assessment is to ensure that UK industries do not face unfair competition from foreign businesses neglecting climate impacts.

Rapid turnaround

It also follows months of calls from MPs and businesses alike to enshrine a net-zero target into UK law – a discussion that has been amplified by the recent climate school strikes and Extinction Rebellion protests.

The announcement from the Government comes just hours after the Business, Energy and Industrial Strategy (BEIS) committee's chair Rachel Reeves MP introduced a new bill for legislating on net-zero to the House on Tuesday afternoon (11 June).

The bill, which followed the CCC's recommendations and included all international aviation and shipping, was broadly welcomed across the house – particularly by groups such as the Environmental Audit Committee (EAC).

Path to net-zero

The UK Government first requested advice from the CCC on how best to legislate for a net-zero carbon economy last Autumn, in the wake of the Intergovernmental Panel on Climate Change's (IPCC) landmark report on global warming.

The report shed light on the vast difference in economic, social and environmental impacts between the Paris Agreement's agreed 1.5C and 2C pathways for the first time, revealing that the 0.5C difference would significantly worsen the risks of drought, floods, extreme heat and poverty for hundreds of millions of people. In order to limit warming to 1.5C, the paper concluded, global emissions would need to be cut by 45% by 2030 before reaching zero in 2050.

In the wake of the report, Scotland has already legislated to hit net-zero by 2045, while Wales has legislated for a 95% cut to national emissions by the same deadline. On a global level, efforts to reduce emissions have seen a 1C drop in the temperature rise being forecast by the end of the century – from 4C to around 3C.

From a business perspective, several of the UK's largest corporates have also set their own pre-2050 net-zero or 1.5C targets in light of the IPCC's claims, including the likes of BT, Skanska UK, Ecotricity and Aldi UK and Ireland. This trend can be seen across the global business community too, with modular flooring firm Interface, engineering and electronics giant Bosch and container shipping giant Maersk among the global cohort of so-called "zeronauts".

Businesses from all sectors and of all sizes have also been aiming to drive change outside of their own operations by lobbying the UK Government to legislate for net-zero. Last month, a coalition of 128 UK-based businesses, industry networks and investors wrote to Ministers demanding that a net-zero target for 2050 is legislated "immediately" and were

told such moves would be made “in a timeframe which reflects the urgency of the issue”.

Commenting on the introduction of the legally binding target, Secretary of State for Business, Energy and Industrial Strategy Greg Clark said: “We want to continue our global leadership and that’s why we are introducing a legally binding net zero target to end the UK’s contribution to global warming entirely by 2050. The report we commissioned from the Committee on Climate Change makes clear that we have laid the foundations to achieve a net zero emissions economy, and that it is necessary and feasible.

“Almost 400,000 people are already employed in the low-carbon sector and its supply chains across the country. Through our modern Industrial Strategy we’re investing in clean growth to ensure we reap the rewards and create two million high quality jobs by 2030.”

A green reaction round-up will be published on the edie website shortly.

Matt Mace & Sarah George

Global emissions climbed at highest rate in seven years in 2018, BP says



Global carbon emissions jumped the most in seven years in 2018 as energy demand surged, according to BP's annual review of world energy, indicating the world is falling behind in its efforts to rein in climate change.

The report, one of the most closely watched surveys of global energy trends, found that primary demand rose at the fastest pace this decade in 2018 even though economic growth weakened. China, India and the U.S. were responsible for two thirds of the 2.9% increase in consumption.

Urgency is building around the world to contain a global increase in the temperature, which has risen 1 degree Celsius since the start of the industrial revolution and is on track to at least double that increase by the end of the century. It marks the quickest change in the climate since the end of the last ice age some 10,000 years ago.

"At a time when society is increasing concerns about climate change and the need for action, energy demand and carbon emissions are growing at their fastest rate for years," BP Chief Economist Spencer Dale said at a briefing in London.

Much of the gains were driven by more volatile weather

patterns. An increase in the number of days that were either unusually hot or cold boosted energy use for heating and cooling, Dale said. As a result, global CO2 emissions rose for a third straight year, a trend likely to stick for the time being.

Almost 200 nations pledged to take steps to limit warming to well below 2 degrees through the Paris Agreement on climate change in 2015. Their aim was to limit the superstorms, droughts and famine predicted to happen more frequently with runaway climate change.

Even the dirtiest fossil fuel for power generation is increasing. Both consumption and production of coal advanced at their fastest rate for five years, driven by the need for developing economies across Asia to connect millions of homes to a reliable source of electricity. That's despite coal's share of primary energy falling to just over a quarter of primary energy and 17 gigawatts of plants burning the fuel being retired.

BP's report contained some more hopeful trends. Renewable energy consumption jumped 15% in 2018, near the record advance from a year earlier. China, again at the forefront, is adding more renewable energy than the world's most developed nations in the OECD combined, BP said.

Growth in output from wind, solar, geothermal, biomass and burning waste accounted for about a third of the increase in total power generation, or the same as the increase in coal.

"Renewables can't grow quickly enough," Dale said.

5 extreme trends that will affect oil in the next 5 years



Opinion by **Theo Priestley**

The Oil & Gas industry is synonymous with the word 'extreme' but in many ways that term doesn't translate well when it comes to keeping up with the latest of technology trends.

While the environments that the energy industry operate in might be considered so, the ability to tap into emerging trends is on the opposite side of the spectrum compared to other industries like Manufacturing.

So what should the oil and gas and energy industries be looking toward in the future to maintain its own extreme, competitive advantage?

Internet of Things (IoT) and Edge Computing – Connecting the Sea for Extreme Operational Efficiency

An industry buzzword that's been around for a while now. IoT

is picking up pace with the interest from the energy sector as it looks to harness data from an array of sensors whether from tidal, wind, or traditional oil and gas pipelines.

The attraction of receiving real-time, operational data from machines and large, inaccessible equipment is huge as companies seek to minimise or predict failure, and maximise efficiencies and uptime.

But let's scrutinise the promise of IOT further, because it's not as easy as it appears to extract the value required.

For example, there are approximately 3,500,000km of pipeline across the World on and offshore. Beneath the waves an estimated 70% are already at or beyond design life.

While on land both WiFi and 5G are touted as the standard for connecting IOT-enabled devices, and for harvesting data in real-time the reality facing the energy industry is that 70% of the World's surface is water, and those technologies don't work subsurface which would enable the internet of things in the extreme environments they operate in.

This applies for smart cities also where existing infrastructure is buried below ground.

Asset integrity management is a big concern for the oil industry today as costs soar towards an asset's end of life while production declines, and this doesn't take into account the reputational cost and damage of having a major failure subsea, the environmental impact and costs associated with loss of production and revenue.

Many installations are in late life but with little understanding of actual pipeline condition and integrity meaning a loss in revenue and production if longevity cannot be extended.

This is a critical use case of IOT technology, especially

Subsea Internet of Things where the retrofitting of wireless monitoring devices and sensors can greatly increase the amount of data required for effective decision making at this level; data including pressure, temperature, fatigue, corrosion, and vibration and flow from sensors which form part of an Edge network of devices which can not only communicate with each other in real-time but offer analytical capabilities meaning the cost of data transfer from thousands of meters below the surface is greatly reduced for efficiency.

Blockchain – Asset Management taken to the Extreme

Asset integrity is only one key aspect of maintaining an efficient, productive and compliant energy network. Asset management at this scale is a headache for many engineers, CTOs and CFOs responsible for production.

How can you track thousands of components, their lifespans, their repairs and replacements, the costs associated and third party invoices effectively and in a way which can't be altered or mismanaged?

Blockchain offers an answer. Although the underlying aspect of Blockchain is purely a distributed ledger and therefore a backbone infrastructure technology (and in reality, very boring) the fact that an asset's lifecycle, service and test records can be recorded and traced on blockchain offers greatly enhanced transparency and auditability.

If a critical component is purchased, everything about that item has already been recorded, from the materials used, their original source, down to who manufactured it, and who signed off on the quality testing.

From that point on, where the part is used, what it is used for, when it was operational, any failures recorded, any repairs recorded, to its eventual decommissioning is stored on the digital ledger, completely immutable to change or alteration.

Digital Twins – Using IOT and Real-Time Data for Extreme Visualisation

The concept of a Digital Twin along with the Internet of Things again is not a new concept. A Digital Twin refers to the digital replica of physical assets (physical twin), processes, people, places, systems and devices that can be used for various purposes.

The digital representation provides both the elements and the dynamics of how an Internet of things device operates and lives throughout its life cycle.

The idea of creating a digital representation of an asset or device combined with the real-time sensor data can be extremely inviting for many industries and the energy sector is no exception.

Being able to visualise an entire installation, down to pumps, motors, pipes, valves, compressors, turbines and much more, along with real-time data associated with their operation can be an engineer's dream however the balance in question is being able to receive that information at critical moments in a timely and meaningful way.

This is fine for where remedial work or understanding the behaviour of a component or machine where time is not critical is perfect for the application of this technology.

Walking through the exploded view of a huge turbine using virtual or augmented reality works very well in scenarios where there are no time constraints.

But every engineer knows that you simply can't beat being presented with a dashboard in real-time.

For all new technologies, context is absolutely key in the correct implementation and the energy sector is no exception to this rule.

However, many Digital Twin initiatives fall short simply because they do not take into account subsea infrastructure, and operational decisions are being based on only half the picture.

Remember to take into account real-time data from your offshore structures.

Virtual/ Augmented Reality – Bringing Data Closer to the User in Extreme Conditions

Imagine being able to walk through a pipeline installation without physically being there.

Imagine being able to walk through a huge wind turbine and all its internal components and seeing them operate in real-time.

Imagine being a diver meters below the surface of the ocean, and having information relayed and overlaid in real-time via your mask or helmet from wireless sensors instead of holding a display and attaching it to a wired sensor installation.

Imagine this same capability for an ROV operator and control screen.

All this is possible with augmented and virtual reality. While the technology itself struggles to find a foothold in the real world of the consumer, on an industrial scale it is flourishing as it finds new ways to present information to a user that frees their capacity to do other tasks, or instructs them on how to repair or monitor complex machinery in extreme conditions without the need for manuals or guides.

Artificial Intelligence – Extreme decision making made possible

No industry can escape the rise of the machines, or the capabilities that machine learning and advanced algorithms can bring to automating decision making and making sense of petabytes of data in an instant.

As time becomes as much a critical commodity as revenue, A.I. can aid in the analysis of real-time energy production and asset lifecycles, GIS data for site planning, aiding in faster operational decision making, invoicing and order to cash automation, predictive maintenance of assets and the planning of repairs with minimal interruption to production, automation of ROV equipment without the need for operators, the list can be endless if applied correctly.

Again, it's key here to reiterate that this trend goes hand in hand with edge computing, and the movement and processing of data and critical information at the source (in most cases, at sensor level) rather than at the datawarehouse will become the norm and most efficient method of implementation in the future.

What we must bear in mind is that A.I. is nothing more than algorithms that can learn from their inputs and adapt, and for that to happen it needs to be given the right data to make those decisions in the types of scenarios listed.

The oil and gas industry has a big task ahead before thinking about the implementation of machine learning solutions; how can it get that data out from installations and equipment in extreme conditions such as subsea locations?

What data is absolutely critical to make an A.I. solution viable and is it available? How 'clean' is that data the organisation holds? The old saying 'Garbage In/ Garbage Out' has never been truer than today when discussing the potential of A.I.

There we have it, 5 extreme trends for the next 5 years to think about. But perhaps there is a sixth trend when you consider all five at once, because in combination they are extremely powerful and interconnected, and every one is about the underlying value that can be extracted from the data generated by the business.

And they do say that 'data' is the new oil after all....

Theo Priestley is the Chief Marketing Officer at WFS Technologies, and a world renowned technology futurist.

OPEC Still Gridlocked on Meeting Date Amid Iran-Saudi Schism



With just two weeks remaining before they're supposed to gather in Vienna, OPEC and its allies are still struggling to settle on a meeting date. It's the latest example of how bitter geopolitical rivalry between Saudi Arabia and Iran can cause gridlock in the cartel.

The Organization of Petroleum Exporting Countries and its partners, an alliance that spans 24 oil-producing nations, must choose whether to extend production cuts into the second half of the year or end a pact that has put a floor under prices. It's a decision of growing urgency as a deteriorating global economy and entrenched trade war batter crude prices.

Yet for the past three weeks they've been fruitlessly juggling

dates after Russia, the biggest non-OPEC producer in the coalition, sought to shift the meeting to early July. Now, as countries that initially resisted Russia's proposal give it their support, delegates familiar with the matter say opposition comes from just one nation: Iran.

It's almost certainly no coincidence that this intransigence comes as its longtime foe, Saudi Arabia, and other OPEC nations take the Islamic Republic's market share while its crude exports are squeezed by U.S. sanctions.

"This seems to be about flexing muscles, marking territory," said Helima Croft, chief commodities strategist at RBC Capital Markets in New York. "Digging lines in the sand because you can."

Iranian crude production has tumbled to the lowest in three decades as President Donald Trump pressures the country to renegotiate an accord on its nuclear program, data compiled by Bloomberg show. Meanwhile the Saudis, a religious and political adversary of Tehran, have aided Trump by raising their own crude production.

As tensions mount, hostilities have flared in the Persian Gulf, where Saudi oil tankers and pipeline infrastructure have suffered attacks that the kingdom has blamed on Iran.

Despite the political friction, OPEC is still broadly holding together on oil-supply policy. Even though Saudi Arabia has boosted crude production, it's still abiding by output limits agreed with the rest of the group at the end of last year, and wants these to be renewed when the cartel meets, whenever that may be.

Whether the group decides to gather at the end of this month or in July, there are currently no challenges to reaching an agreement, with the high level of stockpiles in the U.S. underscoring the need for a cuts extension at least until the end of the year, United Arab Emirates Energy Minister Suhail

Al Mazrouei said at an event in Montreal on Tuesday.

“What’s amazing about this dispute is that it has little to do with the actual content of the agreement – a rollover seems almost certain,” said Croft.

Power Shift

When Russia last month proposed changing the date of the meeting – originally planned for June 25-26 – because of a domestic scheduling conflict, it seemed another case of OPEC’s new ally demonstrating its influence. A previous gathering intended for April was scrapped at Moscow’s request.

Ever since the partnership between OPEC and its erstwhile competitors was struck in late 2016, Russia has typically secured beneficial terms. Saudi Arabia, OPEC’s biggest member, promptly supported Russia’s request on the change of meeting dates.

“It might look like a minor scheduling issue, but actually it’s a symptom of the shifting balance of power that’s been underway since 2016, ” said Derek Brower, a director at consultant RS Energy Group Inc. “Not just diary power, but actual pricing power is now decided by Russia and OPEC’s Gulf producers.”

Riyadh and Moscow may also prevail in the dispute over dates, which they’re seeking to push to July 3-4. Countries that initially opposed Russia’s request, such as Algeria and Nigeria, appear to have fallen in line, delegates say. Algeria dropped its objections after presidential elections in the country planned for July 4 were delayed, they said.

Sole Objector

That just leaves Iran, which insists that the original plan to convene on June 25-26 should stand. In a letter to OPEC’s Vienna-based secretariat, the Islamic Republic cited its own

schedule commitments for rejecting the date move, delegates said.

Venezuelan Oil Minister Manuel Quevedo, who this year holds OPEC's rotating presidency, is making another attempt this week to persuade Tehran to accept the change after failing to win over Iranian Oil Minister Bijan Zanganeh, said the delegates.

What happens if he fails is unclear. A compromise of holding the meeting for OPEC members on June 25 as originally planned, and moving the gathering for non-OPEC producers to July, has been considered, delegates said.

However, OPEC's rules require consensus for the date of a conference to be altered, and without Iran's blessing the upcoming gathering will – at least theoretically – remain set for June 25.

As both Saudi Arabia and Russia now cite a conflict with commitments surrounding the Group of 20 summit in Japan taking place in late June, how they would respond if the dates aren't amended is uncertain.

"It's a fiasco," said Brower.

Oil, gas and fake news on the airwaves last night

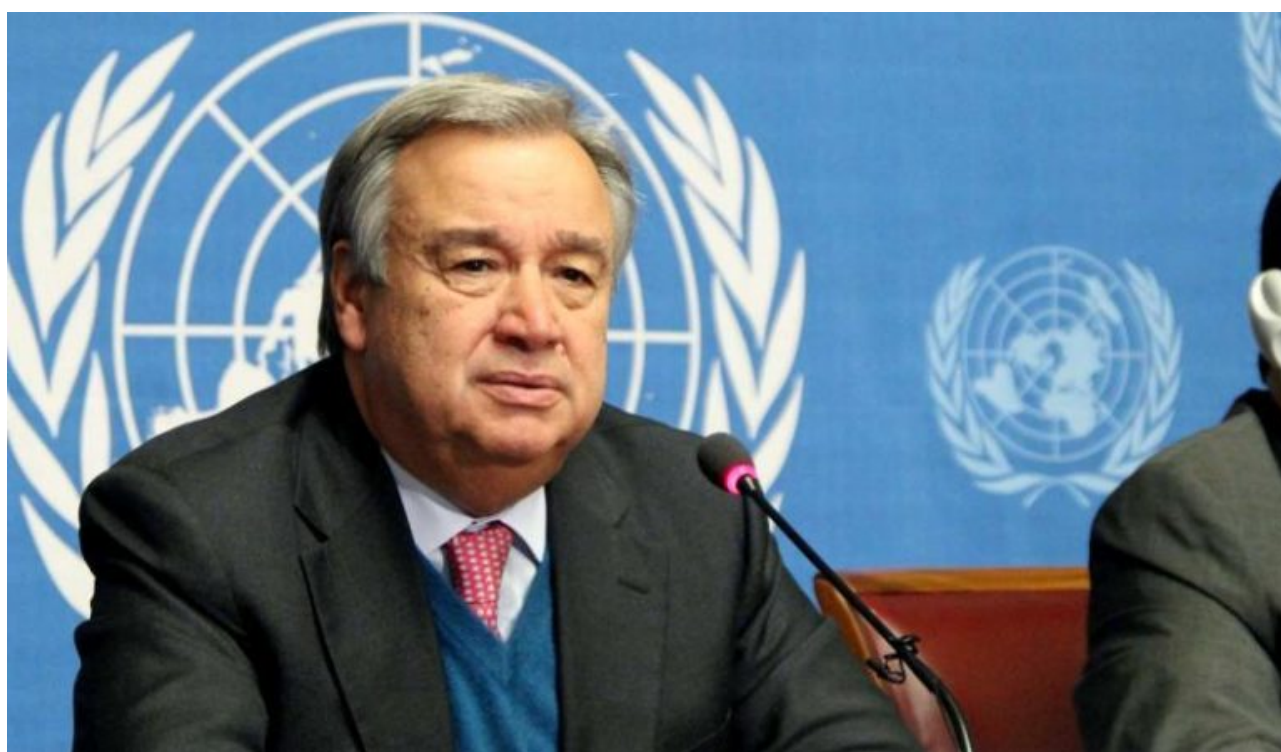


Oil and gas industry = good. Foreign Policy Magazine = not good. Those were the main messages on the airwaves last night.

Al Hayah Al Youm's Lobna Assal focused on Oil Minister Tarek El Molla's attendance at the Observatoire Méditerranéen de l'Energie (OME) in Paris, where he revealed that **Egypt's oil and gas production has reached 1.9 mn bbl of oil equivalent a day**, the highest level in the country's history. Assal then spoke to ministry spokesman Hamdy Abdel Aziz about a number of ongoing projects in the oil, gas and petrochem sectors (watch, runtime: 7:02).

Fighting fake news with cold, hard facts: Morsi-era Investment Minister Yehia Hamed's hit piece in Foreign Policy earlier this week grabbed the attention of Al Hayah Al Youm's Khaled Abu Bakr, who highlighted a riposte currently doing the rounds online written by Madbouly's economic adviser Gihan Saleh (watch, runtime: 7:38). Saleh accuses Hamed of making "numerous false and incorrect statements" to "hide and distort facts." Abu Bakr also mentioned Al Shorouk's Ziad Bahaa El Din's review of the piece, which criticized Hamed's argument for being overtly political.

OPEN LETTER TO UN SECRETARY GENERAL ANTONIO GUTERRES



His Excellency António Guterres
Secretary-General
United Nations
United Nations Secretariat
New York, NY 10017
U.S.A.

**Re: Maritime Boundary Disputes in the Eastern Mediterranean:
Crises and Opportunities**

Excellency:

I write to request your urgent intervention in defusing a looming crisis directly affecting the vital interests of all coastal States in the Eastern Mediterranean as well as, indirectly, those of dozens of others in Europe, Asia and Africa. Specifically, your assistance is required to help resolve the inter-related maritime boundary disputes among the coastal States of the region in accordance with the principles and processes enshrined in the United Nations Charter and international law.

These longstanding boundary disputes have contributed to numerous confrontations between States in the past. The number and severity of international crises currently raging in the region and its periphery have increased tensions to dangerous levels. In addition, the relatively recent discovery of abundant oil and gas deposits offshore of several Eastern Mediterranean countries has dramatically raised the economic stakes attaching to maritime boundary disputes. As a result, several major powers – including the United States, the United Kingdom and France, on one side, and the Russian Federation, on the other – have significantly increased their naval and other military activities in the region. The presence of dozens more warships and warplanes in such a relatively enclosed geography virtually guarantees an increase in friction. As a result, it imperils the maintenance of peace and security in the region, and it hampers the economic development of the relevant coastal States and their peoples.

Only one thing can provide a chance for the lasting stability that has eluded the Eastern Mediterranean for so long: an integrated, interdisciplinary approach, based on “best law” and “best science”, one that resolves these maritime boundary disputes justly and fairly. The United States has used its good offices to promote, support, or even mediate various forms of dialogue among States in the region, and appears to have made some progress (especially between Lebanon and Israel). While this effort has helped to contain mounting

tensions, it has yet to resolve any of the key maritime boundary disputes in the region.

Excellency,

The best hope for effectively settling these matters in a timely fashion lies in greater involvement by the United Nations. The manner of that involvement may vary from case to case depending on the circumstances, but in general, only the UN and its institutions have both the legal and the moral authority to lead such processes to just and fair conclusions. I know I speak for millions of people I have never met when I respectfully request your personal intervention at this critical juncture.

The seven coastal States currently involved – Cyprus, Egypt, Greece, Israel, Lebanon, Syria, and Turkey – are all UN Member States. A possible eighth coastal State, Palestine enjoys both non-Member Observer State status at the UN, as well as official recognition by more than two-thirds of UN Member States. Cyprus, Egypt, Greece, Lebanon and Palestine have all signed and ratified the 1982 United Nations Convention on the Law of the Sea (UNCLOS). Israel is a party to the 1958 Convention on the Territorial Sea and the Contiguous Zone, and to the 1958 Convention on the Continental Shelf. The latter treaty has also been signed and ratified by Cyprus, while Lebanon has signed but not ratified the 1958 treaty. Syria and Turkey are not parties to any Law of the Sea treaties, but they are still bound by relevant rules of customary international law.

The International Court of Justice (ICJ), which is the UN's principal judicial organ, has affirmed in multiple cases that the maritime delimitation rules contained in UNCLOS reflect customary international law and, as such, are applicable generally. A body of jurisprudence regarding maritime boundary delimitation has developed through two dozen decisions by international courts and tribunals rendered over the past

half-century. This jurisprudence offers an authoritative guide for coastal States in solving their maritime boundary disputes.

In addition, like the legal framework and processes, the scientific landscape is now better defined – and therefore more predictable – than ever before. The latest mapping technologies and techniques are so reliable that what were once unpredictable variables can now be estimated with amazing precision. This means that any international court or arbitral proceedings or other means of maritime boundary dispute resolution are rooted not just in the same laws and rules, but also in the same science. As a result, governments can now enter into such processes and predict, with a high degree of certainty, what the outcomes will be, removing much of the guesswork that might otherwise cause them to demur or delay.

For purposes of the legal and scientific rules applicable to maritime boundary delimitation under contemporary international law, a total of 12 maritime boundaries can be said to cover the maritime spaces for the seven coastal States in the Eastern Mediterranean. At present only two bilateral maritime boundary treaties have been signed in the region: 1) the Agreement between the Republic of Cyprus and the Arab Republic of Egypt on the Delimitation of the Exclusive Economic Zone of 17 February 2003 (entry into force 7 March 2004); and 2) the Agreement between the Government of the State of Israel and the Government of the Republic of Cyprus on the Delimitation of the Exclusive Economic Zone of 17 December 2007 (entry into force 25 February 2011). This means that no fewer than 10 potential boundaries and more than six tri-junction points (or “tri-points”) – i.e., more than 83% of the total maritime area of the Eastern Mediterranean – remain unresolved or in dispute.

As of April 2019, all seven coastal States in the Eastern Mediterranean had active offshore hydrocarbon industries, with approximately 238,135 square kilometers of waters covered by

some 231 available Oil and Gas Blocks, representing just over 51% of the total offshore waters in the region. Of the present-day blocks currently on offer, up to 36% can be classified as “contentious” due to uncertainties regarding the exact locations of maritime boundaries.

As a consequence of the uncertainties surrounding the vast majority of the maritime boundaries in the Eastern Mediterranean, future economic development stemming from seabed hydrocarbon discoveries and exploitation will be negatively affected, thereby reducing overall revenues for the region. (NB: for the Mediterranean Sea as a whole, there are 95 maritime boundaries, of which only 31 (or 32%) are treated, while 64 (or 68%) remain unresolved or in dispute.)

As you well know, according to Article 33 of the UN Charter, “[t]he parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.”

Given the rights and duties enumerated under Article 33, and following the successful precedent set by your predecessor in facilitating the 2016 agreement between Gabon and Equatorial Guinea to have their maritime boundary dispute referred to the ICJ, I humbly request that you consider appointing a Special Advisor and publicly expressing your readiness to launch a UN mediation process aimed at resolving similar disputes in the Eastern Mediterranean. Your personal engagement and imprimatur are of vital importance to help the affected countries succeed in resolving their boundary disputes peacefully and in accordance with international law.

It should be noted, too, that while even the active role of the United States is insufficient, on its own, to bring about the resolution of all boundary disputes in the Eastern

Mediterranean, its continuing engagement is almost certainly necessary. Given that US mediation has been particularly helpful for limiting tensions in one of the region's most dangerous relationships – the one between Israel and Lebanon – its backing of UN efforts on other fronts looks a lot like a prerequisite for success.

The aforementioned steps would help instill new momentum in the process – and confidence in the parties – at a critical time, when recent discoveries of oil and gas deposits in maritime zones of overlapping jurisdictions demand major investment decisions by foreign investors and the national oil companies of the countries involved. Offshore seabed hydrocarbon activities in recent years have resulted in a series of important discoveries, including two massive finds: *Leviathan*, discovered off the Israeli coast in December 2010 and reported to hold 22 trillion cubic feet (Tcf) in gas reserves; and *Zohr*, discovered off Egypt in August 2015 and reported to contain 30 Tcf. Both discoveries, which are proceeding to the development stage, lie in close general proximity to the boundaries delimited by the aforementioned bilateral treaties.

Once a Special Advisor has been appointed by you, it would be even more helpful if you could facilitate a multi-party ministerial meeting on the boundary disputes in the Eastern Mediterranean at UN Headquarters in New York, at the UN Office in Geneva, or at some other convenient and appropriate location. Preparatory meetings by technical teams representing the countries involved, assisted by neutral experts in maritime delimitation, could be organized before such a high-level meeting, a process that could then be replicated for additional sessions going forward.

Excellency,

Your active leadership in securing mutually acceptable solutions for the maritime boundary disputes in the Eastern

Mediterranean would not only help strengthen respect for the international rule of law, but also would contribute to lasting peace and improved neighborly relations in the region. In addition, the peaceful resolution of these disputes would likewise constitute a source of inspiration for countries facing similar challenges around the world.

Thank you for your consideration.

Very truly yours,



Roudi Baroudi
Energy Economist