

GLOBAL ENERGY GOVERNANCE THROUGH INTERGOVERNMENTAL ORGANIZATIONS: ANALYSIS OF THE FEASIBILITY OF IMPLEMENTATION

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Abstract: This paper analyzes the current factors causing an energy crisis, including depletion of the natural resources, geopolitical tensions, energy security, search for climate stability and absence of universal access to energy. Through the deductive method, the study analyzes if investments are considered as a possible solution to promote sustainable energy. It assesses the current position of intergovernmental organizations linked in some way to the topic of energy, such as the WTO, ECT, G8, G20, IEF, IEA and OPEC, to identify whether the initiatives are being developed and the political will to do so. Some organizations are connected but with limited and insufficient focus. Funding initiatives are below of what is necessary to achieve the goals considered relevant. In the absence of a global governance of energy due to the lack of sufficient cooperation and collaboration of international actors to efficiently mitigate the energy crisis. The challenge is to alter from high to low carbon economy, and the shift from fossil fuels to renewable energy will contribute substantially to this transition. It concludes the necessity of cooperation between organizations such as IRENA and ONU's programme Sustainable Energy for All, which have

the potential to become catalysts for a new trend.

Keywords: Energy – global governance – intergovernmental organizations – natural resources — sustainability

1. INTRODUCTION

On a global scale, the energy sector involves multiple actors, such as States, transnational corporations, international organizations, nongovernmental organizations, and others to be not exhaustive.

The present study is focused on the evaluation of the effectiveness of a global energy governance delimiting as subject intergovernmental organizations (IGOs), such as the World Trade Organization (WTO), Energy Charter Treaty (ECT), Group of Eight (G8), Group of Twenty (G20), International Energy Forum (IEF), International Energy Agency (IEA) and Organization of the Petroleum Exporting Countries (OPEC), which are somehow connected with the theme of energy. This choice is justified by the fact that these organizations operate in a broader perspective than States, for example, and are not seeking merely economic activity, such as transnational companies, emerging the possibility they can issue rules to minimize or resolve emerging issues in the current scenario, which deserve appropriate global treatment.

This research starts from the perspective of identification of an energy crisis sector. The most relevant indicators of an energy crisis were considered to influence the energy framework, such as: (i) tensions between actors, caused by conflicts of interest involving the field of energy geopolitics, (ii) depletion of natural resources, essential for power generation, (iii) energy security, fundament for the society maintenance; (iv) climate change mitigation, (v) difficulty on energy access and (vi) investments security.

Unfortunately, the perspective of a regulation or a single overall States agreement to solve or address these issues is utopic, due to the disinterest to create a global supranational organization, and given the current international scenario, which can be demonstrated by lack of consensus on important issues, for example, those discussed in the WTO Doha Round.

Accordingly, to facilitate a solution to this deadlock, this paper inquires whether global governance of energy, led by IGOs connected with the energy issue, could become the appropriate forum to deal with those elements more seriously and efficiently. These organizations, sources of rules, can and must be connected in order to assess whether there is effectiveness in decision-making or not, or whether these organizations are failing in implementing policies necessities to

alleviate or solve the energy crisis and promote low carbon economic activity.

Lastly, this paper seeks to briefly identify new perspectives from an eventual global energy governance from the UN program Sustainable Energy for All (SE4All), the International Renewable Energy Agency (IRENA) and how it would be possible to implement a Plurilateral Agreement in the WTO. The challenge is to alter from high to low carbon economy, which the shift from fossil fuels to renewable energy will contribute substantially to this transition.

2. BRIEF ANALYSIS OF THE ENERGY CRISIS INDICATORS

Geopolitics considers the territorial aspect essential for the growth of a nation, which stretching its borders demonstrates its expansion. Natural energy resources are elements which increase the power of a nation and its domain became a relentless ambition.¹

The growing interest in natural resources has increased its extraction volume to meet demand. It has been observed regarding coal (up to half of the twentieth century), oil and gas (from the second half of the twentieth century onwards). Studies have shown that the growth of production (extraction) reaches a peak and then tends to decline, which was confirmed with coal in England, and with the peak oil in the U.S. in the 1970s.²³

The theory from the book «The Limits to Growth» advocates that the uncontrolled economic growth would lead to the depletion of natural resources, not just energy ones.⁴ Eventual exhaustion of resources explicitly violates one of the most important principles of environmental law, which is to preserve the environment for future generations.

By pressure from developing countries, there was a strong call for adoption of the Resolution n.1803/1962, which granted total control (propriety) of resources located in their territories. However, foreign investment was significantly reduced, due to the lack of legal security in case of expropriation or nationalization by the host countries, emerging a race to bilateral investment treaties (BITs).⁵

1 MORGENTHAU, Hans. **A política entre as nações**. Brasília: UNB, 2003.

2 HUBBERT, M. K., *Nuclear Energy and the Fossil Fuels*, Washington DC: American Petroleum Institute, 1956. In: WTO World Trade Report 2013. p. 173.

3 BARDI, Ugo. **The Limits to Growth Revisited**. New York: Springer, 2011. p. 7.

4 MEADOWS, Donella; RANDERS, Jorgen; MEADOWS, Dennis. **Limits to Growth: the 30-year update**. London: Earthscan, 2004.

5 GUZMAN, Andrew T.. Why LDCs sign treaties that hurt them: explaining the popularity of bilateral investment treaties. *Virginia Journal of International Law*, v.38:639, January, p. 639–688, 1998.

Energy security is a crucial factor for the States autonomy due to their energy dependence to keep its economy. And this reliance between countries is definitely a vulnerability, which can be mitigated by access to energy resources. Thus, external policies have become the strategic core of the countries in this type of endeavor.

Since the 1990s, other factors have emerged. After the Soviet Union disintegration, globalization has engulfed the scene, with the multiplication of financial and commercial transactions. There was a significant development in the energy sector, due to the large investments in oil and gas countries producers, mostly, but there was insufficient political or interest in investing in energy access for all.

Moreover, it is believed climate change is increasing earth temperature, affecting all. Fossil fuels, due to their use, are major emission contributors.

Regarding the investment sector, some parameters must be analyzed as for whether the legal framework is favorable, whether bilateral treaty between countries exists, and if institutions are strong. It must be checked if such investments are sustainable, with low emissions, and if they bring development and energy security.

Thus, from this energy crisis scenario, some points emerge: how does the IGOs act? Is there today an effective global energy governance (GEG)? If not, is it feasible to implement a GEG? The following will discuss these points emphasizing if a global governance could deal with the energy crisis indicators.

3. GLOBAL GOVERNANCE CONCEPT

There are two insights related to the global governance problem. The first is governance should be pursued increasing the system, based on existing regimes and institutions, since do not affect the State as a key actor in international relations. On the other hand, some claim the known State is an archaic institution in the 21st century, unable to deliver the levels of governance required for a world facing environmental problems, endemic poverty, resource depletion, and increasing population.⁶

A more precise governance concept is issued by Rosenau, who distinguishes government from governance, the last broader than the first one since it can also encompass a government and other actors. But the main difference is coercion. While the government requires police power to enforce the law, governance is based solely on the expectation of the fulfillment of rules, informally, based on the will and interest. Thus, it is assumed in this study that global governance must

⁶ GRIFFITHS; CALLAGHAN, *International relations: the key concepts*. p. 124-126.

be understood as global management rather than a global government.⁷

The concept of global governance is also formulated by Karns and Mingst, which defined as acts of coordination at many levels, using existing pieces linked to activities, rules and mechanisms, with the absence of a hierarchical structure of authority and without a central global government. And one of these pieces are the intergovernmental organizations.⁸

Another point of view is elaborated by Pascal Lamy, who states that still remains an international order based on the principle of national sovereignty, and global governance could only result from the action of sovereign states: *In other words, that global governance is the globalization of local governance.*⁹

4. THE CURRENT GLOBAL ENERGY TREATMENT

It is possible to identify today a wide gamma of institutions acting on many levels (bilateral, regional, multilateral), each with its specific members. The several initiatives form a constellation of issues related to energy, such as trade, investment, environment, with no coordination between related rules, leading to a system of global energy governance highly fragmented.¹⁰

The governance regime (considering its feeble existence) have been failing to coordinate the elements of the energy economy, including energy security needs. One solution is to promote cooperation between actors, especially IGOs, to implement a more connected and cohesive model to address the weaknesses and vulnerabilities of current energy governance.

Given this scenario, five obstructive factors to an effective global energy governance are listed below:¹¹

- a) The lack of cohesion of the energy governance system. It means the system exists indirectly, as an aggregation of several organizations and processes related to energy economy. The international community has no interest in dealing with the global energy economy as a cohesive entity, which facilitates

7 ROSENAU, James N.; CZEMPIEL, Ernst-Otto, **Governance without government: order and change in world politics**, New York: Cambridge University Press, 1992. p. 4.

8 KARNs, Margaret P.; MINGST, Karen A. **International organizations: the politics and processes of global governance**. 2 ed. Boulder: Lynne Rienner Publishers, 2010. p. 4.

9 LAMY, Pascal, Global Governance: From Theory to Practice, **Journal of International Economic Law**, v. 15, n. 3, p. 721–728, 2012. p. 721.

10 LEAL-ARCAS, Rafael; FILIS, Andrew, The fragmented governance of the global energy economy: a legal-institutional analysis, **The Journal of World Energy Law & Business**, 2013. p. 3.

11 LEAL-ARCAS; FILIS, op. cit., p. 5-7.

individual actions and allows “no accountability” to other actors.

b) The fragmentation of GEG regime, in which many actors operates in several layers, often with contradictory behaviors, with separate interests, and sparse foci.

c) The plurality of actors, such as States, IGOs, NGOs, TNCs, affect the overall energy economy. As a result, a variety of interests, including conflicts at the national, regional and international levels, caused by instability and inconsistency of standards arises. This plurality of international organizations, as well as the diversity and variety of sophisticated energy interests illustrate the complexity and fragmented global governance of energy.

d) The diversity of energy sources, with a strong reliance on traditional sources like coal, oil and natural gas, which are exhaustible, generates greater competition and obstructs energy stability. The trend of an establishment of a transition to an energy matrix with renewable sources is a way to reduce dependence on fossil fuels and increase security on energy supply.

e) The authority of States undermines the possibility of further evolution of GEG. The international community is a set of distinct actors in which sovereign States have different interests, with power levels and disproportionate economic power. Possible international cooperation arises when the interests of the most influential States sufficiently match. In certain parts of the global energy economy, such as trade (WTO and ECT), there is a greater consensus of interests which resulted in satisfactory levels of global governance, in others there is not, like environment, exploration, extraction, production, and allocation of energy resources.

Thus, it appears that, unfortunately, does not exist today a cohesive unit for GEG. However, it is believed that a governance on the energy sector is essential, which feasibility of implementation will be evaluated next.

5. FEASIBILITY OF A GLOBAL ENERGY GOVERNANCE IMPLEMENTATION

IGOs act differently on different aspects, and it is interesting to check how open they are to a more cohesive governance on the global energy economy and if their actions lead to greater global energy security.¹² In general, IGOs and processes related to energy can affect global energy security as the following manners:

¹² LEAL-ARCAS; FILIS, op. cit., p. 19.

a) Negative way, by creating obstacles to quantitative restrictions on production, or obstructing relationships with institutions related with the promotion of the crisis indicators, such as security, energy access, investment, which can compromise the global energy security, for example, the OPEC.

b) Positive way, by the creation of precautionary measures, such as emergency oil reserve by IEA, removing the effects of interruptions, ensuring energy security and reducing price volatility. Another positive development is the cooperation between producing and consuming countries by IEF, in which 89 countries come together to promote global energy security through sharing and analysis of data. Another example of positive global cooperation is the joint report¹³ of the IEA, OPEC, OECD and World Bank on fossil fuels and other energy subsidies, demonstrating the importance of the subject in the production and consumption.

c) Ambiguous way, by aspects which can be considered both support and undermine global energy security. For example, the WTO acts positively simplifying the energy trading, but on the other hand, acts negatively facilitating the allocation of energy resources to large buyers, who can oligopolize and harm global energy security.¹⁴

To reach a GEG, positive conducts must be adopted by IGOs and other actors, precisely, to solve or mitigate the energy crisis indicators.

About international investments, the regime is based today on bilateral treaties (BITs) and on the ECT, which resembles a BIT. The downside is the limitation of the scope of protection: BITs are limited by two contractors and the ECT address only to its members. However, due to the large quantity of instruments, it can be affirmed the existence of an international investment regime, even without forming a single multilateral agreement. One difference between them is specificity: BITs address investments in a generic way, no matter the industry sector; whereas the ECT nature's investment approach is the energy sector.

Natural resources are energy key elements and are treated as assets owned by States, following the principle of State sovereignty, provided by UN Resolution n.1803/1962. For effective global governance, States necessarily have to participate more actively to improve the extraction, production and distribution organization of these resources.

It is not the purpose of this paper defend that natural energy

13 OCDE. Joint report by IEA, OPEC, OECD and World Bank on fossil-fuel and other energy subsidies: An update of the G20 Pittsburgh and Toronto Commitments. Available at: <http://www.oecd.org/env/49090716.pdf>. Access on 08/11/2013.

14 LEAL-ARCAS; FILIS, op. cit., p. 19.

resources should escape of the sovereign State power, but indeed to assert that more dialogue is needed on how to prevent depletion of these resources, or how to use them more efficiently, without wasting. The theory of the research «Limits to Growth» hardly will prevail in developing countries, claiming for development, as well in developed countries, claiming financial difficulties. But the international community could make efforts to equalize this growth sustainably.

Energy plays a big role in GHG emissions. The climate change is a growing concern due to the time factor. This is explained by the fact that many years will be needed to reverse the global warming, with a substantial reduction of greenhouse gases (GHG) emissions in the atmosphere. The problem is that it would be necessary emit GHGs at a lower amount than the environment can absorb, in order to quantitatively reduce the concentration of these gases, without jeopardizing the livelihood of society, which generally consumes more than needs.

Some organizations have been taking initiatives to fund projects to mitigate emissions, such as the G8 and G20. However, few have been done effectively in this direction. Renewable energy is a perfect outlet to replace part of the fossil fuels, but needs more regulation, especially in developing countries.

The energy access indicator is rarely considered by IGOs and by its members. Despite the abundance of energy resources, as well as the generation of electricity, it does not exist a joint international politic to ensure and provide electricity in remote and urban areas for 1.3 billion people energy deprived and other 2 billion who still use biomass for domestic purposes (cooking), harming families health.

A GEG could emerge from a core, which would centralize decisions, or at least on the first moment, the discussions involving all elements related to the energy issue. It doesn't mean to create another international organization specifically for each indicator, but rather to use or manage existing ones, whether expanding the scope of acting, whether creating joint actions between them, as was done between the IEF and the G20 in preparing a data report.

There is no international regulation to govern exclusively global trade in energy. In this context, the WTO came to occupy a legislative vacuum, applied to all goods and services. Global governance could coordinate energy trade and other schemes, and might address trade aspects of several Preferential Trade Agreements (PTAs), Free Trade and Regional Agreements (FTAs/RTAs) such as North-American Free Trade Area (NAFTA) and the Association of Southeast Asian Nations (ASEAN), and might consider specific agreements on energy, as the ECT. None of these agreements address exclusively global energy trade (except ECT). Rather, the interaction between them could provide a degree of global governance on energy trade, limited to the scope of

each regime.¹⁵

Despite being a limited organization considering the member's coverage and its scope, we see the ECT, which deals with the promotion of trade interests and investment in the energy industries of its members, as a trend to become the adequate forum for discussion and decisions. The argument for this assert, initially, is due to the specificity of the agreement addressing energy framework.

Second, because of the ECT address investment rules, which can be the core to mitigate or (being optimistic) to solve issues involving energy access, energy security, climate change, reduction of resource scarcity, or acting on diversifying energy generation sources, focusing on renewable energy and efficiency.

Thirdly, by covering specific energy provisions, as trade in energy goods, based on GATT/94, adopted by most of the States; transit; environmental protection and efficiency, which make this IGO quite specific and suitable for any governance arrangement. Finally, I emphasize that governance must be established by the presence of qualified staff, and it has been proved ECT has a strong secretariat and structure. The downside is that the ECT regime is limited to its members, meaning it is not a universal regime.

Despite few joint actions, there is a lack of cohesion between organizations, emerging a disorderly on international law, reflected by this lack of cooperation.¹⁶ One question was raised: how bind actors to any commitments made in the context of global governance? Today, global energy governance is merely a constitution of sparse rules, with little cooperation, whose connection between levels is insufficient. This leads to the fact that actors continue to engage in bilateral, regional and multilateral relations. This type of approach is called by "bottom-up", or upwards.

Finally, energy security is a strategic topic directing and justifying many actions in States foreign policy. This is the basis for the relationship between energy producers and consumers. However, it lacks a joint policy. Except for the IEA, composed of OECD members, there is no energy security collective goal, as it stands with the Human Rights under the UN Charter.

It can be identified the task of achieving an energy crisis solution through GEG is not simple, emerging the necessity to cooperate and coordinate several actors and numerous regimes, which can be overlapped or partially complemented between them. It seems there is no interest to promote universal energy security, but only to ensure local supplies. Perhaps the overcoming of egoism, individualism and competitiveness among States is the great challenge for the GEG

¹⁵ LEAL-ARCAS; FILIS, *op. cit.*, p. 20.

¹⁶ LEAL-ARCAS; FILIS, *op. cit.*, p. 53-55.

establishment.

6. PERSPECTIVES

At the launch of SE4All in 2011, the UN intention was to catalyze actions around three objectives to be achieved by 2030:

- Grant universal access to modern energy services;
- Duplicate the global improvement rate in energy efficiency;
- Doubling the share of renewable energy in the global energy mix.¹⁷

The basis for the program is to consider energy as a common thread between economic growth, increased social equity, and an environment that allows world prosperity. Access to power is a prerequisite for achieving many development goals. Completing the three objectives above, it will be possible to achieve sustainable development. The UN took into account the need to establish favorable conditions for private investment because the market requires a legal and security policies that encourage sustainable energy technologies.

The IRENA, founded in 2009, in Germany, is based on the principle of equality, respecting the member sovereignty and jurisdiction, and was designed based on the opportunities and positive effects renewable energy causes on energy security and price volatility. Moreover, new technologies in power generation can stimulate sustainable development, job creation and reduce GHG emissions, leading to a slow and gradual transition to a low carbon economy.¹⁸

The IRENA is a power-oriented organization, and can be regarded with great potential for the establishment of a global energy governance, first, by the probability of increasing share of renewable energy generation in the global energy mix in the coming years, and second, by the extent of the agreement, with 163 members, making it truly global.

From another perspective, the possibility of a specific energy agreement at the WTO deserves some analysis when it comes to international trade.

Today, the WTO system does not provide a sufficient energy treatment. WTO rules lack specificity, treating energy trade equally to general goods and services. One solution would be to discuss the topic in the Doha Round, but the consensus of all members to approve any

17 ONU. SE4All Global Action Agenda. Available at: <http://sustainableenergyforall.org/images/content/SEFA-ActionAgenda.pdf>. Access on 13/11/2013.

18 IRENA. Statute. Available at: http://www.irena.org/documents/uploadDocuments/Statute/IRENA_FC_Statute_signed_in_Bonn_26_01_2009_incl_declaration_on_further_authentic_versions.pdf. Access on 13/11/2013.

contract amendment is a huge obstacle and not feasible in these days.¹⁹

Another possibility would be to develop a plurilateral trade agreement, which could be part of the WTO treaty to be added on Annex 4 of the WTO agreement. According to article II.3 of the WTO agreement, such plurilateral agreements are part of the WTO agreement only to members who have accepted. However, the plurilateral agreements do not create either obligations or rights for not joined members.²⁰

Thus, the plurilateral agreements are positive in a sense all other WTO members can adhere them at any time. And it provides a more flexible organization and a more effective forum to deal with themes such as sustainable energy, transit, intellectual property rights and energy trade-related.²¹ Still, WTO members seem to have no interest in addressing issues related to energy, nor with a transition to a low carbon economy.

7. CONCLUSION

First, it must be clarified that the purpose to establish a GEG through IGOs is just one option to solve or mitigate the crisis indicators. The IGOs and their member's interests is a condition for its implementation. Second, the GEG central goal must be the transition from high to low carbon economy, considered the solution for the energy crisis indicators.

One proposal is to place the investment regime as the core of the normative framework for the energy sector. A framework similar to the ECT acting on a world scale would cause a greater flow of investments in energy infrastructure and promote electricity generation from renewable sources.

From there, the effects are multiple. The higher electricity generation share through renewable energy, the lower will be GHG emissions. It will also postpone natural energy resources depletion and will improve energy access, especially in remote regions. With new technologies, job creation increases. Still, the diversity of sources increases energy security, reducing dependence on oil and natural gas.

The world calls for urgency, which has been ignored by actors who actually have power to change, as States and investors. And if States provide favorable regulatory environments for investors? That is the idea of the UN SE4All program, which has great potential to frame

19 BACCHUS, James. A Way Forward for the WTO. Available at <http://ictsd.org/downloads/2012/02/james-bacchus-a-way-forward-for-the-wto.pdf>. Acesso on 10/10/2013.

20 BASSANI, Matheus Linck. Um desafio na Organização Mundial do Comércio: viabilidade de um acordo plurilateral sobre energia. **Revista de Direito Internacional**, Brasília, v. 12, n. 2, 2014 p. 168-191.

21 Ibidem.

by its ambitious approach, but it always depends on the willingness of multiple actors. The objective of IRENA is noble and deserves to be encouraged, despite being limited only to renewables. Finally, the energy trade will lack of an Agreement in the WTO, at least while members do not establish a consensus.

Therefore, it is considered possible to establish a global energy governance in many levels, not as the only existing solution, but as a mean to manage, enhance and cooperate with society. However, it will depend on the international actor's evolution in order to wish effectively promote a supportive, cooperative environment around a common goal: shift from high to low carbon energy economy.

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