

Redesigning the global energy architecture

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Our world is confronted with a pressing and multi-faceted energy crisis that reaches well beyond the challenge of carbon abatement or securing ample and affordable supplies of oil and gas. While nearly one-third of humanity lacks access to electricity in their homes, the other part of the planet has become addicted to a polluting, shrinking, and increasingly expensive fossil-fuel resource base that is associated with corruption, bad governance and human rights abuses.

These energy-related challenges require policy-making and regulation at the global level. More precisely, the **key goals** of an international energy regime should be:

1. supply security;
2. energy access;
3. sustainability and safety;
4. and domestic good governance.

Yet a strong multilateral energy regime to realize those goals is lacking. The relatively sparse energy governance institutions that exist are fragmented and lack authority. Global energy governance consists of a chaotic and **scattered mish-mash of institutions**, rule-systems, clubs and significant governance gaps. Within this patchwork, there is hardly any coordination or legal hierarchy. Universally accepted norms are missing.

Moreover, the existing arrangements are **limited in scope, representation, and effectiveness**.

- **SCOPE**. International energy institutions have focused predominantly on the expansion of energy markets and far less on energy access for developing countries or environmental protection. While there is cooperation on energy research and technology, there is little sustained effort to fundamentally rethink the global energy supply system. The energy governance architecture is replete with narrow, sector-based institutions that tend to defend “their” sector. The proper way to deal with the energy crisis is to switch the focus from energy sources and supply to demand management and “energy services,” such as efficiently generated electricity for heating, cooking and transportation.
- **REPRESENTATION**. There are few energy governance institutions that bring together a broad spectrum of stakeholders in an equitable setting. International energy institutions are often fragmented along the producer-consumer divide (e.g., IEA and OPEC) or they are dominated by Western countries. Emerging countries such as China and India, but also the lion’s share of developing countries are generally not (well) represented. Organizations such as the IEA and the World Bank have been accused of having an obvious Northern agenda and prioritizing the energy needs of developed countries.

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- **EFFECTIVENESS.** Current global energy governance arrangements flagrantly fail to realize the four outlined objectives. Moreover, the fragmented architecture is not well equipped to deal with the interconnectedness of those energy challenges. Institutions working in isolation seldom discover policy synergies or deal effectively with trade-offs.

Creating a **World Energy Organization is not the solution** as this idea is vigorously opposed by the biggest players and more coherence can be achieved through other routes, such as strengthening existing institutions (e.g., IEA or UN-Energy), intensifying cooperation between institutions to achieve a clearer demarcation of responsibilities, or clustering energy treaties/institutions thematically (as has happened for the chemicals and biodiversity treaties).² Ideally, there should be one lead institution for each specific policy field (e.g., IRENA for renewables, IEA for whole-system analysis).

The biggest players can be brought onboard through high-level and informal forums such as the G20.³ To ensure continuity and compliance, a **permanent G20 Energy Task Force** could be established. Such a Task Force would engage in strategic thinking and set policy objectives that balance across all of the competing priorities. Modeled after the Financial Stability Board, it would not be composed of diplomats but of energy policy-makers and experts and report directly to the world leaders. Its aim would not be to substitute the work already being done elsewhere, but to contribute to policy coherence and give political impulses to various energy governance institutions.

The agendas of existing institutions could be refocused so that they reflect current geopolitical realities and fully support the widespread development of energy efficiency, conservation and renewable energy.

- The **World Bank** and regional development banks should look to phase out their lending to the oil, gas and coal sectors entirely over the long term. In the meantime, a series of clear criteria should restrict the terms on which they support conventional energy sources like coal. In addition, a system of rules should be set up to guide the support of export credit agencies for cross-border flows of energy-related financing.
- The **IEA** should open its doors to China, India and other large, emerging energy consumers and step up its rapprochement with OPEC. With energy accounting for about two-thirds of global CO₂ emissions, the IEA should also embrace a much audacious and progressive vision for the transition to a low-carbon energy future. After expansion of its membership to the BRICS and other emerging economies, and with a firmer identity in favor of clean energy and renewables, the IEA could become the *primus inter pares* among the multilateral energy institutions. In the longer term, an integration of IEA and IRENA can be considered. As such, the IEA will be comparable with the roles played by

² One could think of such clustering in the areas of clean energy or different energy technologies. The IEA's Low-Carbon Energy Technology Platform would be eligible for assuming a leading role, provided that its institutional capacity is strengthened.

³ Initiatives such as the Clean Energy Ministerial and the Major Economies Forum (MEF) can also engage the biggest players to search for practical solutions but, since these initiatives have no secretariat, their agenda and continued existence depends entirely on the political mood of its sponsor, the United States. In that sense, the G20 is more promising as it allows for a larger sense of co-ownership.

the IAEA (which remains the institutional hub for various dimensions of nuclear cooperation), WTO and IMF in their respective policy areas. With such a repositioning, the IEA can contribute to the roll-back of harmful institutional fragmentation.

- UNFCCC mechanisms such as the CDM and the GEF must be geared more strongly towards the promotion of renewable energy and they must be institutionally linked with relevant energy governance mechanisms such as IRENA. The UNFCCC’s Technology Mechanism could also be linked to the IEA’s Low-Carbon Energy Technology Platform and the Clean Energy Ministerial, for example. Democratic, universal and UN-centered governance is paramount for the Green Climate Fund (GCF).

Energy market distortions should be abolished so that energy sources can compete on a level-playing field. The G20 should continue its efforts to phase out inefficient **fossil fuel subsidies**. A supervisory body should review the accuracy and completeness of the national reports on those subsidies. The G20 should also initiate negotiations on a plurilateral **Sustainable Energy Trade Agreement** that focuses on facilitating trade in environmental goods and renewable energy technologies.⁴

The international regime for the **fight against energy poverty** is severely underdeveloped. There is a lack of financing mechanisms, technology transfer systems, and capacity-building schemes to effectively combat energy poverty.⁵ The international community should mobilize additional financing and investment in universal energy access.

The UN Secretary-General’s High-Level Group on Sustainable Energy for All has put forward three targets to be met by 2030: universal energy access, doubling the rate of improvement in energy efficiency, and doubling the share of renewable energy in the global energy mix. At the June 2012 UN Conference on Sustainable Development in Rio, these recommendations could be incorporated into a larger package of **Sustainable Development Goals**. The targets could also be integrated in an updated version of the **St. Petersburg Principles** on Energy Security, agreed upon by the G8 in 2006, which could then also be echoed through the G20 process (e.g., put on the agenda of the G20’s Working Group on Development) and the UNGA.

⁴ For example, crude oil and oil products are generally not subject to import tariffs, while bioenergy products are. Wind power systems are often categorized as “steel” and therefore subject to high tariffs. There are also a wide range of non-tariff barriers to sustainable energy goods and services, such as domestic support measures for biofuels or export restrictions on critical raw materials.

⁵ By declaring 2012 the Year of Sustainable Energy for All, the United Nations are trying to give this topic more international prominence. The government of Norway has also launched an initiative, the International Energy and Climate Initiative, known as “Energy+”, to move this agenda forward.