

### SECURITY POLICY BRIEF

# Towards a new multilateral energy architecture?

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From climate change over peak oil to the geopolitical scramble for the Arctic, there are ample signs that a global energy crisis is unfolding. The sheer scale and urgency of this looming crisis calls for international coordination. Yet, even a cursory look at the existing international energy institutions leads to a sobering conclusion: the global energy governance architecture is weak, fragmented and incomplete. This policy brief discusses both the flaws in the multilateral energy architecture and some emerging ideas to strengthen it, such as the proposal for a Sustainable Energy Trade and new American Agreement the disclosure rules for the extractive sector.

In July 2012, India was struck by the largest power black-out in history. No less than 22 out of the country's 28 states were affected by the outage, comprising about 10 percent of the world population. Ironically, millions of people living in the affected areas were not actually hit by the power cut since they lack access to electricity anyway. Even for many other households and businesses, the effect of the black-out was mitigated since they are used to having regular grid collapses and have standby generators or other back-up systems.

This event exposes many of the energyrelated problems that governments around the world are struggling with. One is energy security, or the reliable and adequate supply of energy to sustain a country's economic development. Another is energy poverty, or the fact that 1.4 billion people in the world still lack access to modern energy services such as lighting, heating and transportation. Since the grid fall-out was partly caused by a prolonged drought, which lowered India's hydro-power increasing demand capacity while for electricity for irrigation, the event also illustrates the likely effects of climate change on our energy systems.

It would be all too easy to relegate the responsibility for these three challenges – energy security, energy poverty, and climate change – solely to the Indian governments, authorities and utility companies. To be sure, Indian authorities have an important role to play in addressing these challenges and, indeed, many observers point to India's poor energy governance system as one of the key culprits of the power fall-out. No wonder, then, that domestic good governance is often depicted as the fourth major goal of global energy governance.

Nonetheless, India's electrical fall-out is but

one piece of a bigger energy puzzle that manifests itself at a larger scale. Climate change is a truly planetary phenomenon, oil markets operate at the global level, technology transfers to address electricity deprivation warrant intercontinental North-South cooperation; in other words, we need some form of international energy governance to effectively deal with these transboundary challenges.

Currently, the energy sector is not very well governed at the international level. There are several multilateral energy institutions in place, each focusing on a specific set of energy issues for a specific set of countries, but there is no strong system of international rules and regulations that puts us firmly on the path toward a more sustainable, equitable, reliable and affordable energy system. This policy brief illustrates the shortcomings of the current set of international energy institutions before surveying some of the emerging practices and ideas that may pave the way for a new and stronger multilateral energy architecture.

#### THE GOALS OF ENERGY GOVERNANCE ENERGY SECURITY

Even though energy security governance has traditionally been a matter of purely national governance, various countries have set up international institutions to coordinate their energy policies, gather and disseminate data, share best practices and manage emergency response mechanisms. The best-known such institution is the Paris-based International Energy Agency (IEA), created in the wake of the first oil shock. Most of the time the IEA serves as a sort of information clearing-house but occasionally it captures global prime time when it coordinates a release from its members' strategic oil deposits, such as it did last year in response to the prolonged outage in Libya.

For all its merits as an oil market watchdog (and, occasionally, fire brigade), the IEA's role in global energy governance is curbed in several ways. Since the agency's membership is exclusively reserved for members of the OECD, emerging and oil-thirsty giants such as China and India remain outside of the IEA. Clearly, the IEA cannot play the global role its name implies if it does not find appropriate ways to accommodate these emerging powers. Another challenge is that the IEA has difficulties in shedding its image as a conservative petroleum-focused institution. Even though the IEA addresses energy policy issues writ large, the agency is still widely viewed as a child of the oil agitation of the 1970s.

Other multilateral energy institutions hardly fare any better. The Organization of Petroleum-Exporting Countries (OPEC) is commonly viewed as a small club of the selfinterested, trying to maximize the oil rents for the club members, while acting as a spoiler in the climate regime. OPEC meetings are often characterized by quarrels, members frequently cheat on their allocated production quota, and in the end, the Saudis nearly always act as the swing producer to balance oil markets.

The International Energy Forum (IEF), an institution created to bridge the divide between oil consumers and producers, has some useful features. Biannually, it brings together a very large number of energy ministers and CEO's of big energy companies to discuss the state of the oil (and, to a lesser extent, the gas) market. For the participants, it offers an opportunity for having numerous bilateral meetings with colleagues in a short time span. The IEF also manages a system to bring more transparency to oil markets, the so-called Joint Oil Data Initiative (Jodi), but since it is based entirely on voluntary self-reporting, the database contains many gaps and inflated numbers.

The Energy Charter Treaty (ECT), finally, was designed in the early 1990s to manage the energy (and, particularly, the natural gas) relations between Western Europe and the Soviet successor states. The treaty was never ratified by Russia, Norway and the United States. Russia applied it on a provisional basis before formally withdrawing from it in 2009. The ECT and its Brussels Secretariat, which was conspicuously absent during the recent gas spats between Russia and Ukraine in 2006 and 2009, clearly need an existential rethink.

#### FIGHTING ENERGY POVERTY

The widespread and persistent lack of access to modern energy services in many rural areas in the world represents yet another set of major energy challenges, for which new international governance mechanisms are needed.

While energy poverty may seem to be a purely local political issue at first sight, its sheer scale makes it a global issue. About 1.4 billion people currently have no access to electricity in their homes, which is essential to a decent quality of life. An even higher number of people, 2.7 billion, relies on traditional biomass for cooking, with dire consequences not only for their health and education but also for the environment, as it leads to soil degradation and deforestation.

Energy poverty is an important issue for global governance because it is of critical importance to the success of the broader anti-poverty agenda. It is increasingly recognized that greater quality and quantity of energy services is required to meet the Millennium Development Goals (MDG). Indeed, the fight against energy poverty is often depicted as the "missing" MDG.

The absence of a specific MDG for energy services is one clear indication of how the theme of energy access has long been overlooked in international policy processes. Multilateral donor agencies such as the World Bank have devoted some attention to energy access but, in practice, the Bank's neoliberal structural reforms have done little to incentivize the provision of energy services to the poor nor to reduce overall figures of energy poverty.

#### CLIMATE CHANGE MITIGATION

Climate change, thirdly, is arguably the most defining issue of our time. The intricate link between global warming and our energy system is evident: fossil fuels provide 80 percent of global energy while being responsible for almost 60 percent of global greenhouse gas emissions. Clearly, any reasonable global CO<sub>2</sub> mitigation plan must involve a reconfiguration of the energy sector, by allowing us to shift to low-carbon fuels and sources. Admittedly, some observers put high faith in carbon capture and sequestration (CCS) projects, but given the cost and the fact that this technology is not yet demonstrated on a large-enough scale, CCS is far from a silver bullet to solve the energy-climate conundrum.

With only 37 industrialized countries committing themselves to reduce their greenhouse gas emissions by 5.2% on average for the period 2008-2012, it was obvious from the outset that the Kyoto Protocol was never going to be enough to stop climate change. As large developing countries continued to grow (and pollute) at an astonishing pace, it has become ever more clear that no international climate agreement can be meaningful without the participation of these emerging powers. Yet, at the same time it has raised ethical questions about the differentiated responsibility for climate change and has thus stirred political tensions.

Today the global climate negotiations are in complete political deadlock, much like that other grand multilateral endeavor, the WTO's Doha Development Round. Last year's conference of the parties (COP) in Durban barely kept the international negotiation process alive by extending Kyoto for a few more years. Durban made it clear that no post-Kyoto protocol will enter into force until 2020, much too late according to various observers. The International Energy Agency (IEA) has warned that, if the world is to stay below 2 degrees Celsius of warming, then emissions must be kept in check to no more than 450 parts per million (ppm) of carbon dioxide in the atmosphere; the level is currently around 390 ppm. If we do not undertake action, by 2017, we will be "locked" into a carbon path that will tip us over the dangerous 2 degrees target.

#### GOOD GOVERNANCE

A fourth major challenge is good governance. The upstream energy sector has always been particularly susceptible to corruption because of the concentration of hydrocarbon reserves in countries that have weak democratic institutions.

Advocacy groups such as Human Rights Watch and Global Witness have issued numerous reports on the alleged complicity in the misuse of government revenues from oil and gas extraction by firms operating in repressive or poorly governed countries. To counter such corruption, the United Kingdom spearheaded the launch of the Extractive Industries Transparency Initiative (EITI) in 2002, calling on firms to publish accounts on what they pay to governments. To date, the EITI schemes remain entirely voluntary.

Still, as Ann Florini has argued, many oil companies do not shy away from doing business in countries whose track record on human rights is less than stellar. What is more, some companies are accused of complicity to human rights violations. Shell has been criticized for alleged complicity in human rights violations in Nigeria in the 1990s, the American oil firm Unocal has been sued for human rights atrocities in Myanmar, and Chinese oil companies have been vehemently criticized for their operations in Darfur.

## FLAWS IN THE GLOBAL ENERGY ARCHITECTURE

Clearly, the global energy architecture is unable to provide long-lasting solutions to the key challenges of energy governance. 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, rulesystems, 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, sectorbased institutions that tend to defend "their" sector (e.g., IAEA for nuclear, the IEA for oil/gas/CCS, and now IRENA for renewables). 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.

Effectiveness. Current global energy governance arrangements flagrantly fail to four outlined objectives. realize the 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.

#### **NEW APPROACHES AND IDEAS**

In spite of this depressing overview of global energy institutions, promising new approaches, practices and ideas are constantly emerging. The remainder of this policy brief will home in on four of them: the creation of IRENA, the UN's SE4ALL initiative, the plea for a plurilateral trade agreement on clean energy, and the new disclosure rules for extractive industries.

#### IRENA

The creation of the International Renewable Energy Agency (IRENA) in 2009 is the single most important innovation in global energy governance of the past decade. IRENA, which currently boasts an impressive total of 150 members, is noteworthy for two reasons.

First, in an era of stagnating institutional innovation in global environmental governance, the creation of an entirely new bureaucracy has become quite exceptional. Its rapid negotiation, ratification and institutional set-up processes make IRENA even more remarkable. No comparably large and institutionalized international organization has been created over the past 10 years.

Second, IRENA is the first major

international organization that is set up to navigate and hasten the transition to more sustainable energy sources, in all of their occurring forms. By focusing on a transformation of the energy sector, it tackles head on the principal underlying cause of some of the world's major environmental problems such as air pollution, acid rain, and climate change.

In that respect, IRENA differs from the large and growing body of international rules that has been adopted to manage the plethora of energy-related environmental externalities, such as the Kyoto Protocol, the International Convention for the Prevention of Pollution by Ships (MARPOL), and many others. Even as those international environmental treaties obviously affect the energy sector, they do not lead to a radical departure from our current energy path. IRENA, by contrast, intends to do just that.

To be sure, IRENA is no standard-setting organization, nor is it able to impose legally binding obligations on its members. The agency is not designed to serve as a framework for negotiating such binding obligations. Instead, IRENA focuses on the gathering and dissemination of knowledge related to renewable energy technologies and policies.

Most importantly, IRENA will give a voice to the sector of renewables on the global stage and act as a cheerleader to spur the development and diffusion of renewables and, hence, the decarbonization of our energy systems.

#### SE4ALL

On the front of energy deprivation, things are moving too. The United Nations (UN) have declared 2012 the International Year of Sustainable Energy for All (SE4ALL). UN Secretary-General Ban Ki-Moon has put together an Advisory Group on Energy and Climate Change, which has recommended to meet three objectives by 2030:

- 1. ensuring universal access to modern energy services;
- 2. doubling the rate of improvement in energy efficiency; and
- 3. doubling the share of renewable energy in the global energy mix.

These recommendations were taking up during the talks at the Rio+20 conference on sustainable development, held in June 2012. One important outcome of the Rio+20 summit was the agreement to integrate these three goals into a broader set of Sustainable Development Goals (SDGs), which are designed to succeed the Millennium Development Goals (MDGs) in 2015.

While this is a worthwhile endeavor, policymakers could also contemplate the inclusion of the three targets 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 UN General Assembly.

#### **GREEN TRADE LIBERALIZATION**

One of the big fears surrounding the spread of renewable energy sources and technologies is that international competition in clean energy will backfire. The best-case scenario would be that global competition in green technology innovation will lead to a race to the top, spurring the rapid development and spread of renewables.

However, if countries are too much focused on national competitiveness, there is a clear risk of looming trade wars and green protectionism. There are already a lot of barriers to free trade in sustainable energy goods and services, notably in the form of domestic content requirements for key components that make up a sustainable energy system. For example, Japan and the EU have protested at the WTO that the Canadian Province of Ontario is stipulating that new solar and wind facilities must be built with a certain amount of domestically manufactured components.

The United States has in recent months also levied tariffs on Chinese solar panels and wind turbine towers because the Chinese companies have allegedly enjoyed unfair government support. The European Union (EU) could possibly follow in the US footsteps. Moreover, Brussels has included airline companies into its Emission Trading System as of 1 January 2012, provoking much criticism from third countries.

Many countries also restrict foreign investment in industries such as electricity generation and distribution, which may also hamper the rapid development of renewables. China has limited its exports of rare earths, some of which are absolutely critical to renewable energy.

These are but a few examples of how the unfolding clean energy race risks to engender new trade tensions. In order to prevent this from happening, the ICTSD, a Geneva-based think-tank has recently come up with a proposal for a Sustainable Energy Trade Agreement. The basic idea of the agreement would be to overcome trade distortions and speed up the development of clean energy and renewables across the globe.

#### PUBLISH WHAT YOU PAY

In August 2012, the US Securities and Exchange Commission (SEC) adopted a stringent set of rules that require US-listed companies to publish details of payments to countries where they extract resources. Previous efforts to create transparency, such as the EITI, were entirely voluntary.

The rules, which were required under the

2010 Dodd-Frank financial reform law, force companies to disclose — country by country and project by project — how much they pay governments around the world for access to their oil, natural gas and minerals.

This kind of transparency makes it possible to find the theft and waste that devastates poor but resource-rich countries. The EU should now move to adopt similar rules as the US. Moreover, the G20 should consider the creation of a global standard for reporting to allow comparison of payments made by US and EU companies.

#### **CONCLUSIONS**

This policy brief has identified four major goals of global energy governance:

- 1. providing energy security;
- 2. combating energy poverty;
- 3. addressing climate change;
- 4. domestic good governance.

A cursory review of the current system of global energy governance leads to a grim conclusion: the global energy architecture is not up to the gigantic task of bringing the world's energy system in line with the above-mentioned goals. The multilateral energy institutions we have at our disposal are too limited in terms of scope, representation and effectiveness.

The energy governance architecture is constantly evolving, though, and often for the better. The creation of IRENA in 2009 was a milestone event that could make a real dent for climate change mitigation, energy security and rural electrification in the developing world. The SEC's new regulations on oil payments could be a real shot in the arm for transparency and economic growth in developing countries. And with Ban Ki-Moon's SE4ALL initiative, the fight against energy poverty is finally gathering steam.

These are far from the only ideas on global energy governance reform that are currently floating. This last January, for example, the Chinese government called for a new international mechanism to stabilize oil markets. A few years ago, former Russian President Medvedev has called for a new Eurasian gas treaty to replace the ECT.

As long as energy security and climate change concerns continue to top the international agenda, the debate on a reform of global energy governance institutions will not wane. This provides an excellent opportunity to rebuild the international system of rules, institutions and regulations to realize the grand objectives of global energy governance.

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