The Reality of Climate Financial Risk

Those who argue that climate change has little to do with macroprudential risk management are offering a counsel of despair. If the 2008 global financial crisis revealed anything, it is that regulation matters, even if it isn't always politically popular or easily optimized.

LAUSANNE, SWITZERLAND – In a recent commentary, John H. Cochrane, a senior fellow at the Hoover Institution, argues that "climate financial risk" is a fallacy. His eye-catching premise is that climate change doesn't pose a threat to the global financial system, because it – and the phase-out of fossil fuels that is needed to address it – are developments that everyone already knows are underway. He sees climate-related financial regulation as a Trojan horse for an otherwise unpopular political agenda.

We disagree. For starters, one should acknowledge the context in which regulation emerges. With respect to climate policy, the Intergovernmental Panel on Climate Change has set the stage with its sixth assessment report, which concludes with a high degree of certainty that the Earth's climate is changing,

and that human activities are the cause. Ecologist William Ripple, the co-author of another recent study of planetary "vital signs," goes further: "There is growing evidence we are getting close to or have already gone beyond tipping points associated with important parts of the Earth system."

Unlike the 2008 global financial crisis – when banks that took excessive risks were bailed out, and global financial regulation was overhauled in light of our new understanding about interdependent financial markets – unmitigated climate change will lead to a crisis with irreversible outcomes.

The question, as Cochrane puts it, is whether climate-related financial regulation can do anything to help us avoid such outcomes. Although the answer is complex and currently incomplete, we would argue that it can. Financial regulation to mitigate climate risk is indeed worth pursuing, because the stakes are too high to let the perfect become the enemy of the good.

Consider some of the arguments about systemic financial risk and extreme climate events. First, we are told that the risk of "stranded assets" – particularly fossil-fuel assets – will become a fact of life, to be borne only by investors. Here, Cochrane points out, correctly, that fossil-fuel investments have always been risky. But can we reasonably say that the prevalence of this energy source should be left to market players alone, or that only investors will bear the costs?

Though per capita fossil-fuel consumption in countries such as the United States and the United Kingdom has declined since 1990, total consumption has grown dramatically elsewhere, rising by 50% globally over the last 40 years. In 2020, China and India were the planet's two largest coal-energy producers, relying on coal for 61% and 71% of their electricity, respectively. Their economies, and those of many other developing countries, simply would not sustain a precipitous reduction in fossil-fuel energy.

Cochrane also suggests that there is no scientifically validated possibility that extreme climate events will cause systemic financial crises over the next decade, and that regulators are therefore stymied from assessing the risks on financial institutions' balance sheets over a five- or ten-year horizon. But the sheer scale of the challenge should make us reconsider the temporal dimensions of regulation.

If temperature increases are to be kept within 2° Celsius of pre-industrial levels this century, about 80% of all coal, one-third of all oil, and half of all gas reserves must be left unburned. All of the Arctic's oil and the remainder of Canada's oil sands – the world's largest deposit of crude oil – must be left in the ground, starting almost immediately.

Finally, it is said that the technocratic regulation of climate investments cannot protect us against un-modeled tipping points. But this view simply ignores the extensive literature in climate economics. In this field, the work of Nobel laureate economist William Nordhaus is widely referenced. His Dynamic Integrated Climate-Economy (DICE) model has influenced many scientists' and economists' own modeling of tipping points, and the US government already relies on these "integrated assessment models" to formulate policy and calculate the "social cost of carbon."

This interdependency between economics, policy, politics, public opinion, and regulation should be familiar from the crash of 2008. The dangerous over-leveraging that generated that crisis was an open secret; but those in a position, politically and culturally, to do something about it were willing to deny the systemic risk it posed. One can find the same denialism in the climate debate. According to the Center for American Progress, 139 members of the current US Congress (109 representatives and 30 senators; a majority of the Republican caucus) "have made recent statements casting doubt on the clear, established scientific consensus that the world is warming – and that human activity is to blame."

Cochrane makes an eloquent case for why policymakers should focus on creating coherent, scientifically valid policy responses to climate change and financial systemic risk separately, rather than pursuing climate financial regulation. But this isn't an either/or choice. We need both kinds of policies, and we need coordination between the two domains.

We therefore should welcome the approach being taken by US Secretary of the Treasury Janet Yellen's Financial Stability Oversight Council, which has brought together leading regulators and tasked them with preventing a repeat of the 2008 Wall Street meltdown. Yellen has said she will use this multi-regulator body as her principal tool to assess climate risks and develop the disclosure policies needed to shift to a low-carbon economy.

Counterintuitive though it may be, climate-related financial regulation could usher in a new form of political accountability, by putting governments and individuals (elected and unelected) on the hook for their decisions. Such accountability was notably absent before and during the 2008 crisis. With political will, serious thinking about regulating climate financial risk could open up a fruitful debate for similar action on all neglected policy fronts.

Surging wind industry faces its own green dilemma: landfills

Siemens launches first recyclable wind turbine blade

- **Anti-wind groups use dumping of blades as rallying issue**
- **Industry calls for EU landfill ban**

Wind turbines have become a vital source of global green energy but their makers increasingly face an environmental conundrum of their own: how to recycle them.

The European Union’s share of electricity from wind power has grown from less than 1% in 2000, when the continent began to curb planet-heating fossil fuels, to more than 16% today.

As the first wave of windmills reach the end of their lives, tens of thousands of blades are being stacked and buried in landfill sites where they will take centuries to decompose.

Spanish turbine maker Siemens Gamesa this week launched what it called a “game changer” – the first recyclable blades, which use a technology that allows their carbon and glass fibres to be reused in products like screen monitors or car parts.

“We have reached a major milestone in a society that puts care for the environment at its heart,” said Andreas Nauen, chief executive of Siemens Gamesa, which expects the blades to become the industry standard.

Europe is the world’s second largest producer of wind-

generated electricity, making up about 30% of the global capacity, compared to China’s 39%, according to the Global Wind Energy Council, an industry trade association.

Wind Europe, a Brussels-based trade association which promotes the use of wind power in Europe, expects 52,000 blades a year to need disposal by 2030, up from about 1,000 today.

“The public want to be reassured that wind energy is fully sustainable and fully circular,” said WindEurope’s chief executive, Giles Dickson, describing Siemens Gamesa’s new recyclable blade as a “significant breakthrough”.

While wind turbine blades are not especially toxic, the resulting landfill, if improperly handled, may contribute to dangerous environmental impacts, including the pollution of land and waterways.

All forms of energy have some environmental cost but renewables, almost by definition, cause less damage to the planet, said Martin Gerhardt, Siemens Gamesa’s offshore wind chief.

“If you look at oil wells and the spills or if you consider methane leaks, compared to the fossil industries, wind is the lesser problem,” he said.

Wind power is one of the cleanest forms of energy, with a carbon footprint 99% lower than coal and 75% less than solar, according to a study by Bernstein Research, a US-based research and brokerage firm.

Its emissions come mainly from the production of iron and steel used in turbines and concrete for windmill foundations.

If these were mitigated by techniques such as carbon capture and storage – where carbon dioxide is buried underground – “you’d be able to cut out the carbon footprint completely,” said Deepa Venkateswaran, the study’s author.

The growing mountains of waste created by old blades has become a rallying point for groups opposed to wind turbines, which they also say are noisy and spoil the countryside.

But landfill is likely to remain the preferred disposal option because it is the cheapest, said Eric Waeyenbergh, advocacy manager at Geocycle, a sustainable waste management firm.

“If you just throw it in the landfill, this is the cheapest price you can have when you’re dismantling the windmill. And that’s a problem because there’s no mandatory recycling or recovery obligation,” he said.

Geocycle and WindEurope are lobbying for landfills to be banned across Europe where only four countries – Austria, Germany, the Netherlands and Finland – have outlawed the landfilling of composite materials, such as wind turbine blades.

Geocycle co-runs a cement kiln in Germany, with building industry giant Lafarge, which is partly fuelled by burning thousands of tonnes of old wind turbines, which create less carbon dioxide than fossil fuels.

Recyclable blades can also be ground up for use in products such as rearview car mirrors and insulation panels, or heat-treated to create materials for roof light panels and gutters.

However, industry groups say these techniques are not currently available at commercial scale or at a price that would make them viable alternatives to landfill.

David Romero Vindel, co-founder of Reciclalia, which cuts and shreds turbine blades for recycling as carbon fibre yarn and fabric, said a landfill ban would help his firm.

“We need the EU to push the sector in this direction of recycling,” he said.

Vivian Loonela, a spokeswoman for the European Commission said it will review its landfill policies in 2024.

“The recycling of (windmill) composite fraction remains a challenge due to the low value of the recycled product and the relatively small amount of waste (produced), which does not stimulate the recycling markets,” she said.

– Thomson Reuters Foundation

How U.S. Presidents Use the Strategic Petroleum Reserve

As U.S. president, Joe Biden can tap the nation’s emergency oil stockpile to make up for supply shortages – be they disruptions to crude flows such as in Louisiana this week after Hurricane Ida, or price spikes caused by geopolitical instability in the Middle East. The tool at his disposal is the Strategic Petroleum Reserve, set up in the aftermath of the Arab oil embargo in the 1970s as a national energy safety net. It’s the world’s largest supply of emergency crude, stored in deep and heavily guarded underground salt caverns along the U.S. Gulf Coast.

1. How much oil is in reserve?

The reserve stood at 621.3 million barrels as of Aug. 20, enough to replace more than half a year’s worth of U.S. crude net imports. Current inventory is about 87% of its maximum authorized storage capacity.

2. In what circumstances can presidents release stockpiled oil?

It’s pretty much the president’s prerogative. But the 1975 law that established the reserve says a president can order a full drawdown in the event of a “severe energy supply interruption” that threatens national security or the economy. A limited drawdown (up to 30 million barrels) can be ordered in the event of “a domestic or international energy supply shortage of significant scope or duration.”

3. Have presidents tapped the reserve before?

Yes. In 2011, President Barack Obama released 30 million barrels as part of a joint effort with other nations to counter supply disruptions from Libya. In 2005, President George W. Bush released 11 million barrels in the wake of Hurricane Katrina. And in 1991, under President George H.W. Bush, 17 million barrels were released during the first Gulf War. Test releases take place from time to time, as well as limited releases in the form of swaps. In 2017, the Energy Department authorized the release of 5 million barrels to Gulf Coast refineries when Hurricane Harvey wreaked havoc on the region. Such arrangements are designed to address short-term emergency needs, and the crude is repaid, in kind, at a future date.

4. What’s happening in the wake of Hurricane Ida?

Exxon Mobil Corp. is starting its huge Baton Rouge refinery and needs a large amount of crude to process, and fast. Major disruptions to nearby pipelines and production facilities in the wake of the storm have spurred the oil giant to ask for up to 1.5 million barrels of oil from the reserve to temporarily replace its usual supply sources. The Department of Energy is encouraging refiners to prioritize making products such as gasoline, which is badly needed in the area for cars and generators.

5. What does a release entail?

The maximum drawdown capability is 4.4 million barrels a day, according to the Energy Department’s website, and it takes 13 days for SPR oil to reach the open market after a presidential decision. But the mere announcement that the SPR is being deployed could have an immediate, if short-lived, effect on oil prices.

6. What’s the outlook for the U.S. stockpile?

The domestic shale boom has allowed the U.S. to join the ranks of the world’s biggest oil producers, lending weight to arguments that the emergency reserve is past its sell-by date. But in recent months shale production has stalled, demand has increased and imports have also gone up. In the past the reserve has been used to pay government bills ranging from roads to deficit reduction and drugs, and current plans are for the stockpile to be cut almost in half over several years. But periodic use of the reserve after natural disasters may be the most effective rebuttal to the case for doing away with it.

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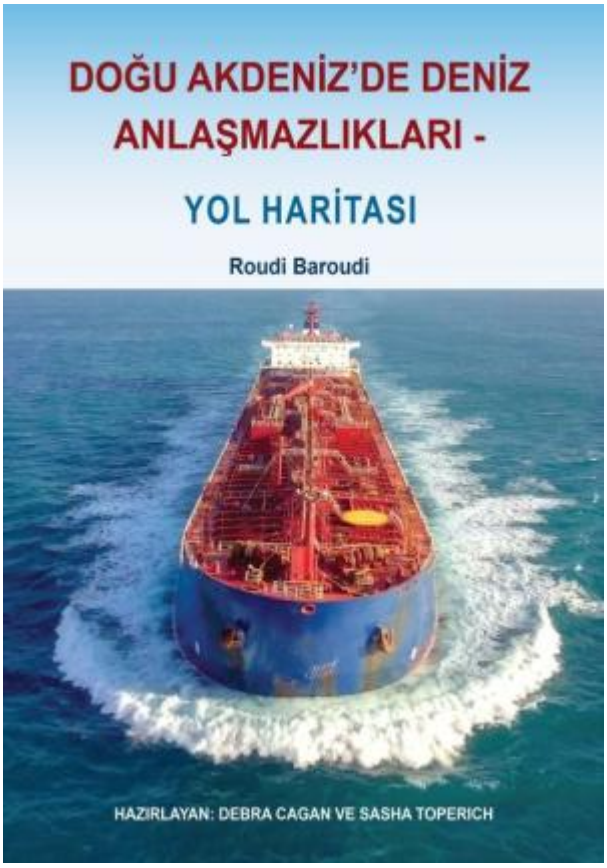
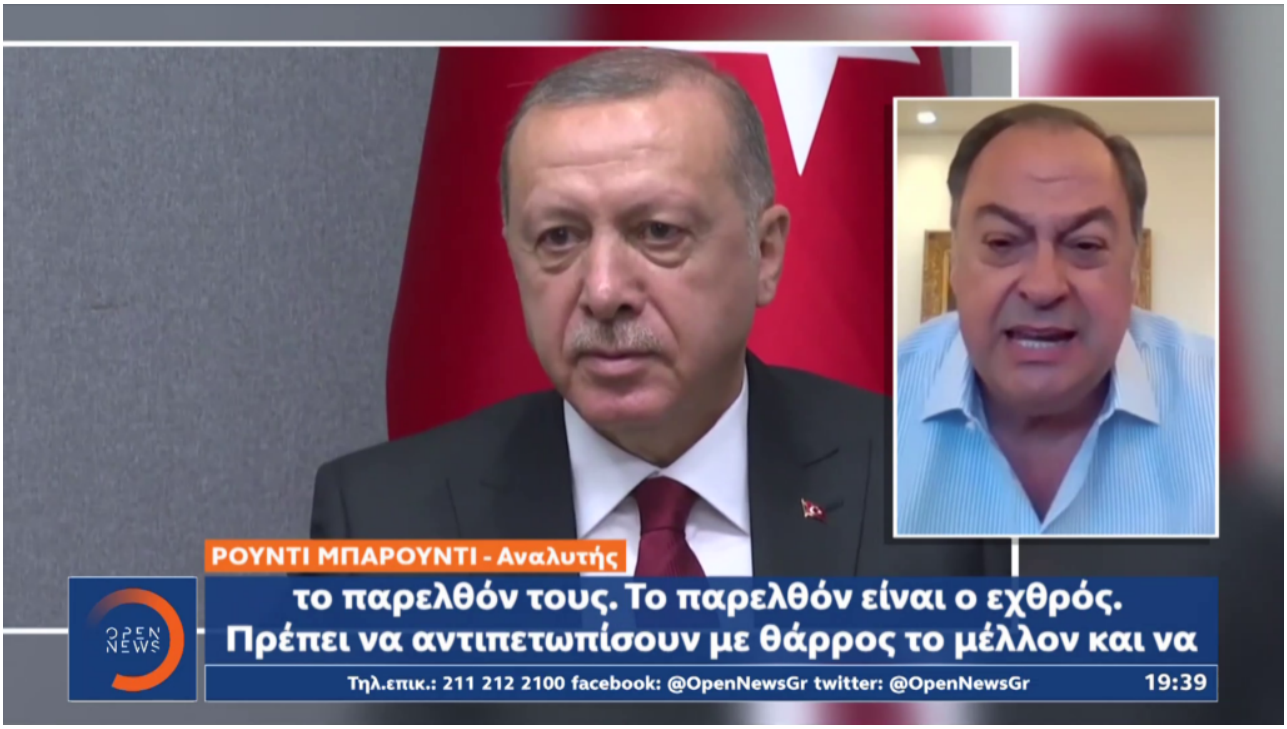
SEMINAL BOOK ON SETTLING MEDITERRANEAN BORDER DISPUTES NOW AVAILABLE IN TURKISH





Study stresses diplomacy, international law as pathways to energy boom and regional stability

Washington D.C. – 27th July 2021

WASHINGTON, D.C.: A highly influential book about maritime boundary disputes in the Eastern Mediterranean has been

translated into Turkish, its publisher announced on Monday, spreading its message of peaceful dialogue to a key audience in a region poised for offshore energy riches.

The Transatlantic Leadership Network said it hoped the Turkish translation of author Roudi Baroudi's "Maritime Disputes in the Eastern Mediterranean: The Way Forward" would be just as well-received as its Arabic, French, Greek, and original English versions. The book, distributed by the Brookings Institution Press, co-edited by Debra Cagan and Sasha Toperich has been hailed by a wide variety of academics, diplomats, and other experts.

Baroudi's study emphasizes the paucity of settled maritime boundaries in the region, how crucial these are to the safe and effective exploitation of offshore energy resources, and the proven avenues available for dispute resolution. He explains the purpose and ever-increasing applicability of the United Nations Convention on the Law of the Sea (UNCLOS), the use of legal and diplomatic creativity to circumnavigate mistrust, and the power of shared interest to foment some form of cooperation, even if indirect.

Given recent history, the subject matter could be neither more relevant, nor more timely. Enormous quantities of natural gas have been discovered off the coasts of several East Med countries in the past few years, but thus far the only ones to make real development progress have been Egypt, Israel, and, to a lesser extent, Cyprus. Baroudi's book stresses that the only thing these countries have in common is that their shared maritime boundaries are not in dispute, which has enabled them to attract the necessary investment to the areas in question.

The problems involved – and the solutions on offer – relate to several points of friction across the region, including (to note but a few) a years-long US mediation effort to resolve the maritime boundary between Israel and Lebanon; decades-old tensions between Greece and Turkey, especially over

Castellorizo, a Greek-ruled island just 2 kilometers off Turkey's Mediterranean coast; and multiple side-effects of the division – and partial occupation by Turkish troops – of Cyprus.

Maritime Disputes in the Eastern Mediterranean: The Way Forward" examines these and other complexities of the regional situation, and the several analyses reach a single conclusion: for each of the region's countries, the only viable option is to trust in the rules and processes of UNCLOS, engage in bi- and/or multilateral dialogues with its neighbors, and start reaping the rewards of this emerging energy hub.

Baroudi's background consists of more than four decades in the energy sector, during which time he has helped design policy for companies, governments, and multilateral institutions, including the European Commission, the World Bank, U.S. Exim Bank and the International Monetary Fund. His areas of expertise range from oil and gas, petrochemicals, power, energy security, and energy-sector reform to environmental impacts and protections, carbon trading, privatization, and infrastructure. This book was his latest as being author and co-author of several studies and his next – a study of the region's Blue Economy prospects in the post-carbon era – is expected to come out in the first half of 2022. He currently serves as CEO of Energy and Environment Holding, an independent consultancy based in Doha, Qatar.

Qatar's low-carbon LNG expansion to meet world's

growing demand for cleaner energy: PwC

Qatar’s low-carbon LNG expansion will meet world’s growing demand for cleaner energy, PwC has said in its ‘Qatar Economy Watch’ report.

Qatar’s gas production process is among the lowest carbon-intensity globally and will further decline as a result of Qatar Petroleum (QP) sustainability strategy, announced in January that includes cutting methane leaks, using solar power for operations and boosting carbon capture and storage, PwC noted.

As part of these efforts, Qatar was one of the five founding members in April 2021 of the Net Zero Producers’ Forum, alongside the US and Saudi Arabia. This commitment to reducing the intensity of production will further add to Qatar’s competitive edge against other LNG producers.

In a world-first in September 2020, QP signed a LNG contract with Singapore that includes wellhead-to-delivery reporting of greenhouse emissions. This was a first step towards a future in which carbon taxes or other mechanisms could advantage lower-intensity producers like Qatar.

PwC said, “The combination of an improving demand outlook for LNG with delays to new supply because of the weakened balance sheets of private hydrocarbon companies, makes it an ideal moment for Qatar to press ahead with expansion. In February 2021, QP awarded the main contract to build the four new LNG terminals for the North Field East expansion. The new supply will come onstream in stages during 2025-2027 and QP intends to soon commission another two trains.

“QP may be considering further expansion in the future, which makes sense given that North Field’s reserves are sufficient for around three centuries of production at current levels, whereas the global economy is expected to have fully decarbonised by the end of this century.”

The report said, “Financing the project, expected to cost around $43bn for all six trains, will benefit from the low interest rate environment, enabling QP to finance much of the capex through low-cost bonds as well as equity contributions from joint-venture partners. Equity bids were received from six oil majors in May 2021, and discussions are also underway for customers, including in China, to take smaller stakes.”

The six new trains will boost Qatar’s LNG output by nearly two-thirds and also lift its production of valuable by-products including condensates, natural gas liquids, ethane and helium. This will enable ongoing government expenditure to boost the economy as well as QIA’s reserves. Work on the project will pick up rapidly over the next few years, providing a significant boost to the post-Covid-19 recovery, particularly for the construction sector and for companies supplying goods and services to the project. Energy prices have recovered to pre-Covid-19 levels and may show continued strength for several years, PwC noted. This is because there has been a sharp drop in capital expenditure by oil and gas companies which may result in supply constraints, depending on how strongly demand recovers and how rapidly the Opec+ output cuts are tapered.

Speaking at the Qatar Economic Forum in June, the CEOs of ExxonMobil, Shell and Total Energies, along with Qatar’s

Minister of State for Energy Affairs, HE Saad bin Sherida al-Kaabi, warned that underinvestment could cause oil prices to spike towards $100. “Of particular relevance for Qatar is the fact that a raft of major LNG projects have been postponed or cancelled as a result of the lower capex budgets and worries about long term prices, reducing competition for the new capacity that will be generated from its own North Field expansion.

“At the same time, there has been a growing emphasis in global commitments to tackle climate change and address ESG (environmental, social and governance) concerns, such as China pledging to reach net-zero emissions in 2060. Sustainability advocates are finding traction in leveraging the willingness of governments to take decisive action against Covid-19 as a precedent for stronger action on climate change, including the Biden Administration’s pledge to “Build Back Better”. This shift in focus benefits Qatar because of the importance of gas as a lower-carbon transition fuel,” PwC said.

Rolls-Royce, Shell Deepen Sustainable Jet-Fuel Partnership

Rolls-Royce Holdings Plc and Royal Dutch Shell Plc said they'll deepen their cooperation on sustainable aviation fuels as part of the push to achieve net-zero carbon emissions.

At the heart of the agreement are plans to explore opportunities for bringing 100% SAF to certification, the companies said Wednesday. Such fuels can currently be blended with kerosene in concentrations of no more than 50%.

Airlines are counting on SAF to reduce carbon emissions in the years before electric- and hydrogen-based propulsion systems become widely available, most likely after 2035. Progress has been hampered by regulatory hurdles and a lack of supply both

of biofuels and their synthetic equivalents, which has pushed prices significantly beyond those for traditional jet fuel.

The collaboration will also aim to develop new innovations, with SAF expected to have a role powering hybrid-electric versions of flying taxis currently in the final stages of development as well as jetliners and corporate aircraft, Rolls-Royce Chief Technology Officer Paul Stein said.

“The investments that are going to be required to scale up sustainable aviation fuels are measured in billions,” Stein said in an interview following the announcement. For energy companies, “before they invest their dollars in SAF-plants they need comfort that the market will be there and customers will buy the fuel.”

The agreement deepens an existing partnership between the companies in alternative fuels. Shell will supply sustainable aviation fuels to Rolls-Royce as the company aims to test engines like Ultrafan to demonstrate they are 100% SAF compatible. Shell is also the exclusive supplier for Rolls-Royce’s new SAFinity service allowing business travelers to take carbon-neutral flights, while the firms will also look at opportunities to co-operate in shipping and rail.

The key to moving forward with sustainable fuels is getting regulation in place to mandate their use, said Stein. The U.S. favors subsidizing the fuel at source, which is “not incompatible” with the European approach, he added.

In April, Shell announced an investment in sustainable-fuels technology company LanzaJet, adding to a string of deals meant to position the oil giant for the energy transition. Rolls-Royce in turn plans to make all of its in-production civil aircraft engines compatible with burning 100% SAF by 2023.

How biofuels cut emissions:

The carbon dioxide absorbed by plants during the growth of

biomass is roughly equal to the amount produced when the fuel is burned, making SAF approximately carbon-neutral over its life cycle. However, CO2 released during the production and transport of SAF means the reduction in emissions is about 80% compared with fossil fuels. Feedstocks for biofuel also include spent cooking oil, waste gases and agricultural residues.

Economics needs a climate revolution

By Tom Brookes And Gernot Wagner/ Brussels/New York

• There is no excuse for continuing to adhere to an intellectual paradigm that has served us so badly for so long

Nowhere are the limitations of neoclassical economic thinking – the DNA of economics as it is currently taught and practised – more apparent than in the face of the climate crisis. While

there are fresh ideas and models emerging, the old orthodoxy remains deeply entrenched. Change cannot come fast enough.

The economics discipline has failed to understand the climate crisis – let alone provide effective policy solutions for it – because most economists tend to divide problems into small, manageable pieces. Rational people, they are wont to say, think at the margin. What matters is not the average or totality of one's actions but rather the very next step, weighed against the immediate alternatives.

Such thinking is indeed rational for small discrete problems. Compartmentalisation is necessary for managing competing demands on one's time and attention. But marginal thinking is inadequate for an all-consuming problem touching every aspect of society.

Economists also tend to equate rationality with precision. The discipline's power over public discourse and policymaking lies in its implicit claim that those who cannot compute precise benefits and costs are somehow irrational. This allows economists – and their models – to ignore pervasive climate risks and uncertainties, including the possibility of climatic tipping points and societal responses to them. And when one considers economists' fixation with equilibrium models, the mismatch between the climate challenge and the discipline's current tools becomes too glaring to ignore.

Yes, a return to equilibrium – getting "back to normal" – is an all-too-human preference. But it is precisely the opposite of what is needed – rapidly phasing out fossil fuels – to stabilise the world's climate.

These limitations are reflected in benefit-cost analyses of cutting emissions of carbon dioxide and other greenhouse gases. The traditional thinking suggests a go-slow path for cutting CO2. The logic seems compelling: the cost of damage caused by climate change, after all, is incurred in the future, while the costs of climate action occur today. The Nobel prize-winning verdict is that we should delay necessary investment in a low-carbon economy to avoid hurting the current high-carbon economy.

To be clear, a lot of new thinking has gone into showing that even this conventional logic would call for significantly more climate action now, because the costs are often overestimated while the potential (even if uncertain) benefits are underestimated. The young researchers advancing this work must walk a near-impossible tightrope, because they cannot publish what they believe to be their best work (based on the most defensible assumptions) without invoking the outmoded neoclassical model to demonstrate the validity of new ideas.

The very structure of academic economics all but guarantees that marginal thinking continues to dominate. The most effective way to introduce new ideas into the peer-reviewed academic literature is to follow something akin to an 80/20-rule: stick to the established script for the most part; but try to push the envelope by probing one dubious assumption at a time. Needless to say, this makes it extremely difficult to change the overall frame of reference, even when those who helped establish the standard view are looking well beyond it themselves.

Consider the case of Kenneth J Arrow, who shared a Nobel Prize in Economic Sciences in 1972 for showing how marginal actions taken by self-interested individuals can improve societal welfare. That pioneering work cemented economists' equilibrium thinking. But Arrow lived for another 45 years, and he spent that time moving past his earlier work. In the 1980s, for example, he was instrumental in founding the Santa Fe Institute, which is dedicated to what has since become known as complexity science – an attempt to move beyond the equilibrium mindset he had helped establish.

Because equilibrium thinking underpins the traditional climate-economic models that were developed in the 1990s, these models assume that there are tradeoffs between climate action and economic growth. They imagine a world where the economy simply glides along a Panglossian path of progress. Climate policy might still be worthwhile, but only if we are willing to accept costs that will throw the economy off its chosen path.

Against the backdrop of this traditional view, recent pronouncements by the International Monetary Fund and the International Energy Agency are nothing short of revolutionary. Both institutions have now concluded that ambitious climate action leads to higher growth and more jobs even in the near term.

The logic is straightforward: climate policies create many more jobs in clean-energy sectors than are lost in fossil-fuel sectors, reminding us that investment is the flipside of cost. That is why the proposal for a $2 trillion infrastructure package in the United States could be expected to spur higher net economic activity and employment. Perhaps more surprising is the finding that carbon pricing alone appears to reduce emissions without hurting jobs or overall economic growth. The problem with carbon taxes or emissions trading is that real-world policies are not reducing emissions fast enough and therefore will need to be buttressed by regulation.

There is no excuse for continuing to adhere to an intellectual paradigm that has served us so badly for so long. The standard models have been used to reject policies that would have helped turn the tide many years ago, back when the climate crisis still could have been addressed with marginal changes to the existing economic system. Now, we no longer have the luxury of being able to settle for incremental change.

The good news is that rapid change is happening on the political front, owing not least to the shrinking cost of climate action. The bad news is that the framework of neoclassical economics is still blocking progress. The discipline is long overdue for its own tipping point towards new modes of thinking commensurate with the climate challenge. — Project Syndicate

• *Tom Brookes is Executive Director of Strategic Communications at the European Climate Foundation. Gernot Wagner is Clinical Associate Professor of Environmental Studies at New York University.*

Η κλιματική κρίση δίνει σε Ελλάδα και Τουρκία την ευκαιρία για «ιστορικούς συμβιβασμούς»

Ελλάδα και Τουρκία έχουν τα πάντα να κερδίσουν και τίποτα ή σχετικά λίγα να χάσουν συνεργαζόμενοι σε κάθε ευκαιρία, αλλά ειδικά στην ενέργεια

ΗΕλλάδα και η Τουρκία έχουν μια από τις πιο περίπλοκες σχέσεις του κόσμου. Όλοι γνωρίζουμε την ιστορία, αν και πολλές από τις λεπτομέρειες αμφισβητούνται. Ωστόσο, υπάρχουν ορισμένα αδιαμφισβήτητα γεγονότα. Δύο πρώην μακροχρόνιοι εχθροί συγκεντρώθηκαν ως σύμμαχοι από τον Ψυχρό Πόλεμο, όταν και οι δύο εντάχθηκαν στο ΝΑΤΟ, αλλά γενικά παρέμειναν σε διαφωνίες

για έναν μακρύ κατάλογο θεμάτων.

Το βασικό μάθημα από αυτήν την απλή σύνοψη είναι ότι η Ελλάδα και η Τουρκία εντάχθηκαν στην Ατλαντική συμμαχία για τον ίδιο βασικό λόγο: ο καθένας θεωρούσε τη διαμάχη τους ως μια μικρότερη απειλή από αυτήν που έθεσε η Σοβιετική Ένωση, η οποία ήταν δυνητικά υπαρξιακή. Στο τέλος της ημέρας, και παρά τις παλιές δυσαρέσκειες και τις συνεχιζόμενες εντάσεις, οι διαδοχικές κυβερνήσεις – συμπεριλαμβανομένου της χούντας – και των δύο χωρών τήρησαν την ίδια λογική ανάλυση για δεκαετίες.

Και οι δύο εξακολουθούν να είναι μέλη του ΝΑΤΟ, αλλά η σοβιετική απειλή αντικαθίσταται μόνο εν μέρει από μια πολύ πιο αδύναμη Ρωσία. Σε κάποιο βαθμό, αυτό οδήγησε σε επανέναρξη της ελληνοτουρκικής τριβής, ειδικά στα θαλάσσια σύνορά τους στη Μεσόγειο.

Διακυβεύονται πολλά περισσότερα από την υπερηφάνεια ή την επικράτεια

Και αυτή τη φορά, διακυβεύονται πολλά περισσότερα από την υπερηφάνεια ή την επικράτεια. Δεδομένου ότι έχουν ανακαλυφθεί τεράστιες ποσότητες φυσικού αερίου ανοικτής θάλασσας σε πολλά μέρη της Ανατολικής Μεσογείου, η διασυνοριακή διαμάχη μπορεί να περιλαμβάνει πόρους που θα μπορούσαν να προσφέρουν ιστορικά πλεονεκτήματα σε όποιον τα ελέγχει.

Για άλλη μια φορά, ακούγονται σαν λογικοί υπολογισμοί. Αλλά είναι πραγματικά; Θα επιτρέψω στα μεγάλα αποθέματα φυσικού αερίου τα οποία έχουν τη δυνατότητα να βοηθήσουν οποιαδήποτε χώρα να εξασφαλίσει ένα καλύτερο μέλλον για τον λαό της.

Η εξοικονόμηση και τα έσοδα θα επιτρέψουν άνευ προηγουμένου επενδύσεις στην εκπαίδευση, την υγειονομική περίθαλψη, τις μεταφορές και άλλες υποδομές, δημιουργώντας περισσότερες και καλύτερες θέσεις εργασίας και αναγκάζοντας αμέτρητους ανθρώπους από τη φτώχεια. Ακόμη και τα τέλη διαμετακόμισης από

τη φιλοξενία ενός διεθνούς αγωγού μπορούν να παρέχουν σημαντικό εισόδημα, και όσο περισσότερο διασχίζει ο αγωγός, τόσο υψηλότερα είναι τα τέλη.

Αλλά θα έλεγα ότι, όπως συνέβη κατά τον Ψυχρό Πόλεμο, τόσο η Ελλάδα όσο και η Τουρκία θα έπρεπε να λάβουν περισσότερο υπόψη τις μεγαλύτερες – στην πραγματικότητα, πολύ μεγαλύτερες – εκτιμήσεις.

Θανάσιμη απειλή

Και όλα αυτά έχουν να κάνουν με την κλιματική αλλαγή. Αυτή η πρόκληση αποτελεί θανάσιμη απειλή, όχι μόνο για τους Έλληνες και τους Τούρκους, αλλά και για τον ίδιο τον ανθρώπινο πολιτισμό. Και σε αντίθεση με τη Σοβιετική Ένωση, αυτή δεν είναι μια πολιτική-στρατιωτική δύναμη που μπορεί να αποφευχθεί, να υποτιμηθεί.

Ούτε μπορούμε να το περιμένουμε και να ελπίζουμε ότι, όπως και η ΕΣΣΔ, η κλιματική αλλαγή θα διαλυθεί από τα δικά της ελαττώματα. Όχι, θα σώσουμε τον πλανήτη μας δουλεύοντας μαζί για να αποκαταστήσουμε τη ζημιά που έχουμε κάνει με την άντληση ατελείωτων ρευμάτων άνθρακα στην ατμόσφαιρα.

Μπορούμε να το κάνουμε μόνο μειώνοντας δραστικά τις εκπομπές και αυτό μπορεί να επιτευχθεί μόνο με τη μετάβαση σε ανανεώσιμες πηγές ενέργειας και καθαρότερα, πιο πράσινα καύσιμα. Και είτε αρέσει είτε όχι, καθώς οι μεγάλες Μεσογειακές δυνάμεις, η Ελλάδα και η Τουρκία έχουν τεράστιους ρόλους να διαδραματίσουν σε αυτήν τη διαδικασία – και ως εκ τούτου τεράστιες ευθύνες. Όπως και στο ΝΑΤΟ, και οι δύο θα αναμένεται να τραβήξουν τα αντίστοιχα βάρη τους.

Ο χρόνος είναι σωστός για μια νέα

προσπάθεια

Προηγούμενες απόπειρες συμφιλίωσης ήταν πάντα ελλιπείς ή εκτροχιασμένες, αλλά υπάρχει λόγος να ελπίζουμε ότι ο χρόνος είναι σωστός για μια νέα προσπάθεια και ότι ορισμένοι από τους βασικούς παίκτες βρίσκονται στο σωστό δρόμο.

Η σύνοδος κορυφής του ΝΑΤΟ την περασμένη εβδομάδα, για παράδειγμα, είδε τον πρόεδρο των ΗΠΑ Τζο Μπάιντεν να σημειώνει πολύ διαφορετικές σημειώσεις από τον προκάτοχό του, Ντόναλντ Τραμπ, τονίζοντας τη δυνατότητα της συμμαχίας να επηρεάσει μια ευρεία ποικιλία γεωπολιτικών θεμάτων.

Οι συναντήσεις του στο περιθώριο της συνόδου κορυφής περιελάμβαναν μια συνάντηση με τον Τούρκο ομόλογό του, Ρετζέπ Ταγίπ Ερντογάν, ο οποίος αργότερα δήλωσε ότι άνοιξε μια «νέα εποχή» εποικοδομητικών δεσμών. Εάν αυτό αποδειχθεί αλήθεια και η Άγκυρα θέλει πραγματικά να επισκευάσει τις σχέσεις της με την Ουάσιγκτον, θα μπορούσε να έχει θετικές επιπτώσεις, όχι μόνο για την ελληνοτουρκική συμφιλίωση, αλλά και για μια ειρηνική επίλυση του Κυπριακού.

Ως γείτονες σε αυτόν τον χώρο και de facto εταίροι στην εκστρατεία για τη μείωση των εκπομπών, η Ελλάδα και η Τουρκία θα μπορούσαν να μεγιστοποιήσουν την απόδοση των προσπαθειών τους, τόσο ατομικά όσο και σε συνεργασία.

Δεδομένης της σημασίας της πληροφορίας και του ρυθμού με τον οποίο αυξάνεται η ικανότητά μας να τις συλλέγουμε λόγω της τεχνολογίας, θα μπορούσαν να ξεκινήσουν να ανταλλάσουν δεδομένα.

Για σχεδόν οτιδήποτε έχει κατασκευαστεί, εγκατασταθεί ή λειτουργεί στη θάλασσα, η εκ των προτέρων γνώση των καιρικών συνθηκών, παλίρροια, ρεύματα, θερμοκρασίες νερού, επίπεδα αλατότητας κ.λπ., μπορεί να είναι καθοριστικής σημασίας για τον σχεδιασμό, την απόδοση και την προστασία τόσο των ανθρώπων όσο και των περιβάλλον.

Στην τελική ανάλυση, τόσο η Ελλάδα όσο και η Τουρκία έχουν τα πάντα να κερδίσουν, και τίποτα ή σχετικά λίγο να χάσουν, συνεργαζόμενοι σε κάθε ευκαιρία, αλλά ειδικά σε διάφορες μορφές ενέργειας. Όπως και με τις αντίστοιχες αποφάσεις τους να ενταχθούν στο ΝΑΤΟ, αυτό απαιτεί σαφή ανάλυση και ρεαλιστική χάραξη πολιτικής, για την επίτευξη, την προώθηση, την υπεράσπιση και την εφαρμογή ορισμένων ιστορικών συμβιβασμών.

Why hybrid cars are popular in an increasingly electric world

By Kyle Stock Bloomberg

Confession: I’m an auto writer and I drive one of the world’s most boring vehicles.
It’s a minivan and a hybrid, though not a particularly robust

one.
The 2018 Chrysler Pacifica manages just 30 miles on a charge.
Did I mention it’s white?
While my Tesla-driving neighbour may snicker, my dad-math is simple and sanguine: my crew seldom rolls more than 20 miles in a day.
Even with a standard outlet, we can fully recharge the Pacifica’s meagre battery overnight and start again the next day, cruising on the electric motor on the eight-mile soccer commute or the 12-mile Home Depot lap.
On the rare road trip, we burn some fossils.
All told, we buy gas about four times a year.
Electric vehicles are killing the gas-powered car – even faster than expected – but they are also running roughshod over hybrid vehicles like mine, their cranky older siblings.
In America, sales of fully electric vehicles eclipsed those of plug-in hybrids four years ago and have steadily pulled away since.
Americans bought four EVs for every hybrid in the first quarter of this year.
In Asia, hybrids lost the lead to EVs almost six years ago and the gap is far wider.
I get it, no one wants to do dad-math while they’re standing on the sales lot.
With a purchase that big, the heart wants what the heart wants – namely something new and exciting.
A hybrid, increasingly, is a flip phone in an iPhone world.
Here’s the thing, though: hybrids are bonkers good these days.
The nice thing about writing about the auto industry is that I get to drive a lot of different vehicles – “press cars” in the industry lexicon.
The first-hand experience is helpful when interviewing auto executives, and one of the best ways to stay familiar with what they’re making.
Lately, my driveway has been a parade of excellent hybrids.
Right now, it’s a Toyota Highlander that is steadily posting 35 miles to a gallon.

Before that, there was the Hyundai Sonata, Kia Sorento and a sublime BMW 530e.
Some, like my Pacifica, can be plugged in and charged, but many generate their electricity exclusively by dragging off the car's momentum when it slows.
In the industry argot, the former are plug-in hybrid electric vehicles, or PHEVs, and the latter are hybrid electric vehicles, or HEVs. Their much cooler, electric-only cousins are known as battery electric vehicles, or BEVs.
Nothing with an "H" in the acronym carries any gravity in the Tesla-sphere, but they all quietly nudged the needle on carbon emissions.
And they're all a little more fun to zip around in than their combustion cousins.
The standout of late was the Toyota RAV4 Prime, which goes for 42 miles before the spark plugs flare up and the tiny explosions start.
That's top of the hybrid class these days, and more than enough for the average US commute.
And on a road-trip, it entirely cancels out the biggest EV bugaboo: range anxiety.
The combustion engine on a car like the RAV4 Prime is like a standby package of hot dogs at a barbecue or a well-rested starting pitcher sitting in the bullpen.
Don't think of it as a gas vehicle with a trickle of electrons, but as an EV with a robust Plan B.
True, it lacks the tech smugness of a silent, sentient Tesla, but the tradeoff is pretty good.
And I'm not the only one who thinks so – the rigs are selling like ice cream at the beach, according to Samantha Groot, Toyota general manager of vehicle marketing.
In the first quarter of this year, nearly one in four vehicles Toyota sold in the US was some form of hybrid, up from 12% a year earlier.
Honda is part of the acceleration, as well.
The share of customers buying its hybrid CR-V SUV surged 10-fold this spring.

Zombies With Batteries In Europe, the Middle East and Africa, more stringent emissions thresholds in the first quarter boosted plug-in hybrid sales ahead of purely electric vehicles for the first time in nearly three years, according to BloombergNEF.
In America, EVs stayed far ahead in that period, but there's some evidence the chimera vehicles gained back some ground in the second quarter.
Combination gas and electric vehicles accounted for 6% of US vehicle registrations in April, more than double the share of fully electric rigs, according to IHS Markit.
This isn't coming from Gen Z early adopters.
The new wave of hybrid buyers tend to be older, and many of them live in the South and Midwest, according to IHS.
In short: it's regular old car people making slightly more pragmatic (and greener) decisions.
Tesla surely doesn't care, but rest assured this stat isn't lost on other auto executives.
In the race to EV supremacy, the slow lane will be stacked with better and better hybrids.
So don't pour one out for the Prius just yet.
It's still doing just fine, and is increasingly in good company.
Just this week, Ferrari unveiled its second plug-in hybrid.
It's a lot like my minivan, save for the 205 miles-per-hour bit.

Oil survey reveals a divide on when global demand will

peak

The accelerating shift to cleaner energy poses a challenge for global oil demand in the next decade, according to a Bloomberg Intelligence survey, but responses were divided as to whether consumption will return to pre-pandemic highs.

About 39 percent of respondents see demand slightly above the pre-COVID level of 100 million barrels a day in 2030, while 30 percent expect consumption to fall short of that mark. With fuel efficiency, electric vehicles and green reforms enacted in the wake of the pandemic creating headwinds for crude sales, OPEC is likely rein in output for a prolonged period to avoid oversupply, BI said.

Some forecasters expect crude demand to peak sooner rather than later. Goldman Sachs Group Inc. sees consumption topping out in 2026, while BP has said the era of demand growth may already be over. The International Energy Agency has taken a more conservative view, predicting a plateau around 2030.