Contemporary International Energy Governance is Failing our Climate Futures

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Today, around 75% of anthropogenic greenhouse gas emissions are energy-related.¹ Stabilising atmospheric carbon dioxide concentrations therefore requires net-zero energy systems to be foremost on climate agendas.

Given this, it is surprising that the United Nations Framework Convention on Climate Change (UNFCCC), the primary multilateral body tasked with "stabiliz[ing] greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system," is ill-equipped to deal with energy systems.² Of the seventy-one paragraphs contained in the outcome document of the 26th Conference of Parties to the UNFCCC (COP26), energy is mentioned in just one.³ This is an unacceptable shortcoming of the present approach to multilateral climate governance, but has rarely been highlighted in academic literature, news media, or public discourse.

This is partly a function of the UNFCCC's negotiation structure; while negotiation tracks include loss and damage, adaptation, and climate technologies, there is not one single track for attaining net-zero energy systems. This could be attributed to the fact that energy systems are too broad and too obvious a target, but a closer look at recent negotiations and discourse indicates that COPs are not structured in a way that permits open debate over energy, especially not in a way that includes key stakeholders. At COP26, one of the primary debates centered around language surrounding coal use in India and China. The "phase-down" vs the "phase-out" lexicology⁴ was characteristic of a structure that forces meaningful policy commitments into the hands of high-level politicians, resulting in stated ambitions coalescing around impossible-to-quantify metrics in lieu of actionable abatement pathways. The global multilateral governance framework must clearly do more, better, to address the elephant in the room that is the energy system. The UN's primary solution to this, to date, has been the creation of UN-Energy, an inter-agency collaboration mechanism that by its very existence underscores the decentralised network that exists in the UN. .

Moreover, the UNFCCC's effort to engage the private sector remain woefully inadequate compared to other UN bodies, including regional economic commissions, the UN Environmental Programme, and UNIDO. Much of this reluctance stems from the desire to distance principled climate negotiations from the influence of the private sector, which plays an outsized role in the

¹https://iea.blob.core.windows.net/assets/c3086240-732b-4f6a-89d7-db01be018f5e/GlobalEnergyReview CO2Emissionsin2021.pdf

²https://unfccc.int/process-and-meetings/what-is-the-united-nations-framework-convention-on-climate-change

³https://unfccc.int/documents/310475

⁴https://apnews.com/article/climate-business-europe-united-kingdom-scotland-459b7ca49f7a55736db4ff0 206c42d60

global flow of energy. However, all the Nationally Determined Contributions in the world are useless without the buy-in of multinational energy corporations. These firms, whether they are acknowledged at COPs or not, exert a greater influence on the climate change outcomes than the vast majority of countries. The international community not only struggles to hold them to account, it lacks effective dialogue mechanisms with them. As such, issues such as global fossil fuel subsidies, which account for 5-10% of global GDP and often directed through the private sector (alongside state-run energy behemoths),⁵ are inadequately dealt with.

Although non-UN multilateral fora exist, they are fragmented and often have competing priorities.⁶ Among major academic efforts to map global energy governance arrangements and institutions, the number of "global energy governors" identified ranges from six to fifty. Some key organizations include IRENA (International Renewable Energy Agency), the oft-opposed OPEC (Organization of Petroleum Exporting Countries) and the IEA (International Energy Agency), set up by the rich-nation club of the OECD (Organization for Economic Co-operation and Development) in response to the OPEC-led 1973 Oil Embargo. Other multilateral fora include SEforAll (Sustainable Energy for All), IAEA (International Atomic Energy Agency), and regional organizations such as OLADE (Organización Latinoamericana de Energía).

At the same time, much multilateral energy policy is confined to non-energy-specific policy clubs. For example, the G7 (Group of 7) has attempted to coordinate the reduction of dependence on Russian fossil fuels in response to the invasion of Ukraine.⁷ When evaluating this alphabet soup, academics have argued that "no single account can do justice to the multiplicity of rules and institutions that make up the full energy regime complex."⁸ The consequence of the chaotic international energy governance environment is that contemporary energy governance is confined mostly to national policy: in democracies, subject to the whims of short-term electoral cycle promises, and in dictatorships, lacking public pressure for long-term action.

Indeed, history shows us that we do not govern energy very effectively at the international scale. Since the Second World War, globalization has increased energy interdependence and reduced sufficiency. We have created an intricate web of cross-border energy connections, development partnerships, and interlinkages, but have failed to put in place robust governance structures. Security has become a transnational endeavor, where demand is often met by imports. Today, Europe's import dependence has paralysed its ability to reduce Russian fossil fuels in response to the country's illegal occupation of parts of Ukraine. The situation is a classic energy trilemma of security, affordability, and sustainability. Europe is now racing to reduce its import dependency while facing rising wholesale prices, trying to help affordability and avoiding short-term policies that could hinder the energy transition.⁹ But the international community, lacking a true multilateral forum for global energy governance, has little political "bite." A

⁵https://www.imf.org/en/Topics/climate-change/energy-subsidies

⁶http://dx.doi.org/10.1057/palcomms.2015.47

⁷https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/natural-gas/040722-g7-natio ns-vow-to-expedite-efforts-to-curb-russian-oil-coal-dependence

⁸http://dx.doi.org/10.1057/palcomms.2015.47

⁹https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1511.

well-organized global energy governance mechanism might, for example, ensure that commodities are supplied at prices that permit only normal profits rather than allowing the current supernormal profits to grow ever-larger. These failures are not new; the same happened repeatedly throughout the oil crises of the 1970s.¹⁰

The inability of the global energy governance system to respond to immediate price shocks appears to offer little hope for it to fare any better when trying to respond to the long-term challenges of transitioning to net-zero. Internationally, we lack a consensus on what the energy transition should actually look like. The global energy governance picture is characterized by ad-hoc responses by individual companies, or groups of influence. This has created an incoherent policy landscape littered with uncoordinated efforts.¹¹ The lack of a clear cooperation mechanism hinders potential efficiency gains from international collaborations; for example, in regional electricity grid connections to balance intermittent renewable supply and demand, or with our current gas-dependent system, in sharing the burden of gas storage facilities in response to the Russian-induced price crisis. As we transition to future technologies, the limitations of the current energy governance system are likely to become ever-more apparent. For example, while there is a hydrogen task force under the UNECE (United Nations Economic Commission for Europe), and involvement of UNEP, there is little standardization of emissions (monitoring, quantifying and mitigating efforts), up-to-date technology utilization assessments, and adoption of technical tools to act as a global efficient governing body.¹²

We must therefore ask ourselves what a more effective model for international energy governance would look like? No-one has yet provided a perfect answer to this, and we do not purport to provide one either. There are, however, a few things that any new model must follow. First, the Paris Agreement's principle of common-but-differentiated responsibilities necessitates an approach that provides significant autonomy to individual state actors and recognises each party's individual circumstances. Nonetheless, we must establish a general framework, and ideally a dedicated negotiation track, for engagement within UN climate negotiations. There are potential agenda items that would benefit from global agreement, in particular by avoiding carbon leakage when climate-leading states risk when they act unilaterally:¹³ a carbon takeback obligation on upstream emissions from fossil fuel producers, moratoriums on the most polluting fossil fuel extraction, and an end to upstream fossil fuel subsidies to name but three. Finally, we must remember a pure top-down approach is incompatible with existing climate negotiations, social justice, and the very nature of energy as a polycentric system itself. Key bottom-up approaches within the international governance system could include streamlining the Technology and Financing Mechanisms under a dedicated renewable energy transfer mechanism, building on recent work in integrating these policy tracks.¹⁴ National governments and local authorities can utilize such capacity-aiding tools and guidelines while possessing the flexibility to adapt on a case-by-case basis.

¹⁰https://www.nber.org/system/files/working_papers/w16790/w16790.pdf.

¹¹https://ink.library.smu.edu.sg/soss_research/2065

¹²https://unece.org/task-force-hydrogen

¹³https://doi.org/10.1016/j.jinteco.2004.01.003

¹⁴https://unfccc.int/documents/309908

As this article has highlighted, the current climate governance framework system lacks mechanisms to govern energy systems effectively, despite this being the single biggest "problem" to solve as we seek to reach net-zero emissions. The fact that this has been overlooked for so long is both remarkable and unacceptable. A consultation process is urgently needed to bring together policymakers, private sector stakeholders, academics, and civil society to reconsider how we cooperate internationally to govern energy, and moreover, how we cultivate future energy systems that are more secure, equitable, and sustainable than those today.