

# What are the Challenges Facing Global Energy Governance?

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SEBASTIAN MANG, JUN 7 2014

Energy policy cuts across a variety of globally important issues including environmental, geopolitical, economic, political and developmental dimensions. Despite this prominence and importance of energy policy, academics argue that there is a lack of global structures in global energy governance whilst the circumstances in which nations and companies operate, are increasingly volatile. International energy policy however is hitherto an underdeveloped policy field.

The literature around energy policy has been steadily growing (Colgan, 2010; Florini, 2008, Florini and Savacool, 2009, 2011; Lesage et al., 2010), however the global governance of energy policy has been far less explored. My research has identified that energy policy has been seen traditionally from a hard-nosed geopolitical viewpoint, regarding energy security as a zero-sum game. More recently market-liberals however see markets and institutions as central. Global energy governance is seen by many as fragmented, and this fragmented nature of energy is under-researched and often discussed from a market-liberal viewpoint. This paper aims to further the literature by discussing the fragmentation of the global energy governance through using the geopolitical/realist account and testing this against the case study of the International Energy Agency (IEA) to see whether this account holds up.

This paper explores the following question: what impact do current challenges facing global energy governance have on the global energy governance system? My hypothesis is threefold: a) global energy governance is affected by the individual national interest considerations of actors b) multipolarity challenges existing structures of energy governance, and c) peak-oil increases both the bargaining power of producer states and competition between consumers.

### Existing structures of global energy governance

The international system has been described as fragmented (Leal-Arcas and Filis, 2013; Dubash and Florini, 2011; Lesage, 2009; Lesage et al, 2010). Many organisations have been set up with an energy policy function; however no single international body co-ordinates energy governance (Cheng, 2013:5). Goldthau and Witte (2010:7-8) argue that one can categorise international efforts into three types. First, certain institutions are designed to correct market failures and could be described as consumer clubs. The prime example, and the example used for our case study, is the IEA, which following the 1970s oil shocks was originally established to deal with short-term supply management. Second, other institutions are designed to lower transaction costs. One such example is the International Energy Forum (IEF), whose objective is to promote transparency. The IEA's data-gathering and data-sharing activities are another example. Third, there are institutions which set rules and standards. Examples are the World Trade Organization (WTO), Energy Charter Treaty (ECT) and United Nations Framework Convention on Climate Change (UNFCCC) which aim to establish legislation on rule setting for market exchange or the global climate change regime.

Goldthau and Witte miss out an important fourth set of institutions: producer clubs which aim to keep oil or gas prices high. Examples include OPEC, which was the cause of the 1970s oil shocks, as well as the Gas Exporting Countries Forum which has been dubbed Gas OPEC as a result of fears of it becoming a producer gas cartel. Other policy

# What are the Challenges Facing Global Energy Governance?

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areas also deal with by many international organizations (IOs), however within energy, the IOs are divided and represent respectively the different sides of the debate – i.e. producers (OPEC) and consumers (IEA) or the west (IEA) with no representation of emerging countries – and secondly have no real enforcement mechanisms.

## Geopolitics and market-liberalism

Traditionally academics have argued that geopolitics and a zero-sum game dictate that energy policy-making concentrates on energy mercantilism, arguing that global energy is about a battle for the world's energy resources – e.g. China's scramble for Africa (Zweig & Jianhai, 2005:84; Dannreuther, 2010:3), the use of energy as a foreign policy tool – e.g. Russia's use of the energy weapon (Monaghan, 2005:2; Riley, 2012:2; Smith, 2008), and seeing energy as a future cause of conflict – e.g. the scramble for the Arctic (Borgerson, 2008). These academics highlight consumers' fears about supply security and producers' interest in demand security. This view is strongly rooted in the realist paradigm (Waltz, 1998; Wenger et al, 2009), which considers the global system to be based on an anarchic system in which states are sovereign actors in a world based on the balance of power, and where nations only cooperate for self-interest. As Waltz (1986:103) argues states aim "to control what they depend on or to lessen the extent of their dependency" on others. Deudney (1997:91) argues that "most types of geopolitics are types of realism, and many of the insights of realism were articulated by geopolitical theorists before the term 'realpolitik' was coined in the nineteenth century". Indeed geopolitical views of energy security "tend to be founded [...] on (neo)-realist ontological premises" (Stoddard, 2013:444). The notion of geopolitics is central and inherently linked to the study of energy policy.

However, other analysts (Goldthau and Witte, 2010; Goldthau, 2011; Noel, 2008; Taylor and Van Doren, 2008) see energy as based within a market setting. Goldthau and Witte (2010:2) argue that "the geopolitical dimension of energy security is based on the myopic and erroneous presumption that global energy politics is necessarily a zero-sum game". They argue that the geopolitical view neglects the fact that market forces are of primary importance in international oil and gas trade. These accounts are rooted in liberalism and market-liberalism and see energy security and insecurity as positive and negative market outcomes (Bielecki, 2002:327). Chester, (2010:889) thus argues that energy security is "determined by the operation of the market, and can thus only be defined in market terms – particularly supply and price". Liberal perspectives on energy see IOs playing the role of promoting common goods such as international governance and aiming to constrain geopolitical actions of states (Noel, 2008; Taylor and Van Doren, 2008). Thus they highlight both the importance of markets (Noel 2008, Taylor and Van Doren, 2008) and the importance, or at least potential, of institutional cooperation (Goldthau and Witte, 2010).

The geopolitical views are most closely aligned with the realist school of thought while the market liberals present a liberal view (Stoddard, 2013:447). To fill a gap in the literature we discuss the fragmentation of global energy governance from a geopolitical stance, and test this account against the case study of the IEA to see how the IEA deals with fragmentation and how geopolitical arguments hold true.

## Theoretical Argument: Challenges to international energy policy and attempts to encourage global energy governance

This section discusses what impact current challenges have on the fragmented global governance system. This section discusses, 1) the effect of national interest on global energy governance, 2) the growing multi-polarity in the global order, and 3) the effects of the emergence of a sellers' market.

First, global energy governance reflects the fact that sovereign states engage with each other only to the extent of their own national interest; actors are inherently driven to strive for relative gains. Efforts by actors to promote collective energy security are undercut by the systemic constraints or in other words the realist view of international relations in which states are defensive of their respective national interest. Due to the importance of energy sources – not only for economic prosperity – makes energy a policy area which states do not like to compromise on, let alone pool or transfer sovereignty to an IO.

Second, analysts argue that since the 2000s a decline of US hegemony and a shift from a unipolar to a multipolar

# What are the Challenges Facing Global Energy Governance?

Written by Sebastian Mang

system has been occurring. This change has also occurred in international energy governance to a significant extent. Helm (2005:1-3) argues that since the 2000s one can see a “paradigm shift” in energy towards the increasing importance of supply security. Ciuta (2010:130) further argues that China is becoming a net-oil importer while the re-emergence of Russia since the 2000s has raised the profile of the role of energy as a factor in the emergence of a multipolar world. Competition within a multi-polar system, as Waltz (2000:6) argues is more complicated due to increased “uncertainties about the comparative capabilities of states which multiply as numbers grow, and because estimates of the cohesiveness and strength of coalitions are harder to make.”

Luft (2004) asserts that “superpowers find it difficult to coexist while competing over scarce resources”. Thus, a natural conclusion from these assertions is that an increase in the number of key players increases the potential conflicts between energy actors. This extra competition and the increased likelihood of conflict, makes it hard for countries to see relative gains within organisations that were set up by competing actors. This paper concurs with Florini and Savacool (2009:5243) who argue that IOs face new challenges related to the rapid growth of emerging economies, in particular China and India. These countries have had little role in creating IOs in energy and are thus underrepresented. The rise of emerging actors within the global order, based on anarchy, will thus lead to increased competition and conflict and thus cooperation is unlikely.

Third, in many producer countries, the rise of state-owned national oil companies and the imminent reality of peak oil means the coming to an end of cheap oil. This means that the overall balance of power between energy producer and consumer states will inherently change. Umbach (2010:1230) argues that “the emergence of a ‘sellers’ market’ on the global level may lead to a profound change in the nature of competition between producer and consumer states as well as among consumers themselves.” The producer countries will therefore be less willing to cooperate on global energy governance as a result of being in a better bargaining position and in a situation to realize relative gains. Moreover, peak oil and a sellers’ market could increase competition between consumer countries and the likelihood of conflict. This is, in particular, the case between western economies and BRIC countries, which are not represented in the IEA and are challenging the global order.

To show this, I draw on an example of a sellers’ market on a regional level. In 2012, 45% of gas imported by the EU originated in Russia. In some countries, in particular those in Central and Eastern Europe, this figure is much higher[1]. Analysts argue that “Russia has systematically attempted to use energy” to influence its neighbours’ foreign policy, domestic policy and economic systems (Monaghan, 2005:5). This has been achieved not only by cutting off the gas from Ukraine in 2006 and 2008 and through the Georgian war in 2006 but also through the use of its national oil company Gazprom which has behaved in a monopolistic fashion (Smith, 2008; Mang, 2013). Due to Russia’s petroleum resources and the use of Gazprom to promote state objectives, it can be argued that the EU is dependent on Russia. This example highlights clearly that Russia has a favourable relative power position and is in a strong bargaining position vis-à-vis the EU. Russia will thus be less willing to cooperate on global energy governance to keep prices low and supply steady.

Overall therefore this paper argues that increased cooperation is unlikely. It draws out the following hypothesis for testing: a) global energy governance based on collective action is not desired due to national interest concerns and the unwillingness to transfer sovereignty, b) the rise of emerging economies/powers will lead to increased competition/conflict and emerging powers will not participate in western dominated IOs, and c) the emergence of a seller’s market leads to intensified conflict between producer and consumer IOs.

## International Energy Agency: Can it deal with these challenges?

### Research Design

This paper now aims to test the hypothesis against the case study of the IEA. The IEA was founded as a response to the 1973 oil shocks within the framework of the Organization for Economic Cooperation and Development (OECD), today it has diversified its role. Scholars recognise the key importance of the IEA (Colgan, 2009; Kohl, 2010, Florini, 2010), due to the IEA containing the biggest western economies, being part of the OECD framework, having established oil crisis management systems, and being an authoritative voice in international energy through its yearly

# What are the Challenges Facing Global Energy Governance?

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World Energy Outlook publication.

This case study is not intended to analyse the effectiveness of a specific IEA project or program but rather look at the IEA holistically and test the above hypothesis. This section will briefly test each of the hypothesis made above and establish to what extent the IEA has been able to overcome these challenges. Furthermore, as the arguments are based within the realist paradigm, this section aims to investigate whether this paradigm holds up in the case of the IEA.

## Hypothesis testing

The first hypothesis was that collective action is not desired because of actor's aversion towards cooperation. The IEA's core area, is its emergency oil crisis management system for which it has international authority. According to the founding document, the International Energy Program (IEP) Agreement, it has international authority on this issue. Indeed members must agree to maintain oil stocks of equivalent to ninety days of imports and to a system of demand restraints. The secretariat acting alone or at the request of one or several member states can trigger the sharing system when daily rate of oil supplies reduce by at least 7% (Goldthau and Witte, 2010). Although this system has never been initiated this represents a rare pooling of sovereignty in energy policy.

In 1979 the IEA adopted the Coordinated Emergency Response Mechanism (CERM) which was to be a more flexible response to actual or imminent oil supply shocks which is triggered by the executive director in consultation with member states. This measure was initiated three times: 1991 Gulf War, 2005 Hurricane Katrina and 2011 oil supplies disruptions caused by Libya (Florini, 2011). Both mechanisms highlights that consumer states have financially and politically invested into an IO that uses market-based mechanisms to curtail geopolitical actions of producer countries. Although the trigger of CERM in 1991, in which only the US, Germany and Japan released stocks, highlights the rather voluntary basis of IEA mechanisms, it shows the willingness of some states to cooperate for collective energy security. Overall, the IEA has limited authority in rule creation and enforcement mechanism outside of the emergency oil crisis management. Therefore, although a certain amount of pooling has taken place to provide collective energy security of sorts, the IEA remains weak and cooperation occurs on a rather voluntary basis. Overall, this disproves my hypothesis.

Second, the IEA has a significant problem in having strict membership criteria. Only OECD member countries are eligible to join the organisation. To join the OECD, states must demonstrate that they are democratic, have a market-based economy, and respect the rule of law and human rights. These criteria cannot be fulfilled by important consumer nations such as China. Furthermore, the current voting system is based on oil consumption figures from the 70s. If emerging economies were to join the IO, emerging economies which are now overtaking western countries' consumption would be heavily disadvantages or any change in the voting procedure would result in western economies losing a good deal of control over the IEA (Van de Graaf, 2011: 236).

On the other hand however, Chinese, Indian, Russian and other emerging economies' energy ministers have attended several ministerial meetings of the IEA (Van de Graaf, 2011:238). While it is not likely that the IEA will include new members into its organisation (Colgan, 2009), this problem is somewhat overcome by allowing for dialogue with emerging economies within the IEA framework. While, there is still the possibility of conflict due to the uneven distribution of power within the IEA framework, dialogue is occurring which indicates the willingness of both sides to cooperate for the stability of market forces (Goldthau and Witte, 2010).

Finally, this paper has argued that within the global energy market we see a move towards a sellers' market. The IEA has developed key relationships with OPEC as well as, as highlighted above, allowing Russia to join Ministerial meetings in 2009. Since the 1991 Gulf War the IEA and OPEC have slowly developed a closer relationship. Florini (2011:46) argues that the IEA and OPEC cooperate substantially and that this is based on both organisations' mutual interest in stability. Both organisations hold workshops and share analysis. In addition she argues that an informal understanding that the IEA will consult the OPEC secretariat is in place. Therefore, although it can be argued that a sellers' market is emerging, cooperation of the IEA with the OPEC, which was the reason for the creation of the IEA, disproves my third hypothesis.

# What are the Challenges Facing Global Energy Governance?

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## Conclusion

This IEA case study highlights the flaw in the geopolitical argument that cooperation and energy governance is intrinsically absent in what is seen as an anarchic system based on self-interest. While it is true that global energy governance is fragmented, the international community is striving for more cooperation with emerging consumer economies as well as producing economies.

This highlights the fact, which has become clear within the research and analysis, that the geopolitical and realist school of thought does not account for the centrality of the market and the interlinked nature of the market of energy and energy security. This paper has aimed to show that the theoretical argument based on a geopolitical stance put forward does not completely hold up because it does not recognise the centrality of market forces. All participants within the global energy economy have one thing in common; namely a fundamental stake in the stability and continued growth of the world economy. In this author's opinion, this is only achievable through global energy governance and through a stronger global regulatory framework that allows for healthy competition. I recognize the limitations of this paper and would suggest a closer analysis of the international energy market – the environment in which actors and IOs operate in – as well as further analysis of each IOs role within the governance of this policy field.

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# What are the Challenges Facing Global Energy Governance?

Written by Sebastian Mang

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## **What are the Challenges Facing Global Energy Governance?**

Written by Sebastian Mang

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[1]See Mang, 2013 for an assessment of EU’s Energy Security Risk Patterns

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