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International Cooperation for Sustainability- Option or Necessity

The case of the integrated climate and energy policy adopted by the European Council
in March 2007

**Thesis submitted in order to obtain the degree of Master of Arts in
Governance, Leadership and Democracy Studies**

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ABSTRACT

We are living historical times, and that is in part not due to the best of reasons.

In this complex Era, we are facing a critical stage: our planet's capacities to support our ongoing development have reached a rupture point.

A concerted and precise take of action is mandatory in order to achieve a sustainable development, or otherwise, the risk of losing both our planet and our future perspectives is not only real, as well as imminent.

Bearing this in mind, the aim of the present work is the analysis of international cooperation for sustainability. For this purpose, the case of the European Policy and its integrated climate and energy policy 2007 – 2020, was used as an attempt to analyse and ponder its goals, strengths and failures.

This work has followed a documental based analysis, focusing on several crucial authors on governance in world politics, such as Richard Falk and Anne-Marie Slaughter among others. Concurrently, it was taken into account the establishment of theoretical links between those and other authors along with the European Union's climate and energy official position.

It will present, without disregard for other works, that some of the main criticisms appointed to the Governance approach are based on its present structural limitations in conjunction with some of the faulty institutional examples found in today's contemporary international politics.

Taking in consideration all the references and sources, this work was able to conclude that at the present time Environmental Governance is not merely a possible and reasonable path to world politics, but rather an essential part of its future.



In conclusion, the path towards environmental sustainability is not an easy or quick one. It's a full-on commitment between all the interested parts: us, our children and our children's children. However, this is a commitment we must assume, because ready or not, the present is now. And the future of the planet depends on how we act at this very moment.



***“We do not inherit the Earth from our antecessors,
We simply borrow it from our children.”***

David Brower, Founder of Earth Island Institute



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Introduction

The history of men and politics, namely of international politics, has always been a complex one. The always hard to find equilibrium between ‘the State’s national interest’ and the ‘international affairs place and duty of each state’, has been the subject on the main focus of both academic and political debate for many decades.

Currently in the 21st century, the level of development achieved by man-created technologies has been out-growing itself each year. This fact has been, without a doubt, helping to manage Mankind’s place on planet Earth. This however, presents an extremely delicate and difficult balance. The balance between our planet’s natural resources and wild life, and us, Mankind, is becoming more difficult, and simultaneously more essential.

Having in account our academic background with the present MA programme in ‘Governance, Leadership and Democracy Studies’, we came to realize that these three topics can several times, be perceived as deeply intertwined with each other. In a political world where democracy tends to be a, more than would be desirable, take for granted political achievement, the need for a global view and action on global issues (such as terrorism, environmental sustainability, or energy resources) is becoming a more and more pressing matter. And this is the moment where ‘Governance’ and more so, the ‘Global Governance’ perspective may present itself as the turning point in the way these issues are dealt with.

The theme of International cooperation for sustainability is not a new item in the agenda. However, the way we rationalize and interpret that same theme should be renewed.

In this context, the need to study the “Global Governance” theoretical approach became clearer to us. Regarding the environmental focus of this theory, we advocate that the global dimension of the environmental problem we are facing turns it into one of the most relevant and urgent study subjects of our time.

As IR academics, we perceive that the present climate change gives us an opportunity to enhance international cooperation between states and other relevant actors, in order to attempt to find a useful and enduring solution for a matter that will, and is already affecting all of us.

Environmental issues are more evident and urgent than ever, and yet no state or nation has the individual capacity to solve them. Perhaps the better way to present an efficient and long-lasting solution for these issues, is in fact, addressing them under the “Global Governance” perspective.

Bearing this in mind, several different theories and approaches to IR and to world politics have come to light, along the modern history period. The ‘Global Governance’ approach to international relations is one of those approaches and it’s fairly recent.¹ Despite its recent character, we can see that throughout the international politics history, there were many occasions in which the fundamental or similar ideas behind the GG approach could be found.

It is important to present a first brief definition of ‘Governance’, bearing in mind that there are several accepted and acknowledged definitions to this concept. We have chosen the following: *“Governance refers to the exercise of political and administrative authority at all levels to manage a country’s affairs. It comprises the mechanisms,*

¹ We can remount the formal origins of a GG (global governance) approach to the foundation of the UN, even though its predecessor –the Society of Nations- was a first attempt to the concept;

processes and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences.¹ Specific reference is made to democratic governance as “a process of creating and sustaining an environment for inclusive and responsive political processes and settlements.”²

With the present thesis, we intend to establish-if possible- a relation between the current ‘European Union’s environmental sustainability policy’ and the Global Governance approach, ultimately trying to demonstrate that, at least at the environmental sustainability level, the EU is currently aiming to act from a GG approach.

To do so, we depart from the following focal question : *‘To what extent can the current comprehensive integrated climate and energy policy adopted by the European Council in March 2007, be perceived as an example of International Cooperation for Sustainability in the present international world, and be considered a reasonable proof of the feasibility of ‘Environmental Governance’ as an essential component for the future of world politics?’*

We are currently living in an international setting with a growing network of complexity with new pressing international issues and actors³, which forces today’s world leaders and social sciences academics, to quickly assimilate the changes that are being brought to our present. Europe and the European Union have always taken a

² The definition was presented integrally by the United Nations Development Programme, in its programme entitled *UN System Task Team on the Post-2015 UN Development Agenda – Governance and Development*, available online at: http://www.un.org/millenniumgoals/pdf/Think%20Pieces/7_governance.pdf;

³ The international setting today is becoming highly complex, and the rate of change has been alarmingly fast: from the shifting of the status-quo and the emergency of new state actors that bring new challenges at every level (like China, Iran or Russia); to the emergency of new threats that present a global- and not merely regional risk- like the case of ISIL in the Middle East; until the case of the growing refugees crisis in Europe.

major role in the world's international politics stage, and in current times that is no exception.

Our inclination towards this focal question was a direct result of this fact.

With the rise of new complex issues –like the Russian annexation of Crimea's, or the rise of the Islamic extremist groups in the Middle East and North Africa- the EU has been trying, unsuccessfully, to solve these problems. Due of the cause-effect cycle in which our current societies live today, consequences of these problems have given rise to new issues –like the present refugees crisis- that require EU's action to tackle and solve it as soon as possible.

Unfortunately, given the constant shifting complexity of today's world, these are not easily-solved issues and because of their 'human and security immediate' dimension, they have been placed at the EU's top priorities. This leads to the growing importance of this thesis main field of analysis: environmental sustainability. Even though we are conscious that environmental matters are not a recent topic and that the majority of main actors in today's international relations delegate's these topics to a secondary priority rank, this thesis aims to demonstrate , that the matters of environmental sustainability are now, more pressing than ever. And therefore, the analysis of the EU's way to tackle it will be the main focus.

With this purpose, we have established the three following answer hypotheses, which will be properly addressed in the third and final chapter of this thesis:

a)- 'Environmental Governance' as an essential and viable component for the future of world politics;



b)- The impossibility of ‘Environmental Governance’ as an essential and viable component for the future of world politics;

c)- ‘Environmental Governance’ as an partially necessary component for the future of world politics.

The following thesis will follow a strictly documental analysis methodological basis with, when and if necessary, the proper analysis and comment of empirical statistical data that may help to better illustrate relevant points.

This documental analysis was based on several different sources, although there will be outlined the importance of three specific works which were essential to our research, namely: the European Parliament’s document entitled: ‘DECISION No .../2013/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 November 2013 on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet", ‘*On Humane Governance- Toward Global Governance*’, 1995, by Richard Falk; and ‘*A New World Order*’, 2005, by Anne-Marie Slaughter.

Within this framework, a brief organization of the chapters of this thesis is presented below.

In the first chapter we will attempt to briefly define the formal origins of the Global Governance theory. Analysing a selection of the relevant state-of-the art available for this theme while presenting a critical analysis. Still in this first chapter, we will analyse some perspectives that oppose the GG approach, which leads lastly to a brief clarification of the ‘Environmental Governance’ approach. Furthermore, we will also analyse and define the subsequent theory that has emerged from the GG approach,



and that we believe is being the ‘compass’ for the current EU’s approach to the sustainability issues.

In the second chapter of this thesis we will provide a more insightful analysis to the specified EU policy chosen by us to be the practical analysis part of this thesis. In it, we will attempt to provide a critical insight on how this EU policy actually works, as well as, through the EU’s own documents, try to present the Union’s vision and main sustainability guidelines and objectives for its member-states until 2020. This chapter will be finalized by the brief but relevant presentation of a specific subject that was targeted by this EU policy- the ‘Green Energy’- in which we will present and discuss some empirical data presented in EU’s official documents, thus giving us feasible comparative data for a better understanding of this issue.

In the third and final chapter of this thesis, we will briefly explore the main ‘for’ and ‘against’ arguments towards the Environmental Governance approach. We then intend to expose the three answer hypotheses that we have formulated regarding this thesis, and lastly present the hypothesis which we have concluded the most coherent after the elaboration of this thesis.

Finally we shall then present our main conclusions regarding this thesis.



1. Global Governance - the overlooked theory

With the following chapter we will attempt to briefly analyse and demonstrate the ideological and formal origins of the Global Governance approach to international relations.

1.1 – Global Governance- Origin and Meaning

The simple definition of ‘Global Governance’ (GG) has been a very controversial issue for the past few decades. The relevance of actors beyond the state-centred widely spread theory, as well as the generalized perception of the impact of the globalization phenomenon in today’s world politics, were two of the main factors which led to the appearance of the GG theory.

In a first approach, it is relevant to address the historical evolution of the theoretical foundations of GG. We can start by saying that the ‘origins’ of the ‘global governance’ approach are appointed by several IR scholars, in the nineteenth- century, namely through the “European Concert”.⁴ Many scholars believe this was indeed the first moment in the international relations history, in which it is perfectly visible the commitment to joint action between several states without it being an effect of coercion or threat by others.⁵ The European states that decided to join forces and form the European Concert did so because they had a higher goal which tended to be common to all of them: the need to prevent unlimited imperialistic ambitions to rise again within

⁴ The European Concert was created in 1815, with the signing of the Paris Treaty- and we can say the creation of the Concert came as a consequence of the Vienna Congress that started in 1814, putting an end to war in France and to the Napoleonic expansion ambitions- thus focusing on the of ‘balance of power’ within Europe.

⁵, MITZEN, Jennifer, *Power in Concert: The Nineteenth-Century Origins of Global Governance*, University of Chicago Press, 2013, Chicago;

the main European powers of the time (like it had happened with Napoleon in France).⁶ Still related to this fact, it is relevant to refer that the 19th century was indeed the turning point in the ways of world politics: the arise of new challenges brought by larger and broader communication, commerce and the evolution of science (regarding the technological advances, per example), led the societies and world leaders of the time to see themselves complied to evolve. Consequently, this led to a change in their perspectives: they soon began to understand the benefits of expanding an international horizontal cooperation setting⁷.

Later on IR history, we can perceive the importance of the understanding of the main theoretical approaches and how their opposition to each other, led to the appearance of a third one, in which GG is included.

The GG approach focuses itself mainly in 3 key-points:

- a) International settings between states should be defined by supra-state cooperation and not by demonstrations of power or fear;⁸
- b) All states share common problems, and for that same reason, some domestic or intern state objectives should also be external/ foreign policy objectives;⁹

⁶ MENDES, Nuno Canas, *História e Conjuntura nas Relações Internacionais*, ISCSP, Lisboa, 2007, pages 48-56;

⁷ FALK, Richard, *On Humane Governance- Toward a New Global Politics*, a report to World Order Models Project, Pennsylvania State University Press, USA, 1995;

⁸ Some of the best examples' for this type of cooperation are the United Nations Organization and, on a different level, the European Union.

⁹ This is extremely visible for example with the approach that the UN has been taking on several matters, like the case of Boko Haram's ascension in north of Africa – the UN has been trying to make states realize that the rise of ideological extremist like Boko Haram, is not a problem exclusive to the states the group is currently attacking on, it is a matter of concern for the whole world, regardless their strategic or economic interests, because the result of such groups actions affect the whole world. Furthermore on this matter, the UN has been trying to concert efforts from all states to deal with this crisis. This is without a doubt within the 'Global Governance' approach to current International Relations.

c) Some problems or issues, given their international dimension, can only be properly solved through a ‘global governance’ approach, otherwise, the solutions found for that issues or problems may only be temporary;¹⁰

This last point –*‘some problems or issues, given their international dimension, can only be properly solved through a ‘global governance’ approach, otherwise, the solutions found for that issues or problems may only be temporary’* - is the actual starting point to the establishment of the ‘Environmental Governance’ approach. The ‘Environmental Governance’ approach starts of from the assumption that all the environmental problems we are experiencing in our life time, were and are mainly caused by us humans.¹¹

Furthermore, it is relevant to take a brief view of one of the main theories that have influenced the GG perspective, namely the functionalism and the neo-functionalism theories. In this functionalist approach, the main influence to GG’s approach, was the approach of David Mitrany and his work. Mitrany’s work was developed mostly during the inter-war period¹², and due to that historical setting ‘functionalism’ was deeply rooted in notions like the ‘obsolescence of the state as the key actor in IR’, and the ‘rising importance of non-governmental state association’¹³. Mitrany’s main point of view is that the more the international world is fragmented and

¹⁰ In this point we start getting into the ‘Environmental Governance’ perspective. This is the starting point of this approach.

¹¹ According to ‘Ecologism’ ideology, the planet has never experienced an unbalance of such bigger proportions before the human species started to develop its technology. This a much more strict intellectual reflection than the ‘Environmental Governance’ approach, because ‘Ecologism’ intellectuals reject all types of human development and technology if in anyway affects or disturbs Nature. ‘Ecologism’ defenders often use non-peaceful and media flares to draw attention to their perspectives.

¹² Mitrany’s theory begins to take shape in the ending of 1920 and starts building up until 1933, when it arises with the term functionalism;

¹³ One of the key points in the ‘functionalist’ theory is its deep assumption that the state has been increasingly losing its lead role as main actor in modern international relations; by this however, they do not mean the state is no longer a relevant figure in IR, they simply mean that due to the development of the world politics and its intertwined phenomenon, the state is today highly influenced by several non-state actors (like international organizations, companies, ONG’s, etc).

divided (whether by conflicts or by partnerships) the more deepened the interdependence relations between states are. Consequently, the more interdependence relations tighten, the harder it is to resolve problems that usually arise given that same interdependence.

In his analysis, Mitrany goes even further and ultimately concludes that the aim should be the creation of a ‘durable and working international peace’, and for Mitrany, that could only be achieved through an institutionalized cooperation-oriented approach to a specific field. According to Mitrany, broader forms of cooperation between states, per example the European Economic Community, were not able to fulfil the requirements of functional cooperation¹⁴.

Following the legacy of Mitrany’s work several other authors developed new approaches to functionalism- Ernest Haas was one of them, and he forged the so called ‘neo-functionalism theory’. To start, the main differences between this ‘neo’ approach and the regular ‘functionalism’ approach are as follows:

a)- The first big difference is that in the ‘neo-functionalism’, Haas, has tried to complement the functionalist assumption that a ‘more peaceful international order, could be achieved through functional cooperation institutions’ with actual specific study cases¹⁵;

b)- the second difference lays in the fact that, like Mitrany before him, Haas also agreed that the ‘nation states system’ that was in place would gradually be substituted by a new political order –in this case a neo-functionalism based system. However, unlike Mitrany, Haas was interested in understanding and defining clear stages for this

¹⁴ More on this matter can be found in : MITRANY, David, *A Working Peace system*, 1966, in The Journal of Politics, vol.29 issue 03, August 1967;

¹⁵ Haas has studied in particular the case of integration within Western Europe;

transformation process, allowing a clearer view on how exactly technical cooperation between states in specific aspects, would eventually lead to political cooperation and then on to a ‘political community’¹⁶;

c)- the third and last main difference between the ‘neo’ and the classical ‘functionalism’ approach is the fact that Haas has developed a theoretical model for a successful integration. Haas brings to attention the importance of the creation of actions and strategies for pro-integration of the elites and of the activities of supranational bodies in order for the integration process to be successful¹⁷.

With his approach, Haas has in a certain way prepared the field for a clearer understanding of the EU’s GG approach to international politics today.

When analysing the European Union’s integration process over the last few decades, and in particular at the political level towards some global matters –like in the health or education areas- we can easily recognize some central guidelines or at least some traces of Haas’s neo-functionalism. Like Haas has shown with his approach, through the development of the integration process, increasingly more areas that were not contemplated in the beginning of that same process start their own process of integration¹⁸, there by simultaneously spreading and deepening the integration process between the states- and due to that, strengthening their interdependence relations.

Having this in account, we can perceive that the GG theory and its sub-sequent theories or approaches, were deeply influenced by the neo-functionalist theory. The

¹⁶ HAAS, Ernest B., *The Uniting of Europe: Political, Social, and Economic Forces, 1950-1957 (Contemporary European Politics and Society)*, Univ of Notre Dame; New edition edition 2004;

¹⁷ Haas considered supranational bodies, entities such as the high authorities of the European Coal and Steel Community (ECSC), as very significant forces in the integration process.

¹⁸ This is a phenomenon Haas has called “spillover effect”, and it simply consists in the spread of the successful integration process from the initial areas of cooperation, to other areas in which cooperation seemed harder to begin with;



integration process occupies a major place in both theories –neo-functionalism and GG- even though with subtle small changes.

In more recent times, since the 90's, a new vision towards the GG approach was brought to us by several authors. One of these authors was Richard Falk, mainly through his work *On Humane Governance- Toward a New Global Politics*, a report prepared for the World Order Models Project, in Pennsylvania State University Press 1995.

In his work the author brightly exposes his understanding of the modern world: a contemporary political world where the forces of modernism are being caught between a capital-driven globalization and a territorially rooted revival of tribalism and ultra-nationalism. With this approach the author demonstrates how the dwelling between basic ideas as sovereignty, democracy, and security, and the urging need for a deep revision of these same concepts, had put the modern world politics on a very serious and very hard point.

The author produces a critical focus on global structures that are producing new patterns of North/South and rich/poor domination, thus perpetuating the un-ending cycles of economic crisis and dependency. Furthermore, the author also underlines the dangerous pressures this type of political action and thinking, has been putting on the carrying resources of the planet, endangering the natural resources and creating several current social dimension problems (such as the crisis of famine in several under developed countries, or the fresh water scarcity we are currently walking towards).

The author then concludes that any hopeful response to these threatening developments would require the fundamental revision of the organizing conceptions of



political life, since these are being reshaped during this era of transition from a state-centric world of geopolitics to a more centrally guided world of geogovernance.

He contends that geogovernance will have adverse consequences for the human condition unless it can be mainly constructed by transnational democratic forces allied to a vision of humane governance.¹⁹

Another author that is worth considering is Anne-Marie Slaughter, particularly with her following works: *A New World Order*, from Princeton University Press, 2004, and the article “The Global Governance Crisis”, originally published in *The InterDependent*, The United Nations Association of the USA, 2006.

In her first work, *A New World Order*, the author attempted to show that against what some prominent academics were arguing – that the world was moving towards the end of the nation-state system, soon to be replaced by “the new medievalism,” in which territorial boundaries would blur, city-states would proliferate, and power would shift increasingly to networks of corporations and nongovernmental organizations. She argued that the state was not disappearing, but rather disaggregating amongst several different national, regional and local branches of government.²⁰

Slaughter defended that these ‘horizontal government networks’ were the real new world order, as opposed to the post 2nd World War order, based on the UN system. The flexibility and quickness of these informal networks granted more to its effectiveness, and with the increasing of the international conflicts rooted on domestic problems that later escalate to international problems (such as ethnicity or

¹⁹ For further on Falk’s argument we strongly suggest the following: Future of Global Governance 3- Prof Richard Falk, Law and Legitimacy Pt 2, York University, <https://www.youtube.com/watch?v=POTvcP02uqE> ;

²⁰ SLAUGHTER, Anne-Marie, *A New World Order*, Princeton University Press, USA, 2004, pages 2 to 35;

environmental policies), the solutions would have to start arising from these new governmental branches.

She then concludes that these informal networks (some with more legitimacy than others) cannot constitute actual global governance by themselves. They need to be part of the solution, but they are not the solution. She claims that in order to function, global governance should be a well-thought mix between the actual UN system and the government networks.²¹

As we may conclude, GG can in fact be perceived as the formal conceptualization of a set of very usual and ancient values, when dealing with matters of international politics. Although it has both supporters and critics, GG is- in our present time, more than ever- proving to be one of the most viable options when dealing with challenges that require global action to be properly undertake. We are not affirming however, that this is easy to achieve. On the contrary, the more successful the GG practice is, the bigger the challenges it will have to face²² and to try to overcome.

What the GG approach actually brings of new to IR, is that in today's complex network of state and non-state actors relations within the frame of international politics, GG comes forward as the one theory in which the key is not to 'rule over' or 'gain power over', the key is actually to strengthen the relations between every and each actor of international politics with the final aim of tackling hard-solution global problems. While at the same time, due to that intra-connection between the several actors, to allow that

²¹ For further Reading on this matter we suggest the following: "The Global Governance Crisis", originally published in *The InterDependent*, The United Nations Association of the USA, 2006, available at: <https://www.princeton.edu/~slaughtr/Articles/InterDependent.pdf> ;

²² One of the biggest reserves regarding the GG approach, is when dealing with any matters that may involve directly the dogmatic formulation of security or sovereignty of the State;



each one of them is able to develop and achieve a new place in an international and more balanced status-quo.²³

In this context of ‘Global Governance’, and more specifically of ‘Environmental Governance’, the states are presented as indispensable, however, for all of it to come together and actually having a chance to succeed, the individuals are also essential. The individual dimension and the macro or state dimensions must be in tune in order for the GG approach to succeed.

²³ We would like to note that even though it was not outlined above, we also had in account the work developed by John Ikenberry regarding this matter, in particular : *The Quest for Global Governance*, 2014, article available at: <http://www.currenthistory.com/Article.php?ID=1112>;
And, “The Global Governance Crisis”, originally published in *The InterDependent*, The United Nations Association of the USA, 2006, available at: <https://www.princeton.edu/~slaughtr/Articles/InterDependent.pdf> ;

1.2 – What the critics say

Given the always deeply complex and shifting international politics field and the unique characteristics of the GG approach towards it, it has become clear that several criticisms to this approach would arise. In the following chapter we intend to briefly demonstrate some of these criticisms.

For start, one of the main critics pointed to the GG approach to international relations, is related with the clear definition of the concept's meaning itself²⁴. The concept in itself is probable to misguide – although the concept of 'governance' is usually interpreted as what the decision-makers, administrators, or steering committees do through their organizations activities. This basically shows that the act of 'governance' is in fact, the legal and agreed framework in which organizations, per example, seek to develop their functions in a larger action scope. This can be understood more easily with the following example: the WHO (World Health Organization) is a clear example of the use of GG approach to international relations today. With a total amount of 194 member-states, this international organization seeks to create both formal and informal guidelines and agreements within its members in order to find viable solutions to global problems- in this case at the health level- such as disease epidemics, the lack of vaccination plans and even control of infectious diseases spread.

Following this line of thought, the critics that criticise the GG concept in itself, argue that the name 'global governance' implies the creation of formal and structured

²⁴ Several pro-GG approach authors were criticised due to the ambiguity of the 'global governance' definition. In cases like in James N. Rosenau's work the 'global governance' spectrum of action and definition is far more broader, than in the case of the works of some other scholars, like Robert Cox or Stephen Gill- according to their interpretation, the GG approach is the one that clearly shapes the bigger picture, namely global finances and global politics;

legal frameworks for state and non-state actions in a global –or worldwide scale- and they claim that is simply unreachable. They visualize GG as an attempt to formalize international law and thus, create formal and legal mechanisms that allow the penalization of those who do not follow ‘the GG rules’. Like it has been in the case of international law, this interpretation of the GG approach is seen by these critics as a real threat to state sovereignty, and because of that, strongly opposed.

Several other critics claim that the GG approach was created merely to support the ‘neo-liberal ideology of globalization’²⁵. This critical approach towards the GG perspective, as come forward mostly in the 20th century, namely in the early 1990’s.

Clearly having a very strong ideological connection with the Marxist theory²⁶, these critics mainly claim that the GG approach is –or was- in fact a highly authoritarian well-planned leading strategy, designed by the main world powers (in this case mainly the USA and the EU), in order to subtly convince the remaining states to ‘pursue a global policy’ in certain matters. Regarding health, for example, the critics claim that this GG approach has indeed diminished the possibilities of development for smaller, not so powerful states.

Although slightly disregarded, this criticism has taken new strength in recent events: the recent Ebola outbreak²⁷, somehow helped revive the GG approach by the UN specialized agencies –in this case the World Health Organization- which were

²⁵ Several authors claim that the globalization is not a natural phenomenon that has developed due to the human’s society evolution over the times; according to them, globalization is merely a consequence of the neo-liberal ideology and politics, in which capitalism and free-markets play a leading role. Following this line of thought, these authors present the GG approach to IR as the mechanism developed by the neo-liberal states in order to exercise control and power over the other states. This theories can often be related with Marxist approaches and also with the theories of the ‘fabricated dependency of the 3rd world states’ towards the West;

²⁶ Further on this theory available in LARA, António de Sousa, *Introdução à Ciência Política – Estudo da Ordem e da Subversão*, ISCSP, Lisboa, 2009;

²⁷ We are making a reference to the period between the end of 2014 and the first semester of 2015 with the Ebola outbreak that was originated in Sierra Leon;

clearly insufficient to aid the African countries this outbreak mainly hit –Sierra Leon, Guinea and Liberia. The lack of real ‘on-the-ground means’ and not remotely enough international financial support, led the WHO to deal with this crisis in the best way they could, however, proving itself insufficient. However, when the few diagnosed cases- and following deaths- started to be declared in the USA or Europe, the international community ‘woke up’ and decided that maybe the Ebola outbreak was in fact, worth the spending in order to prevent more ‘westerns deaths’.

Unfortunately, this line of action is present in many of the GG applied actions in our current world politics. These ‘double-standards’ through which global problems or global challenges are addressed, is in fact related with the fact that the main GG approach institutions today –the UN and the EU- have their range of actions highly defined by its budget funders.

This leads us to the next criticism towards the GG approach: the fact that in a GG setting, even though all have apparently equal ‘member-status’, the ones who own the financial means, usually are the ones who have the greatest ‘influence power’ towards the institution’s line of action. This fact can be easily perceived by anyone who gives a closer look to the UN’s Security Council and its major ‘action delay dilemma’, as well as in the case of the EU and the hard and long action processes for strategic issues- such as energy.

Finally, one author has presented one other criticism to the GG approach: the scholar Robert Latham presents in his work²⁸ a new perspective- the author advocates that the GG approach may have in fact, be confused by its defenders as a theory, when

²⁸ LATHAM, Robert, *Politics in a Floating World: Toward a Critique of Global Governance*, in “Approaches to Global Governance Theory”, several authors, State University of New York, Chapter 2, 1999;

in reality, it may be simply a more ‘global way’ to deal with the changes brought by globalization, especially in the end of the 20th century, given to the ambiguity and complexity in GG’s capability to simultaneously be a term of analysis and an advocacy.

In his work, the author presents several arguments to support this interpretation of GG, however highlighting in the end that his approach was not meant to completely disregard the credibility of GG as a ‘term of analysis’ or even as a ‘advocacy’. Latham continues by adding that others like Rosenau’s have ‘challenged us to think innovatively’²⁹, and affirms that with or without criticism, the GG approach is most likely to continue to grow and develop further, however Latham underlines the importance of keeping a rational approach to GG theory, being aware of its strong points but also of its gaps and practical limitations.

Before we conclude, there are also two other authors we believe are posing an essential critical view over the GG approach: Robert Kaplan and Tim Marshall. These well renowned authors have been presenting several works and in all of them they have brought new and almost always polemic ways of analysing the present world politics. Adepts of geopolitics and of the overlooked relevance of geography and natural sources, these authors have accustomed us to works where they make bright and well-thought reasonings about hard-solving present time problems (such as the rise of ISIL and other extremist religious groups), and how these problems have much of their roots deep in the geographic setting of the region they arise in.

Regarding the GG approach, these authors choose to claim that the referred approach usually doesn’t have in account a critical aspect: the geopolitics. With this perspective they attempt to demonstrate how the present US and Europe ‘Global

²⁹ *Idem*, page 49;

Governance' approach to world politics isn't enough to keep up with the fast paced evolution of world politics.³⁰³¹ According to them, the global governance networks that are already in place are proving to be insufficient and that there needs to be a shift in the GG leading entities – they believe this is being demonstrated by the difficulties that have been seen over and over again in UN actions, in EU's action (specially with the current refugees crisis and the struggling that the EU has been experiencing when dealing with it) and even in the US.

The authors demonstrate that ever since the ending of 2nd WW the world became clearly guided by a US – Europe global governance approach regarding world politics. This political aligned was adequate to the time and context of the time, however, in the present times that context has changed, and this approach has been becoming obsolete. The emergency of undeniably relevant actors like China, Russia and India, are, according to them, helping to consolidate the need for a leadership shift in the GG approach. This non-US shift is accentuated by some of the current conflicts –like the Muslim extremist groups that have been rising in the Middle East and North of Africa regions. The author cleverly explain how this rise of the hostile Muslim factions could perhaps be more easily addressed if the leading forces of the present global governance approach were of a more close religious and ethnic origin.

In conclusion, we can retain that the main critics of these two authors to the current GG approach are: the lack of proper adaptation of this approach to the complex and high-paced transformation of world politics; and the need of having in account the

³⁰ Regarding Robert Kaplan's work, we mainly had in account the following works of the author: *The Revenge of Geography*, Random House Trade Paperback Edition, USA, 2013; *Monsoon: The Indian Ocean and the Future of American Power*, Random House Trade Paperback Edition, USA, 2010; and "The Coming Anarchy", *Atlantic Monthly*, February 1994, pages 44- 76;

³¹ Regarding Tim Marshall's work we mainly had in account the following work: *Prisoners of Geography*, Elliott & Thompson, London, 2015;



geopolitics of the past, present and future of the world regions, in order to successfully attempt a global scale of governance.

1.3 – Environmental Governance

In the following pages we will briefly demonstrate the ideological and formal origins of the so called ‘Environmental Governance’ approach in modern international politics.

First of all, this approach isn’t really a formal theory³². It can be considered more of a ‘sub-approach’, which has been originated from the Global Governance approach to international relations.

The formal origins of this theory or approach are misleading and quite hard to grasp, since the line between the GG theory and all of its derived theories is very vague. However, it is possible to present a sort of a chronological perspective of the several contributions that led to the appearing of this theory in the modern era.

As a starting point, it is important to keep in mind that like the majority of other theories and advances in social sciences and namely in the field of international relations, have been originated in the western civilization. Regarding this, both the GG theory and its main sub-approaches, in this case the ‘Environmental Governance’ approach, have been originated in the modern era, more precisely in the 20th century.

The roots of ‘Environmental Governance’ are very diverse and reflect a multiplicity of influences from several fields of study – in particular in the natural science’s area. The first clear influence in this approach is by the ancient Ecology³³ area of study-or in a more assertive way, by the Human Ecology field of study.

³² When we say ‘formal theory’ we are using the comparison with the main accepted IR theories today: realism and liberalism;

³³ The first record that we have of the interest and study of what is today’s called ‘Ecology’, remounts to Aristotle and his disciple Theophrastus. Both of them have left several records of the studies they have developed regarding the ‘animal-environment’ relations and even an early on version of research about

Human Ecology³⁴ was recognized as a distinct field of study in 1970, and with it was brought the first formal and academic recognition that the Human species is in fact, one of the largest intervenient in planet's Earth environments and ecosystems. This fact opened the path that later on allowed for social sciences, and namely international politics, to start looking at the realistic approach of the 'quest for power'³⁵, as a slightly misguided one.

Following this mix between Ecology, other natural science, and social sciences, other contributions started to rise. One of the most popular ones has been unquestionably, the Gaia hypothesis³⁶, and the work of James Lovelock that presented that the Earth was a living system and that all of its components (fauna, flora and non-live elements) are working in a delicate equilibrium, which sometimes includes phenomenon such as ice ages or mass extinctions. Although at the time his work was highly criticised and mostly disregarded due to its insufficient scientific support and the name chosen³⁷, the main idea of the theory found many followers and enthusiasts. This fact can be easily explained due to the chronological timing- the world had just witnessed the end of the 2nd World War and with it the power –for good and for bad- of the nuclear era. Several academics of many different fields became very alarmed with the harmful effects that nuclear energy could bring to the planet's environment.

the complexity of food-chains and their importance to the environment they are part of. These records go as early as the 4th century BC;

³⁴ 'Human Ecology' was originated in the 1920's in Chicago, USA; its main issue was the study and tracking of the local vegetation in the urban setting. Only later on in 1970, 'Human Ecology' is fully and academically recognized as a distinct field of study;

³⁵ The realism perspective is still today, the most resorted theory by world leaders. Although it has evolved over the years, this theory still plays a major role in decision making at the international politics level; On this perspective, we advise the following work: KAY, Sean, *Global Security in the 21st century- The Quest for Power and the Search for Peace*, Rowman & Littlefield Publishing, 2015 3rd Edition, USA;

³⁶ The Gaia hypothesis was created by James Lovelock in his work "Gaia: A New Look at Life on Earth" from 1965;

³⁷ The reference to the name Gaia was interpreted as a pagan religion link, and many said that the name by itself had diminished the theory's relevance or credit;

The post-2nd WW period, was a very fruitful one for the ecology related social theories and approaches. Along with the other main goals of the United Nations Organization, was the ‘pursuit of a sustainable future’. When in 1971 and through UNESCO’s research program launching³⁸, ecology became a central part in World politics. In 1972, the United Nations held the first ‘International Conference on the Human Environment’ in Stockholm, in which the slogan “Think Globally, Act Locally” was created.

Through the 1980’s the climate and environmental issue kept its place in the front row of the World leader’s priority list, culminating in the major environmental events so far: the Earth Summit³⁹ in Rio de Janeiro in 1992, and the signature of the Kyoto Protocol in 1997 –which was being prepared since the Earth Summit in 1992.

From the 1990’s until today, the ‘environment’ issue has been fairly addressed as a key part in international politics. However, the actual transposition and fulfillment of the agreements and measures –like the Kyoto Protocol- has not been the most successful.

Even though nearly in an annual basis, several high profile international conferences and meetings are developed regarding the environmental sustainability theme⁴⁰, concrete action consensus between the different world states hasn’t been able to reach. With the ‘2015 United Nations Climate Change Conference’ in November 2015, the UN is attempting to reach something that hasn’t been possible for over 20 years of negotiations: the establishment of a binding and universal legal agreement on

³⁸ In 1971 UNESCO launched a research program called Man and Biosphere. With it, it aimed to further increase the knowledge about the effects of the relationship between the human species and the environment. This research program would later on lead to the definition of ‘Biosphere Reserve’;

³⁹ This conference is also known as the UN Conference on the Environment and Development;

⁴⁰ We are referring to conferences such as the ‘2015 United Nations Climate Change Conference’, to be held from 30th November until 11th December 2015, in Paris;



climate, for all the nations of the world⁴¹. To conclude, we can perceive that the environment and its sustainability have now, more than ever, a place in the international politics stage. The embodiment of this matter is made through ‘Environmental Governance’ actions and guidelines, like the ones that are being attempt by the UN in this next international conference or on other example by the European Union, through its ambitious plan⁴². ‘Environmental Governance’ can then be understood simply as the decision of taking collective and concerted planned actions to face the uprising global challenges presented by climate change and all of its consequences.

The ‘Environmental Governance’ approach seeks to demonstrate that besides the origins of the problems (who caused or still causes more atmospheric or water pollution, who cuts down more essential trees, etc) the solution for these same problems must be taken on a ‘Global Governance’ perspective, otherwise risking to fail.⁴³

Given that the problems in case, like for example the climate changes that we are currently witnessing, have a global magnitude (even though some areas or countries are being more clearly affected than others) the responsibility to tackle and solve that problem must itself be also of a global magnitude.⁴⁴ This is exactly where the need for ‘Global Governance’ action rises. In order for states to come together in planning and executing an action on a specific subject, they must put apart their previous notion of

⁴¹ Even Pope Francis has shown his support for the aim of this conference, making a public appeal for real action against human-caused climate changes with his encyclical letter *Laudato Si*, entitled ‘On Care for our Common Home’, and available at: http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html;

⁴² This EU’s plan for European action towards environmental sustainability is the focus study of our thesis, and will be address further on;

⁴³ For further reading on the matter of ‘ecology’ and ‘Ecologism’, we suggest the following: *Le Nouvel Etat du Monde -Bilian 1980-1990*, Ed. La Découvert, pages 227-237; and *Ciência Política- Estudo da Ordem e da Subversão*, Lara, António de Sousa, ISCSP, 2009, pages 716- 718;

⁴⁴ In order to solve some of the global warming effects for example, climate changes, in order to address and solve the problem the solution has to be implemented worldwide and not only locally in some states.

nation interests and start perceiving environmental issues as part of their national interests.

After this realization is achieved, states need to come together through long-term cooperation, and that type of cooperation requires the establishment of a relationship of trust and support between them. This type of international setting is almost what we already currently have with the United Nations Organization and the European Union. Needless to say that these institutions are far from perfection and still need commitment and support from their members to keep moving forward and improve it selves.

Individual action and individual thought are essential for the successful implementation of an ‘Environmental Governance’ approach. This fact can be easily perceived if we simply follow the ‘micro to macro’ logic of action: if we are able to stimulate and promote individual’s genuine concern regarding environmental matters, those individuals will, at some point, come together through civil society in order to act on their concerns; which will lead to the involvement of the media and the shift of public opinion regarding environmental matters; at this point, the government of that state should no longer avoid or refuse to consider those environmental matters, based on the fact that if it chooses to do so, it may cost him the public opinion and therefore their votes and support for the government; following this line of thought, if a government cannot ignore the matter, than the best way to deal with it is acting on it and trying to fix it- this leads the state to wanting to be part of a wider international setting, where it can act on the matter that is important for its domestic politics and at the same time, find a way to alleviate the expense and responsibility of acting in those matters- and the



‘Global Governance’ institutions present themselves as the best alternative so far for this situation.⁴⁵

⁴⁵ An interesting point regarding the importance of the individual and a ‘global conscious’ for the future of the world is presented by Richard Falk, in his work article called “Governance- Points of Departure”, available at: <http://www.greattransition.org/publication/changing-the-political-climate-a-transitional-imperative>;



2. The integrated climate and energy policy

In the following chapter we intend to perform a brief analysis of a specific policy of the European Union (EU), namely the integrated climate and energy policy adopted by the European Council in March 2007, in which climate and energy objectives for the EU members were proposed. These climate and energy objectives were designed with the possible deadline of 2020, giving a window of 13 years which should allow seeing at least some visible changes in specific target-areas in the EU members.

It is important to refer, that although these proposed objectives were designed and proposed for the EU, each member-state of the EU has the right to its own energy policy, supported by domestic interests and sovereignty.

Europe and namely the EU are at the same time blessed and cursed in geographic and natural resources terms. If on one side, the current EU presents itself with a wide variety of member-states, each one with its own set of specific geographic and natural resources advantages and disadvantages, it is also known that energetic resources supplies are very limited inside the current EU member-states⁴⁶. Therefore, this has been for the past few decades, one of the main key topics for action regarding the European Parliament and the European Commission. In order for Europe and the European Union to be able to move forward and play an even bigger part in current international relations, first the EU must become less energetically dependent from its current suppliers.

⁴⁶ This simple example is the perfect setting for realizing the real and present importance of geopolitics. For further analysis regarding the geopolitical situation of Europe we strongly recommend the reading of KAPLAN, Robert, *The Revenge of Geography*, Random House Trade Paperback Edition, USA, 2013;



With this in mind, in March of 2007, the European Council adopted a comprehensive integrated climate and energy policy, which aimed for three main goals for 2020:

- a reduction of at least 20% in greenhouse gas emissions compared to 1990 levels;
- an increase to 20% of the share of renewable energies in energy consumption;
- an improvement of 20% in energy efficiency.⁴⁷

These were very generic and realistic objectives which had in their favour the possibility of enabling further member-state-to-member-state cooperation.

However, in order to understand the ‘governance’ dimension of this policy, it is necessary to first understand, even if in a simplified matter, the importance and the relevance of the energy and climate issue for the EU- namely for its present and its future.

⁴⁷ Data retrieved from the European Parliament document entitled “ Fact Sheets on the European Union – 2015”, and available on the following electronic address:
http://www.europarl.europa.eu/ftu/pdf/en/FTU_5.7.1.pdf;

	1990	1995	2000	2005	2010	2013	Share in EU-28*
EU-28	5 749.7	5 408.5	5 293.1	5 355.5	4 918.2	4 611.0	100.00%
Belgium	150.2	157.2	154.0	148.6	137.5	123.4	2.68%
Bulgaria	110.1	76.4	60.0	64.7	61.1	56.4	1.22%
Czech Republic	193.9	154.0	146.7	145.4	136.6	128.0	2.78%
Denmark	71.0	79.0	72.1	68.0	64.9	57.1	1.24%
Germany	1 259.9	1 135.3	1 063.7	1 015.6	967.0	976.3	21.17%
Estonia	40.1	20.0	17.1	18.5	20.0	21.8	0.47%
Ireland	57.8	60.8	70.8	73.9	65.2	60.6	1.31%
Greece	107.5	113.8	130.4	138.7	121.2	107.6	2.33%
Spain	296.4	337.8	400.0	452.9	369.6	335.3	7.27%
France	558.1	558.6	568.9	570.7	532.6	506.4	10.98%
Croatia	35.5	24.8	27.2	31.0	28.6	24.8	0.54%
Italy	525.3	538.4	561.8	587.4	516.0	446.6	9.68%
Cyprus	6.3	7.9	9.3	10.5	10.7	9.0	0.20%
Latvia	26.4	12.7	10.2	11.2	12.3	11.3	0.24%
Lithuania	48.2	22.5	19.6	23.3	21.1	20.2	0.44%
Luxembourg	13.3	10.8	10.7	14.5	13.6	12.3	0.27%
Hungary	94.7	76.3	74.3	76.7	66.2	57.9	1.26%
Malta	2.2	2.8	2.9	3.2	3.3	3.1	0.07%
Netherlands	224.1	238.3	228.9	224.2	224.1	206.3	4.47%
Austria	79.6	80.8	81.8	94.5	86.9	81.6	1.77%
Poland	474.6	446.1	393.6	399.2	409.6	396.4	8.60%
Portugal	61.9	72.8	85.6	90.2	73.0	67.9	1.47%
Romania	254.1	184.3	141.6	147.8	118.2	111.4	2.42%
Slovenia	18.6	18.8	19.1	20.5	19.6	18.2	0.40%
Slovakia	75.6	55.1	50.3	51.7	47.1	43.8	0.95%
Finland	72.1	72.5	71.1	70.6	77.4	65.0	1.41%
Sweden	73.2	75.4	70.6	68.8	67.1	58.0	1.26%
United Kingdom	819.2	775.6	750.3	733.1	647.8	604.3	13.10%
Iceland	4.1	3.8	4.5	4.4	5.2	5.1	0.11%

*Share in EU-28 total in year 2013

Table 1: Total greenhouse gas emissions by countries (including international aviation and excluding LULUCF), 1990 - 2013 (million tonnes of CO2 equivalents),⁴⁸

The graphic presented above shows the Green House Emissions (GGe) in the European Union member-states, 1990 until 2013. Which allows us to make a quick analysis in order to compare the evolution of the EU and its member-states regarding the GGe's in the pre and during period of the policy in analysis in this thesis.

If we start by carefully observing the first line of the graphic, we can see that during this period (1990 – 2013) the EU in general (EU-28) has registered a gradual decrease in its total greenhouse gas emissions. However, if we look closely to some of

⁴⁸ Graphic taken integrally from the Eurostat website, available at: [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Total_greenhouse_gas_emissions_by_countries_\(including_international_aviation_and_excluding_LULUCF\),_1990_-_2013_\(million_tonnes_of_CO2_equivalents\)_updated.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Total_greenhouse_gas_emissions_by_countries_(including_international_aviation_and_excluding_LULUCF),_1990_-_2013_(million_tonnes_of_CO2_equivalents)_updated.png) ;

the countries lines, we can see that their paths were very different, namely with pics of emissions after 1990, but that they all were able to reduce their GGe's until 2013. We can than conclude that this graphic illustrates the concerted efforts to reduce the GGe's that were stimulated by the EU's integrated energy and climate policy.

We need to mention that although this policy is the focus of our analysis, we will also have in account the recent updates it has suffered as well as other significant policies or action plans that have been taken afterwards and are relevant for, namely the following:

- The EEA's (European Environment Agency) 'State of the Environment Report 2010';
- The conclusions of the 6th EAP (Environment Action Programme) Final Assessment, dated of 2012;
- The formal adoption by the Council and the European Parliament of the need for a creation and formal application of a 7th EAP, on the 20th of November 2013.

In order to have a deeper understanding of these measures, we have chosen to present the following excerpt of the "Fact Sheets on the European Union – 2015", document produced by the European Parliament, and where it is presented in a clear and succinct way the main challenges and objectives of the EU at this levels:

*"Challenges facing Europe in the field of energy include issues such as increasing import dependency, limited diversification, high and volatile energy prices, growing global energy demand, security risks affecting producing and transit countries, the growing threats of climate change, slow progress in energy efficiency, challenges posed by the increasing share of renewables, and the need for increased transparency, further integration and interconnection on energy markets. A variety of measures aiming to achieve an integrated energy market, security of energy supply and sustainability of the energy sector are at the core of the European energy policy."*⁴⁹

Fact Sheets on the European Union – 2015

⁴⁹ Introduction quoted integrally from de European Parliament document entitled " Fact Sheets on the European Union – 2015", and available on the following electronic address: http://www.europarl.europa.eu/ftu/pdf/en/FTU_5.7.1.pdf;

With the reading of this brief introduction presented in the referred document, it is easy to perceive that in the case of the EU, energy, environment and security are deeply intertwined with each other. For that same reason, in the same document it is possible to notice that the EU has established six main goals, which are evidently and closely related to the first 3 generic goals presented, and we shall elaborate briefly about each one, namely:

1. Completing the Internal Energy Market;
2. Strengthening external energy relations;
3. Improving security of energy supply;
4. Boosting energy efficiency;
5. Making the best use of the EU's indigenous energy resources (including renewables);
6. Research, development and demonstration projects.⁵⁰

1.- Regarding this point, the EU has approved and adopted several instruments which have allowed the establishment of an Internal Energy Market. The main outcomes that the EU expects to achieve in this process are to promote the inclusiveness of all member-states in the EU energy market –both suppliers and demanders- allowing a more unified and cohesive Union, in which no member-state is an ‘energy island’- and also promoting the transparency and regulation of the energy market, allowing competitive and fair energy suppliers for EU members.

2.- In this second point, the EU has produced a communication entitled ‘On the security of energy supply and international cooperation — EU energy policy: Engaging with

⁵⁰ All of these goals can be found in the document “ Fact Sheets on the European Union – 2015”, and available on the following electronic address: http://www.europarl.europa.eu/ftu/pdf/en/FTU_5.7.1.pdf;

partners beyond our borders’, in the year of 2011, and with this , the EU intended to improve and promote cooperation relations between the EU member-states and their neighbour states. Further on this matter, a policy to create and adopt an information exchange mechanism between EU member-states and other countries was created by the ending of the year 2012.

3.- In this third point, the EU has clearly defined and stated the strategic importance of oil and gas supplies to its territory. They have been for the last few years, developing and adopting several measure: including risk assessments, preventive action plans and emergency plans, and since 2010 they have also published several new regulations with the purpose of safeguarding the security of gas supplies and the aim of strengthening prevention and crisis response mechanisms. One of the best examples of the EU growing concerns regarding this matter was the 2009 directive that requires member-states to maintain a minimum of oil stocks.⁵¹

4.- The fourth point is simply the re-run of the directive adopted in October of 2012, and intended to coordinate the member-states to get back on their individual tracks in order to achieve the 2020 goals- including on energy efficiency.

5.- The fifth point is one of the most essential and innovative points in this document. With it the EU aimed to promote and stimulate member-states to intensify the diversification of energy supply and to develop local energy resources in order to ensure security of supply and reduce external energy dependency. By doing so, the EU aimed to stimulate the creation and proper maintenance of alternative energy supplies, namely

⁵¹ Corresponding to 90 days of average daily net imports or 61 days of average daily inland consumption, whichever of the two quantities is greater- “ Fact Sheets on the European Union – 2015”, and available on the following electronic address: http://www.europarl.europa.eu/ftu/pdf/en/FTU_5.7.1.pdf;

through renewable energies. With this ‘decarbonisation’ of EU member-states energy consumption, the EU has actively promoted environmental cares and ‘environmental responsibility’ within the member-states, allowing a great boost for ‘Green companies’ to invest and launch themselves in the European markets. By 2020, the EU aims at a 20% target for the use of internal renewable energy for each member-state.

6.- The sixth and last point was the EU endorsement of ‘research, development and demonstration projects’ - namely in the specific areas of energy and environment. Under this banner, the EU has endorsed mainly 3 projects: the Horizon 2020 (H2020) project, the European Strategic Energy Technology Plan (SET-Plan) and the EU future energy technology strategy. With Horizon 2020 project the EU has made available a large amount of funding for any researches or projects that support the development of clean, secure and efficient energy and sustainable development within the European Union. ‘Sustainable development’ has become one of the EU’s primary concerns, accentuated by the climate change effects that have been seen o in the last few years.

With the European Strategic Energy Technology Plan (SET-Plan), the EU has promoted funding for any projects that aim to accelerate the market introduction and take-up of low-carbon and efficient energy technologies within the union member-states. This approach aims to appeal the member-states to start decreasing their dependency on fossil energies and sets them to pursue a more ‘green’ and ‘long term’ alternative.

With the last project, ‘future energy technology strategy’, the EU aimed to strategy to enable itself to have a world-class technology and innovation sector fit for coping with the challenges up to 2020 and beyond- pointing in a long-term energetic and environmental commitment between the member-states.



With this brief document analysis, it is possible to conclude that since 2007 until the present year, the EU through its instruments – the Commission, the Council and the Parliament- has actively supported and acted towards the creation and promotion of a common-based energy policy between the member-states.

The creation and the adoption of this common-based energy policy for the EU member-states reflect the intentions of greater and stronger cohesion within the EU. At the present times, the EU faces many and different challenges: the international conflicts that seem to threaten its security and territorial integrity, such as the Crimea region and Russia's intentions towards it, or even the alarming territorial advances of ISIL and all the security and humanitarian challenges it presents to EU; the question of EU's energy security and the growing necessity to diminish EU's energetic dependency of third countries (which is also connected with the security challenges mention before, namely with Russia's position towards Ukraine);

2.1- The climate and energy policy adopted by the European Council in March 2007 and established objectives for 2020

We will begin by briefly presenting the climate and energy policy adopted by the European Council in the 2nd of May 2007.

It is important to understand that the 2007 policy we have chosen for this thesis, is not ‘single environmental policy’, in fact, the ‘climate and energy policy of 2007’ was originated by the submission of several more specialized reports, presented by the European Commission to the European Council and to the European Parliament, in order to obtain the institutional necessary framework to maintain developing the Union’s initiatives with focus on the environment.

The EU’s concern for the environmental and energy issues is not new. Ever since 1973⁵² the Union has been developing action programmes which were intended to establish within its’ institutions and its’ member-states, the adequate framework in order to pursuing significant actions in the environmental field in order to comply with EU’s long term objectives and values.

Hence, it is useful to notice that already in its ‘climate and energy policy of 2007’, the EU had clearly established a goal for itself-and its members: to pursue and develop the efforts necessary to improve itself in order to keep providing member-states and European citizens a strong and coherent European Union.

With this statement, the EU was referring of course to the economic, political and social dimensions of the Union, but, it was also simultaneously referring to another more immediate dimension: the planet and its environment. The EU’s analysis of the environment in 2007 was that although significant progresses had been through several

⁵² This fact is actually mentioned in the “DECISION No .../2013/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 November 2013 on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet";

inter-states commitments⁵³, those commitments were not nearly enough to actively prevent negative consequences for all the world's countries in the future years.

Therefore, given its particular and unique role among the international community, the EU recognized its own potential for real action on these matters. More even, the EU has frontally assumed that in order to maintain its status in the international community in the future, the EU had to incorporate as one of their current and permanent main goals the aim of turning the Union as a whole-and by its turn, each one of its members- focused on achieving a sustainable development.

Not able to be fully dissociated from the other EU policies and aims, the 'climate and energy 2007 policy' is in fact part the continuous and multidisciplinary effort that the Union's institutions have been making for the last two decades, in the direction of harmonizing the various member-state's policies on several trans-state's matters. Justice, economy and education, have been on the highlight of this 'European harmonization framework' almost since the beginning of modern Union. The environmental issues however, have not.

Having in full account the United Nations and its specialized agencies directives and goals, the Union has been struggling to achieve a higher and deeper level of European consensus about the real importance of European action towards environmental and energetic sustainability.⁵⁴ However, besides the difficulties that have been presented, the Union and its institutions have been able to develop and approve the

⁵³ We can refer for example to the Kyoto's Protocol on CO2 emission rates, available at: http://unfccc.int/kyoto_protocol/items/2830.php;

⁵⁴ This struggle has been the object of several reviews and studies, such as the one led after the EU played a leadership role at the 2002 World Summit on Sustainable Development. Using the concept of normative power Europe the authors examine how the EU operationalized the concept of sustainable development, before questioning whether the EU represents a normative power in the field of sustainable development. So they question the depth of the EU's commitment to sustainable development at that time: LIGHTFOOT, Simon, BURCHELL, Jon, *The European Union and the World Summit on Sustainable Development: Normative Power Europe in Action?*, article published in JCMS: Journal of Common Market Studies, volume 43, issue 1, March 2005, pages 75-95;

7th EAP⁵⁵, in which environment and energetic sustainability goals and aims for the Union and its members are established. The formal establishment of these guidelines is extremely important, once that has been accompanied by the development of a parallel legal and framework, designed to ‘greatly motivate’ the member-states to fully commit themselves to these guidelines and to actually apply them.

The main guidelines this policy has brought are as follows:

- Firstly, regarding the energy area- the EU has recognized that energy presents itself as a crucial factor in the future of both the EU (and all of its member-states individually) and the rest of the world. Therefore, and having in account the historical background of the international community, the Union has underlined the importance of two main directives : increasing security of supply and ensuring the competitiveness of European economies and the availability of affordable energy;⁵⁶
- Secondly, regarding the climate area- the Union has once again recognized the importance and urgency in a planned common action plan to deal with the ongoing climate changes. In this field, with this policy the EU aimed clearly at promoting environmental sustainability and combating climate change and also at defining the need to limiting the global average temperature increase to not more than 2°C above pre-industrial levels as a strategic goal.

⁵⁵ Environment Action Programme, in this case approved in November’s 20th 2013;

⁵⁶ While developing this thesis, we have had in serious consideration all of the recent events that may be relevant to this thesis focus of study. In this specific case, with the recent aggravation of the tensions with Russia related to Crimea, the ‘energy supply security issue’ has been once again under the spotlight. The EU has treaded carefully with this matter given the most probable negative effects of a ‘energy supply cut’ from Russia, as a form of retaliation.

2.2- The EU, climate and energy policy, and environmental governance

In the last decades the EU has taken a prominent position in the international community. The relations between EU and other major international players, like the US or China, have been deepening towards new and more strengthen multi-lateral economic and other-agreements. However the EU's privileged relations with the rest of the world are only as strong as the EU member-states intra-state relations.⁵⁷

The climate and energy topic as always been just by itself a complicated topic: ever since the Industrial Revolutions' beginning, until it's more recent phases⁵⁸, that the environmental issue was interpreted in a micro-scale. This 'micro-scale' was basically the world spread idea that the struggle to ensure environmental protection was a local-one, which should be led by each single state according to its own specificities and objectives. This 'single-state' approach was also applied by the EU member-states, allowing them to develop singular ways to cope with their own environmental protection specificities- this allowed the development of short-term measures to tackle some of the environmental problems, like the overuse of hazardous wastes or the excessive air pollutants emitted by cars and vehicles.

However, with the coming of the year 2000 and following, the EU started to realized that these small and singular measures- although in most cases- with a very positive turnout, were proving inefficient to tackle more larger problems such as the

⁵⁷ This notion that the EU's strength relies on the cohesion of its members is not new. In fact, one of the founders of the EU, Jean Monnet, was actually obsessed by the personal goal of 'uniting all European men and nations', as it is possible to read in his autobiography: MONNET, Jean, *A Auto biografia de um dos Pais Fundadores da União Europeia*, Ulisseia, 2006;

⁵⁸ For example the third and modern phase which started in 1969 and extended itself until at least the early years of 2000;

rising of the medium atmosphere temperature or to actively reduce the greenhouse gases emissions and the sub-consequent ozone layer deterioration⁵⁹.

Being a single and unique case, the EU is hard to formally classify: it is not truly an international organization like the UN; however it is not possible to refer to it as a Federalist Organization either. The Union is and has always been a very unique mix of both.

When in 1950 with the creation of ECST⁶⁰ the visionary leaders that promoted this initiative had all but a single aim: to promote a formal and rational way to develop a framework that would allow avoiding future armed conflicts within the European states, avoiding a new life-loss tragedy like the two World Wars that just had passed.

The creation of the ECST was always closely related to the United Nations Organization (UN) creation. The UN's creation was the comeback from the failure of the League of Nations failure in 1919, giving that the organization had failed one of its main purposes – avoiding another deadly war. With the formal creation of the UN and this time around with full commitment from the USA and the other major world powers, the UN was seen as the first truly global international organization. The UN's success can be resumed by the fact that even with all of its limitations and current contradictions, almost every state and country in the current world are happy to be represented in the organization. This truly demonstrates the relevance that countries, states and even individuals give to the organization.

⁵⁹ The ozone layer deterioration has been carefully followed for the past decades. The concrete data and evolution of the ozone layer is available in the following link, and it allows us to compare the ozone layer evolution from 2007 until the present date. This allows us to draw some careful but positive conclusions about the environmental efforts and policies that have been, since then, made world-wide. Although the data presented does not focus solely on the EU area, we believe that the Union's efforts in this area of action have for certain influenced the present achieving. For the concrete data and images please see: http://ozonewatch.gsfc.nasa.gov/Scripts/big_image.php?date=2007-09-24&hem=S ;

⁶⁰ 1950 marks the creation of the European Coal and Steel Community (ECST);

With the ECST and afterwards with the current European Union, the logic is the exact same: the Union's concrete relevance in today's political and economic setting is easily perceived by the fact that, even with all its limitations and to-improve points, the EU has currently 5 candidate countries⁶¹ and 2 potential candidate-countries awaiting to join the organization.

For several countries that wish to join the Union, the EU is seen as one of the most secure and reliable institutions of our present times. The absence of any major armed conflict between its members since its creation, along with the 'European common policy' framework that has been being established within EU members in several areas are only some of the key aspects that turn the Union so attractive to these applying countries.

For the last decades, the Union has invested a serious and complex effort in deepening the cohesion among member-states throughout the development of the 'Common market and common policy' strategy.⁶² This approach as revealed a level of action that was new in the Union and in other similar international organization (like ASEAN, for example) - the governance level.

The Governance approach has been applied in the Union at several levels and in different manners – from the creation of the Euro zone⁶³, until the more recent legal

⁶¹ According to data from BBC News, in September of 2014, 5 countries were 'candidate-countries' to enter the EU namely: Serbia Montenegro, Albania, Macedonia, Iceland and Turkey; at the same time, 2 other countries were taken as 'potential candidates'- Bosnia and Kosovo; As far as it is accurate to establish among EU public sources, these processes are all in the same status as they were in 2014. The recent refugees and migrants' crisis as it shifted the EU's focus from expanding, to dealing with the present members and its own idiosyncrasies, namely regarding the migration's policies.

⁶² This subject has been in the focus of several studies and authors, having that fact in account, for this matter we have chosen to use the following work, without any disregard from the others available on this matter: WALLACE, Helen, POLLACK, Mark A., YOUNG, Alasdair, *Policy-Making in the European Union*, Seventh Edition, Oxford University Press, 2015;

⁶³ The Euro zone is without a doubt one of the major governance achievements worldwide so far. The fact that several different sovereign states have chosen voluntarily to abdicate of their own state-currency for a common currency, developed and mainly managed by the EU's institutions, is a clear sign of their perception regarding the real power and advantages brought by being a part of this Union's project. This however was not an easy or quick process. It took a heavy load of legal and political preparation, in order

reforms, regarding intern administration issues- these have been clear examples on how the Union has been aiming for further governance within itself. In the area of *environmental governance* this is no different.

As mentioned before, the Union has recognized that in order to work, the environment protection measures could not be taken merely at a ‘single-state’ level; more on the contrary, the more consensus the approach, the more likely for the specific efforts to actually provide visible results in useful time. Given its geographic and politically centrality in the world, the EU reasonably recognized its own power and weight in today’s contemporary politics. Therefore and rightly, it has also recognized its own capabilities and responsibilities towards making decisions and actions that reflect the dignity of its privileged position in world politics. Ever since the World War II ending⁶⁴, that the Union has had in close account the environment and energy related issues. The rise of the world’s average temperature due to the degradation of the ozone layer, profoundly mobilized the Union’s attention and institutions to a broader and more active focus on tackling environmental problems.

With its most recent representatives’ declarations, the Union as shown the world that is in fact committed to pursue a larger scope of measures that can help solve, or at least minimize, these related problems.

This is the case of measures such as:

- using scarce water resources more efficiently;
- adapting building codes to future climate conditions and extreme weather events;

for the Union and its members to be sure the project would be able to work and ultimately, reinforce the ties between the participant states.

⁶⁴ Especially with the Hiroshima and Nagasaki nuclear bombs;

- building flood defences and raising the levels of dykes;
- developing drought-tolerant crops; choosing tree species and forestry practices less vulnerable to storms and fires;
- setting aside land corridors to help species migrate;
- controls on uses of ozone-depleting substances that are not considered as consumption under the Montreal Protocol⁶⁵;
- incentives for the development of ODS (Ozone Depleting Substances) substitutes with climate-friendly alternatives;
- community strategy to limit carbon dioxide (CO₂);
- incentives to development and implementation of alternative and renewable energies;
- proactive development of a Union's common action plan towards energy- with the aim of reducing the Union's dependency of external fossil supplies, diversifying sources and providers, attempting to significantly increase the Union's production and consumption of 'green energies' such as wind and hydro powered energy.

These are the generic measures that are presently in the aim of the EU for the following years. Indeed, it is possible to grasp the *environmental governance* approach that the Union has been developing through the following excerpt:

⁶⁵ The Montreal Protocol on Substances that Deplete the Ozone Layer (a protocol to the Vienna Convention for the Protection of the Ozone Layer), was an international treaty signed in September 1987, designed to protect the ozone layer by phasing out the production of numerous substances that are responsible for ozone depletion. It is important to notice that by the year 2010, the EU had already achieved the 'reduction parameters' established for the year 2020. This demonstrates the strong commitment made by the organization and its member-states in order to engage in a broader environmental protection strategy; the protocol and further information on this matter are available at the United Nations Environment Programme website at: <http://ozone.unep.org/en/treaties-and-decisions/montreal-protocol-substances-deplete-ozone-layer>;

« (...)The Union has set itself the objective of becoming a smart, sustainable and inclusive economy by 2020 with a set of policies and actions aimed at making it a low-carbon and resource-efficient economy.(...) »⁶⁶

In the light of the selected excerpt we can clearly perceive the concerted commitment of the Union's institutions and of the Union's member-states, towards the application of a common set of directives and goals in the areas of environment and energy. This common setting, we believe can be viewed as the application of an environmental governance policy. The key note here is the fact that the *governance* element can be indeed closely related to the success or failure of the whole setting of measures-specially at the environmental protection level. The environment related decisions and policies in the Union have a long 'back-and-forth' history. The longer the proposed measures and policies are discussed among EU institutions and EU member-states, the more inputs (and possibly valid and value-added ones) the same measures and policies are likely to get. On the other hand, this 'contributions' given the different actors creates a notion of common objective, while allowing the states to express their specificities and opinions, thereby promoting cohesion inside the Union and around the measures and policies itself.

The cohesion inside the Union and around the measures and policies itself is an essential factor for pursue of the established goals. With this 'multiple-contributions policy making process', the Union is in fact laying the consensus for the formal framework of its goals- the constitutional law settings. These legal settings are the ultimate *governance* push, binding sovereign and law-making states to a policy or measure that has not been exclusively defined by them.

⁶⁶ EUROPEAN PARLIAMENT AND EUROPEAN COUNCIL, Decision No .../2013/EU of the European Parliament and of the Council, on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet", 20th November 2013, page 2;



For further exemplifying how the EU is indeed being able to successfully apply an *environmental governance* strategy, it is very useful to carefully appreciate each of the EU's member-states prepared and submitted contributions plan for the upcoming "2015 United Nations Climate Change Conference"⁶⁷. In the document submitted, it is possible to analyse the goals that the Union has established as a whole, but also that goals that each EU state as chosen to commit to.⁶⁸

The 2007 climate and energy policy have been prolonged with the 6th and currently the 7th EAP, fact that may show that the EU and subsequently its member-states, are in fact willing to commit themselves to environmental measures and policies aimed for the long run. The Union and its representatives have in several documents and occasions; reinforce their statement that the Union has to commit to environmental progress in a realistic and concerted manner in order to be able to make itself sustainable for the future.

⁶⁷ This conference is also known by COP 21 or CMP 11, and it will take place from November 30th until the December 11th, in Paris. Even though the conference is not at the focus of this thesis, we will accompany carefully the Conference and its on-going resolutions, namely regarding the EU and its member-states action plan.

⁶⁸ The document is available on:
<http://www4.unfccc.int/submissions/INDC/Published%20Documents/Latvia/1/LV-03-06-EU%20INDC.pdf> ;

2.3- Data analysis- The European Union and the ‘Green energies’

Along this sub-chapter we will briefly present some empirical data regarding the renewable or ‘Green energies’ within the Union. We have selected the ‘green energies’ as our factor of analysis, given that it is one of the focal objectives within the Union’s policy for 2020, thus its analysis may provide us with a better grasp of the importance and investment in this sector by the Union’s members. We will also present a brief introduction in order to present a brief framework for better understanding the EU-green energies relation.

As it is known within the EU member-states the main source of energy has been, for a long time, the fossil fuels⁶⁹. However, since the years 2000’ this panorama has been changing, and for the last few decades, the EU has been aiming to expand its production capacities and shares, trying to place itself as a viable and self-supported ‘green energy’ producer/ consumer. And according to that, the European Commission has set out several energy strategies for a more secure, sustainable and low-carbon economy.

The integrated energy and climate change strategy adopted in December 2008 provided a further stimulus for increasing the use of renewable energy sources to 20 % of total energy consumption by 2020, while calling for energy consumption and greenhouse gas emissions to both be cut by 20 %. Directive 2009/28/EC of the European Parliament and Council on the promotion of the use of energy from renewable sources set an overall goal across the EU for a 20 % share of energy consumption to be derived from renewable sources by 2020, while renewables should also account for a 10 % share of the fuel used in the transport sector by the same date. The Directive changes the legal framework for promoting renewable electricity, requires national action plans to show how renewable energies will be developed in each EU

⁶⁹ According to the ‘Environment and Energy Study Institute’, ‘fossil fuels’ is an expression usually utilized to refer to obtaining energy through coal, oil and natural gas. These different sources have in common the fact that they were formed from organic material over the course of millions of years, and once spent they cannot be retrieved in ‘human life time’. These energetic sources also have in common a high rate of atmospheric pollution when processed for human use.

Member State, creates cooperation mechanisms, and establishes sustainability criteria for biofuels (following concerns over their potential adverse effects on crop prices, food supply, forest protection, biodiversity, water and soil resources).

From 2003 until 2013, the quantity of renewable energy produced within the EU-28 increased overall by 84.4 %, the equivalent to an average increase of 6.3 % per year. The primary production of renewable energy within the EU-28 in 2013 was 192 million tonnes of oil equivalent (toe)⁷⁰— a 24.3 % share of total primary energy production from all sources.⁷¹

From this simple data alone we can clearly perceive that since the year 2003, the Union- and consequentially its member-states- have been keeping an active agenda when it comes to ‘green energies’. This fact comes as no surprise, given the fact that European leaders and EU institutions have long-seen the need for viable and more permanent ways to reduce the European energy dependency. This urgent need for alternative energy sources combined with the Union’s promotion of more sustainable energies for the planet, led the Union directly to pursue a larger investment regarding the ‘green energies’ opportunity.

Biomass and renewable waste were the main source of energy production in 2013, counting just under two-thirds (64, 2%) of primary renewable in that year.

The following graphic represents the values for primary production of renewable energy, 2003 and 2013, in the EU. This data allows us to truly see the EU’s evolution within this period, and also of its member-states.

⁷⁰ OECD Definition: Unit of measurement of energy consumption : 1 TOE = 0.041868 TJ, available on <https://stats.oecd.org/glossary/detail.asp?ID=4109>;

⁷¹ Data presented by EUROSTAT, extracted in May 2015 and under the title ‘Renewable energy statistics’, for further information please consult the following: http://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable_energy_statistics;

Table 2: Primary production of renewable energy, 2003 and 2013;⁷²

	Primary production (thousand toe)		Share of total, 2013 (%)				
	2003	2013	Solar energy	Biomass & waste	Geothermal energy	Hydropower	Wind energy
EU-28	104 094	191 961	5.5	64.2	3.1	16.6	10.5
Belgium	708	2 929	8.4	79.7	0.1	1.1	10.7
Bulgaria	952	1 826	7.5	65.0	1.8	19.2	6.5
Czech Republic	1 663	3 640	5.2	87.2	0.0	6.5	1.1
Denmark	2 252	3 240	2.1	68.1	0.2	0.0	29.5
Germany	12 614	33 680	9.6	70.8	0.4	5.9	13.2
Estonia	667	1 122	0.0	95.7	0.0	0.2	4.1
Ireland	235	766	1.5	41.0	0.0	6.5	51.0
Greece	1 538	2 487	20.1	43.1	0.5	21.9	14.3
Spain	9 196	17 377	15.4	39.6	0.1	18.2	26.7
France	15 521	23 073	2.1	64.5	1.0	26.3	6.0
Croatia	800	1 499	0.6	50.1	0.5	45.9	3.0
Italy	9 999	23 500	8.6	45.3	21.3	19.3	5.5
Cyprus	48	109	64.1	16.3	1.4	0.0	18.3
Latvia	1 728	2 137	0.0	87.8	0.0	11.7	0.5
Lithuania	794	1 288	0.3	92.1	0.1	3.5	4.0
Luxembourg	41	107	8.2	75.5	0.0	9.6	6.6
Hungary	906	2 074	0.4	90.3	5.4	0.9	3.0
Malta	0	10	72.6	27.4	0.0	0.0	0.0
Netherlands	1 625	4 294	1.6	86.3	0.6	0.2	11.3
Austria	6 130	9 466	2.4	56.2	0.4	38.1	2.9
Poland	4 150	8 512	0.2	91.1	0.2	2.5	6.1
Portugal	4 241	5 621	2.0	55.4	3.2	21.0	18.4
Romania	4 002	5 561	0.7	68.8	0.5	23.1	7.0
Slovenia	714	1 071	2.6	56.7	3.6	37.0	0.0
Slovakia	651	1 467	3.8	67.3	0.4	28.4	0.0
Finland	7 887	9 934	0.0	88.2	0.0	11.1	0.7
Sweden	12 389	16 770	0.1	63.4	0.0	31.5	5.0
United Kingdom	2 642	8 404	4.3	61.7	0.0	4.8	29.1
Norway	10 277	12 458	0.0	10.0	0.0	88.7	1.3
Montenegro	0	389	0.0	44.7	0.0	55.3	0.0
FYR of Macedonia	313	304	0.3	52.0	3.0	44.8	0.0
Albania	620	812	1.5	24.8	0.0	73.7	0.0
Serbia	1 750	1 989	0.0	55.7	0.2	44.1	0.0
Turkey	10 021	13 718	5.8	33.0	19.2	37.2	4.7

Source: Eurostat (online data codes: ten00081 and nrg_107a)

As an example, we can see that Germany has more than doubled its production from 2003 to 2013, going from 12 614 toe, to 33 680 toe, and that its larger focus of production was on Biomass with 70, 6 % of all its renewable production. When it comes to production Norway had in 2013 also the highest value within all of the 28-member-states, with 88, 7 % of hydro powered energy production.

Already in 2013, according to several sources⁷³, Norway was by that time on the leading front of the EU regarding the green energies subject. With the highest percentage of primary green energy production due to its investment in the hydropower sector, Norway was already in 2013 attempting to stimulate the internal and external investment markets in order to pursue more ambitious goals for its national production energy rates.

⁷² Graphic taken integrally from EUROSTAT's website, available in:

http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Primary_production_of_renewable_energy_2003_and_2013_YB15.png ;

⁷³ Namely according to Bloomberg's article published online dating February 1st of 2013, available at: <http://www.bloomberg.com/news/articles/2013-02-01/norway-may-boost-hydro-output-12-by-2020-survey-shows>;

Table 3: Share of renewables in gross inland energy consumption, 2013;⁷⁴

	Renewable energy total	Biomass & renewable wastes	Hydropower	Geothermal	Wind	Solar
EU-28	11.8	7.7	1.9	0.4	1.2	0.6
Belgium	6.2	5.1	0.1	0.0	0.6	0.4
Bulgaria	10.8	7.0	2.1	0.2	0.7	0.8
Czech Republic	8.5	7.4	0.6	0.0	0.1	0.4
Denmark	24.2	18.5	0.0	0.0	5.3	0.4
Germany	10.3	7.3	0.6	0.0	1.4	1.0
Estonia	12.7	12.0	0.0	0.0	0.7	0.0
Ireland	6.2	2.9	0.4	0.0	2.8	0.1
Greece	10.7	4.9	2.2	0.0	1.5	2.1
Spain	14.7	5.8	2.7	0.0	3.9	2.3
France	9.0	5.8	2.3	0.1	0.5	0.2
Croatia	16.2	6.6	8.8	0.1	0.6	0.1
Italy	16.5	8.4	2.8	3.1	0.8	1.3
Cyprus	6.1	2.0	0.0	0.1	0.9	3.2
Latvia	36.1	30.2	5.6	0.0	0.2	0.0
Lithuania	18.1	16.6	0.7	0.0	0.8	0.1
Luxembourg	3.6	3.0	0.2	0.0	0.2	0.2
Hungary	8.3	7.4	0.1	0.5	0.3	0.0
Malta	1.5	0.7	0.0	0.0	0.0	0.8
Netherlands	4.2	3.4	0.0	0.0	0.6	0.1
Austria	29.6	17.3	10.7	0.1	0.8	0.7
Poland	8.7	7.9	0.2	0.0	0.5	0.0
Portugal	23.5	12.4	5.2	0.8	4.6	0.5
Romania	17.2	11.8	4.0	0.1	1.2	0.1
Slovenia	16.5	9.7	5.8	0.6	0.0	0.4
Slovakia	8.2	5.4	2.4	0.0	0.0	0.3
Finland	29.2	25.8	3.3	0.0	0.2	0.0
Sweden	34.8	22.3	10.7	0.0	1.7	0.0
United Kingdom	5.0	3.4	0.2	0.0	1.2	0.2
Norway	37.4	4.1	32.8	0.0	0.5	0.0
Montenegro	36.9	16.1	20.8	0.0	0.0	0.0
FYR of Macedonia	10.7	5.4	5.0	0.3	0.0	0.0
Albania	31.0	7.7	22.8	0.0	0.0	0.5
Serbia	12.8	6.9	5.9	0.0	0.0	0.0
Turkey	11.8	4.1	4.3	2.2	0.5	0.7

Source: Eurostat (online data codes: nrg_100a and nrg_107a)

We can also verify that regarding the total of inland energy consumption, also in 2013, Germany only had 10, 3% of its consumption sources allocated to renewable sources.

Once again, Norway leads EU's 28 in the share of renewables in gross inland energy consumption in 2013 with 37, 4% of all its inland consumption allocated to renewable energies. Not surprisingly, within this value, 32, 8 % were due to hydropower energy. The country stands out as being both the highest producer and consumer in renewables in this period (2003-2013).

Although it is not an EU member, rather an EU associate, Norway has been taking the lead in the EU environmental and sustainable energy matters regarding the

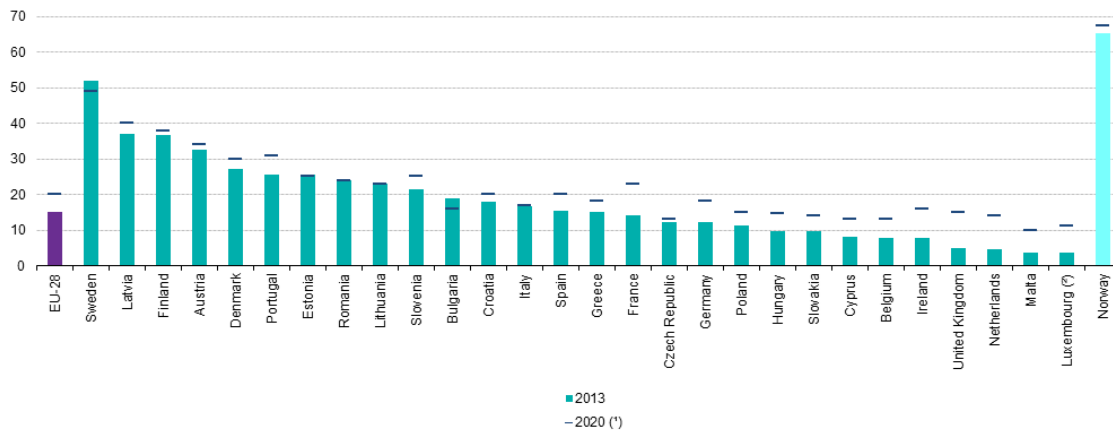
⁷⁴ *Idem*, available in: [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Share_of_renewables_in_gross_inland_energy_consumption_2013_\(%25\)_YB_15.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Share_of_renewables_in_gross_inland_energy_consumption_2013_(%25)_YB_15.png) ;

Union. The national politics of the country have soon been aligned with further search and innovation for more sustainable futures for the country and the world.⁷⁵

These tables present themselves as a perfect way to fully grasp the evolution of the ‘green energy’ production within the EU, but it also allows us to verify one of the main fragilities in this sector in the Union- the very different paces, that the member-states present in this matter.

The highest ‘green energy’ consumer rate in 2013 was registered in Norway, with an astonishing 37, 4 % of all inland-national energy consumption, and 32, 8 % of that same value was due to hydropower energy.

The following graphic presents data regarding the share of renewables in gross inland energy consumption in 2013.



(*) Legally binding targets for 2020.
 (*) 2013: estimate.
 Source: Eurostat (online data code: t2020_31)

Table 4: Share of renewables in gross inland energy consumption, 2013;⁷⁶

⁷⁵ This much can be grasped with several of the country’s official communications on this subject, namely the one made regarding the ‘Norwegian policy on renewable energy’, dating 28th of September 2010, and available at: <https://www.regjeringen.no/no/aktuelt/norwegian-policy-on-renewable-energy/id615709/>;

⁷⁶ *Idem*, available in: [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Share_of_renewables_in_gross_final_energy_consumption_2013_and_2020_\(%25\)_YB15.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Share_of_renewables_in_gross_final_energy_consumption_2013_and_2020_(%25)_YB15.png);



Following the analysis of this data, graphic 4 provides us with very relevant information regarding the ‘green energy’ guidelines within the Union. With this table we can have a clearer view of what are exactly the aims of the EU regarding the environmental sustainability policy we have been analysing with this thesis, with the focus of the ‘green energies’ sector.

At a first glance, we can see that given the Eurostat’s estimations for 2013, Sweden and Bulgaria were the only two member-states that had in 2013 already reached its established legal binding goals for the year 2020. However, these were the only two exceptions- all the other state-members hadn’t reached the goals for 2020 yet, however, given that there are still 4 more years, they still have time to reach for the goals. The EU seeks to have a 20 % share of its gross final energy consumption from renewable sources by 2020.

Aside from combating climate change through a reduction in greenhouse gas emissions, the use of renewable energy sources is likely to result in more secure energy supplies, greater diversity in energy supply (thus tackling the EU’s energetic dependency problem), less air pollution, as well as the possibility for job creation in environmental and renewable energy sectors⁷⁷.

⁷⁷ For further reading we strongly suggest the following: *Energy Revolution, 2015 Full Report*, by Greenpeace, November 2015, and available at: <http://www.greenpeace.org/international/en/publications/Campaign-reports/Climate-Reports/Energy-Revolution-2015/>;

3. For and Against Environmental Governance- analysis of the case study and hypothesis presented

With the previous chapter we have extensively presented the object of our case study and tried to explain the relevance of its particular aspects in the light of international cooperation for sustainability.

In the present chapter we will briefly explore the main ‘for’ and ‘against’ arguments towards the Environmental Governance approach. We then intend to expose the three answer hypotheses that we have formulated regarding this thesis, and lastly present the hypothesis which we have concluded the most coherent after the elaboration of this thesis.

3.1- Against Environmental Governance Approach

We have deliberately chosen to start the sub-chapters on this matter by the negative view of the Environmental Governance (EG) approach because we believe that in that order we reinforce the positive points of the approach.

As has been noted with this thesis, the Governance approach is far from consensus and perfection. Being a ‘derivation’ of Governance, the EG approach is tangible by the same weaknesses and flaws than its main counterpart. The lack of clarity and objectivity in the discourse of many environmental activists that claim themselves to be ‘for Environmental Governance’ is easily criticised by being merely exaggerated self-righteousness and appealing to moral values and its subjectivity.



One other common critic strain to the EG approach has been and is still today, the lack of unity among its defenders.⁷⁸ In order for any governance approach to succeed, there has to be set a common line of action- with the global governance and the EG approach, this fact is even more relevant, once it is the most important part of these approaches core structure itself : unlimited and volunteer cooperation. This lack of common will from the states and non-state actors in pursuing the same goal is easily found in the EG initiatives and strategies. The ecological and environmental disaster continue to occur every day⁷⁹, all around the world, according to the critics simply due to the lack of strong and concertized action from states, international organizations (like the UN) and other non-state relevant actors.

Strongly related with this lack of unity in the EG promoters, is the powerful and determined critique and opposition of some of the world's most important companies and their lobbies⁸⁰.

Enterprises like the Royal Dutch Shell, BP or other energy companies, strongly oppose the fossil-energy dependency reduction advocated by most EG initiatives. This opposition is mainly based in two different arguments: first, the economic factors.

⁷⁸ Following this line of thought we would also like to refer the work *Scale, Sovereignty, and Strategy in Environmental Governance*, where the author James McCarthy develops the idea of environmental governance as a form of regulatory expropriation in international trade agreements;

⁷⁹ From illegal fires and forest-cut downs in Indonesia, to the hazardous oil spills that have happened just on the 01st December 2015 in Russian territory and has killed and endangered many water-bird and sea-animal species; environmental disasters have been happening almost none stop for the last 40-50 years. Even thou non-governmental organizations such as Greenpeace International, promote strong and determinate public awareness campaigns among the general public and some hard-core (sometimes illegal) action campaigns against the main companies and enterprises that are responsible for these ecological disasters, in the last 50 years we have still witnessed the global decreasing of forests and rainforests, the increase of oil related environmental accidents and of several others environmental crisis overlooks by the states and non-state actors and lobbies.

⁸⁰ In order to better comprehend the complexity of this matter, we suggest the following work: Several, *Environmental governance: the emerging economic dimension*, Environmental Politics, Volume 15, Issue 2, 2006;

Having funded an entire ‘empire’ based on the exploration and commerce of fossil-based energy, these companies have reasonably no interest in any initiative that intends to limit or endanger their wealth source. One of the most utilized arguments within this rhetoric is the fact that the drastic reduction from coal or oil energy consumption would inevitably lead to mass firings within these companies, which would have its negative toll in market economies⁸¹. These companies and enterprises present a real and a troublesome problem which activists and pro-EG promoters haven’t been able to answer yet: ‘Can the modern societies be truly de-fossilized? Can the market economies re-adapt and change into a greener economy? What about all the people, families and jobs that are at the present moment directly dependent from the fossil-energy exploration?’

So far, there isn’t a simple answer to these questions. Some of the fossil-energy companies merely accuse the EG promoters and initiatives of being a wishful thinking cause and nothing more. On the other hand, even though they have not stopped their fossil-energy activities, some energy companies have taken some steps towards environmental sustainability, investing real economic and human capital into scientific investigation and development of new ‘greener’ edges of their own activities⁸², in a certain form recognizing the necessity of pro-environment actions and measures.

⁸¹ Many scholars and enthusiast have advocated that the overall world economy is not compatible with the fossil-energy dependency reduction. For them, the fossil-energy market is one of the central pillars of today’s modern western economies, and without that, these economies would be incapable of guaranteeing jobs for the several thousands of people whose job is today dependent on the worlds consumption of fossil-energy resources. This necessity to pose the ‘and then what?’ question has been one of the main issues which pro EG entities have yet been able to respond in a assertive matter.

⁸² Regarding this point, many of the main oil-exploration companies have spent a significant amount of capital in order to prevent the unwanted and devastating oil-spills within the shipping of the crude. Other companies related to the fossil-energy sector have in the last decade invested in the creation of a specialized ‘Environment and sustainability’ department within its companies, in order to promote, develop and support projects and initiatives that aim at promoting the long term sustainability of our planet and resources.



We then have a third force of criticism and opposition to the EG approach, which is led by the ‘climate justice’ motto. The states and entities that support this critic to EG mainly state that the present climate changes and all of its associated negative consequences, were caused exclusively by the western developed states (namely the USA and all of Europe), and that this has only widened the gap between these so called developed countries and the in-development countries⁸³. Some states like China (in the start of its ascension to its current place in the international society, and not so much in the more recent times), Indonesia or India, have used this argument to claim their right to development. The only thing is, that their so called right to development has led to the abrupt increase of manufacture industries and environmental explorations that do not submit to any type of ‘sustainable environmental guidelines’, and which has been posing several challenges to the states itself in how to handle it best.

⁸³ This claim is founded by the fact that ‘in-development’ countries are also the ones who are suffering the most harsh and visible consequences of climate changes caused by the human activity on the planet. This approach can be related with some of the Marxist theories in IR, namely with the ‘resource dependency theory’, in which is stated that the developed countries need the in-development countries to not develop, in order to maintain their *status quo* and to do so they fund the in-development countries resources dependency – namely with the distribution of humanitarian aid instead of granting them the resources they would need to do it on their own in the long term.

3.2- For Environmental Governance Approach

In the following sub-chapter we will present some several concrete and positive examples of the achievements of the EG approach, so far.

Like we have been demonstrating during the elaboration of this thesis, the Governance approach to IR has not been able to reach consensus yet. While for some this approach presents itself unfeasible by having ‘too much’ centralization of will and power (legal and political) in order to work properly, for others the ‘de-statetization’ of the power and role of the state in any global governance approach is what causes the whole approach to be unrealistic and unlikely to work, since the state has indeed to commit itself to obeying guidelines and norms- even when its representatives feel otherwise.

However and having this in mind, we have chosen to demonstrate some of the positive and real examples of the global governance approach in action when applied to the EG approach in particular.

Without question the EU has for the last few decades invested itself into becoming more ‘environmental governance’ efficient. The policy already referred and studied in the development of this thesis, as well as other policies that were not contemplated, are clear signs of the continued effort of the EU in the direction of EG. If on one hand the EU and all of its institutions have been working hard to achieve more cohesive and mandatory norms and policies regarding environmental sustainability, on the other hand we also have to recognize that the EU member states have also been making a real effort in this field (even though the levels of commitment and concrete actions are very different from state to state). This commitment from the individual

member-states has been positively reinforced by the EU's creation of several incentives to environmental sustainability measures –like the financial incentives to the development and innovation on the green energies field, or even the European financial incentives to nature and wildlife preservation related projects within the EU.⁸⁴

Undoubtedly, one of the most important marks of this EU's avid intention to keep moving towards a greater and more institutionalized EG, has been the most recent COP21⁸⁵, an ambitious and huge project in which the EU has taken the lead from the start in order to prevent the repetition of the failure of the COP15, that took place in Copenhagen in 2009.

In this recent edition, the EU has proven itself to be able to lead successfully the conference, and achieve the prized goal: 195 countries have adopted the first universal climate agreement. This is the first clear sign that the world –and specially the world-politics decision makers- have recognized the importance and viability of the Environmental Governance approach- UN Secretary-General Ban Ki-moon stated after the adoption of the agreement: *“History will remember this day... The Paris agreement on climate change is a monumental success for the planet and its people.”*⁸⁶

The agreement achieved in the COP21 was the reunion and mixing of each state's contribution during the 13 days of conference. During that period each country had delivered its own and unique setting of conditions and commitments that were willing to make regarding the climate change problems. These individual plans were

⁸⁴ This is the case of the ‘Lince Ibérico Programme’ which is taking place since 2008 with the co-participation of Spain, or the several wildlife conservation programmes that are in place in each one of the EU member-states;

⁸⁵ The COP21 is the name given to the UN Climate Change Conference, 21st Conference of Parts, which has taken place in Paris from November 30th until December 11th 2015;

⁸⁶ This citation and other relevant information regarding the COP21 can be fully found in the following link:http://www.climateactionprogramme.org/news/historic_climate_deal_agreed_at_cop21?utm_source=Feeds&utm_campaign=News&utm_medium=rss ;



called ‘Nationally Determined Contributions’ (INDCs), and were in fact the strong and sturdy basis that the agreement needed to succeed.

There was a crucial difference, which we believe, has prevented this agreement from suffering the same faith as the COP15 one – the governance dimension. A large part of why the COP15 agreement was widely rejected in 2009 was the simple fact that the agreement was presented as mandatory and binding to all states which chose to sign it –just like the present agreement- it had, however, not been funded on an individual basis, but on a more generalist one and it was not flexible. This presented itself as a problem. A crucial part of the success of any governance approach is the equilibrium between the national or private interests and capacities and the specific governance goals.

By being funded in each personal state assessments of where and how much they were able to and willing to invest in climate change prevention, –in this specific case, regarding the green-house gas emissions- was in fact a very good way to demonstrate that even though countries and states are not all alike in resources and capacities, they all are affected by this issue, and so they all should be involved and committed in dealing with it.⁸⁷

Another key point about the COP21 agreement is the fact that it is rather flexible. Carefully enough, we do not intent to use the word ‘flexible’ to assume that it means that if the signatories of the agreement don’t fulfill its commitments, they will have no formal sanctions. In fact, we mean ‘flexible’ in the way that the present agreement has set a common goal for all: to reduce the green-house gas (GHG)

⁸⁷ FALKNER, Robert, *Environmental Governance and International Relations: Exploring the Links*, May 2003, Vol. 3, No. 2, Pages 72-87, Global Environmental Politics, MIT Press Journals, USA, 2006;



emissions and to limit the average rise in global temperatures to 2 degrees Celsius above pre-industrial times, but without having the signatories highly constrained by their own reduction shares. Although the agreement established national reduction shares for GHG emissions, this is a value that can be rectified if and when necessary, focusing that the important is that all the countries contribute actively to reduce their own emissions in order for it to be a global effort and present global positive outcomes.⁸⁸

We can perceive the fact that 195 countries and states have signed a common agreement on climate change and commit to a common effort towards facing it, actually accentuates the relevance of the environmental sustainability field for today's world politics.

⁸⁸ For further information on the COP21 and all of its developments, we recommend the consultation of the following link: <http://www.cop21.gouv.fr/en/195-countries-adopt-the-first-universal-climate-agreement/> ;

3.2.1 – Hypotheses presentation

For the realization of this thesis we have started with the creation of 3 hypotheses that better illustrated the three possible main conclusions for the problematic that we have covered in this work.

The hypotheses were as follows:

- a)- ‘Environmental Governance’ as an essential and viable component for the future of world politics;

- b)- The impossibility of ‘Environmental Governance’ as an essential and viable component for the future of world politics;

- c)- ‘Environmental Governance’ as an partially necessary component for the future of world politics.

At this point in the thesis and after careful study and weighing of the several different factors and theoretical approaches to have in account, we strongly believe that the hypothesis that should be mostly taken in account is the a) ‘Environmental Governance’ as an essential and viable component for the future of world politics. We shall develop a bit more on this conclusion in the following and final chapter.

We support this conclusion by the data, report and documental analysis we have done so far, as well as by all the relevant entities and ONG’s that have reached a similar conclusion. Furthermore, we would like to support this statement by having in account the World Economic Forum (WEF) report, entitled *Scaling Technologies to*

Decarbonize Energy, dated October 26th 2015⁸⁹. In this report, the WEF presents 15 high potential technology areas and processes to speed up renewable energy development and deployment, stating that around two thirds of global greenhouse gas emissions come from energy production and consumption. Therefore, accelerating development and deployment of technologies to decarbonize energy production and consumption will be at the core of tackling climate change effectively at the speed required to reach the so desired 2 degrees Celsius temperature rise limit determined by scientists.

This report strongly concludes that despite astonishing progress in areas such as renewable energy and energy efficiency in recent years, faster, wider and deeper action is required in order to reach global sustainability. It also concludes that there are many technology options to decarbonize energy and innovation to make those technological improvements a reality. The WEF report presents an interesting view, opposing *what we want to do* to *what we can or must do*. It clearly demonstrates that we already have technology developed enough to turn sustainable development into a reality and not just a part of wishful thinking.

However, it also brightly deduces that this reality comes with a cost. It will require strong investment and committed policies, but in the long run it is our only way to have a sustainable future- and not just for future generations, also for the present ones.

⁸⁹ Full report available at the WEF website, at: <http://reports.weforum.org/scaling-technologies-to-decarbonize-energy-info/>;



This report allows us to reinforce our statement that environmental governance is as an essential and viable component for the future of world politics, and even more for the future of our civilization.



Conclusions

During the elaboration of this thesis we have tried to deepen our knowledge about a specific IR approach – Environmental Governance’. To do so, we have explored several different authors and thinkers, for and against this perspective, while keeping the subject within the framework of the EU and even more in particular, of the EU’s March 2009 policy regarding the energy and environment. This focus on the EU as a case study for this subject was not by chance. It was a very weighed and rational decision that was based in the following main points:

- Firstly, the geographical and political importance of the EU in today’s world.

This is without a doubt one of the most important aspects that led to us choosing the EU’s as a case study. Although there are many different sights and perspectives about what the importance of the EU was and is today, with the research led to this thesis we were able to conclude that in the present time, the European Union remains one of the most valued geopolitical asset in world politics, namely in the environmental governance field, as in other fields.

The EU continues to register requests for EU membership, even with the financial instability around the Euro and some of its member-states delicate situations – this is by itself a sign of how the other states outside the Union perceive it. We can infer that if they long to join the Union, they assume the Union can and will provide them with new and better settings and opportunities. In the world politics field, the EU is present in the

entire major and most important decision making processes, and its participations and contributes are not taken lightly⁹⁰.

The EU has been able to maintain peace inside its members and borders for the last decades, this fact as contributed greatly to the establishment of the Union as a model when it comes to international cooperation and stability promotion. The security factor is one of the most important in the current times – and one of the most contested and polemic, given to the recent developments in terrorist attacks perpetuated inside EU's borders and, in most cases, by EU's legalized citizens.⁹¹ However, people inside European member-states have remained calm and faced this situation by carrying on with their lives and by making public demonstrations and appeals to peace, this presents itself as a sign that even in troubled and hard times, the present EU transmits to its citizens a sense of stability and unity.

- Secondly, the EU's position regarding environmental sustainability in today's world.

Unity and cohesion have always been some of the guidelines inside the Union's development. This said it comes of no surprise that the EU's member-states and institutions have over the last few decades tried hard and fully to pursue common directives regarding environmental sustainability and 'green practices'. We promptly recognize that the EU faces many challenges, namely within itself, given to the extraordinary differentiation of its members at almost all levels- economic, legislative and even political- however, we also promptly point out that the EU shares a very

⁹⁰ In this case we can exemplify through the case of NATO, UN or international conferences and meetings;

⁹¹ This has been one of the most polemic and controversial themes regarding the Union lately – many are wondering if the Schengen zone was a step too big in a globalized and transnational world, where technology and infrastructures allow the almost too quick exchange of information, merchandise and people;

powerful common trait among its members: the love and tradition for democracy and human rights .

This is indeed a fundamental aspect, and from our perspective, one that has contributed to placing the EU in the lead of the world when it comes to environmental sustainability matters. This can be easily understood by the following: in the last few decades the EU has made a great effort to spread the notion that the Environmental Protection is part of the Human Rights, and as such it should be advocated. The Union has been aiming for a broader setting of common policies within its members, inserting an ‘Environmental Governance’ approach as an attempt to tackle some environmental issues more effectively.⁹²

The best example of the true relevance that the EU possesses in this field today was the COP21 result. Like it has been referred within this thesis earlier on, the international agreement signed by 195 countries and states during the summit and regarding the climate changes was only possible due to the leadership of the EU. The Union was the motor of the 11-day negotiations that led to the agreement.

- Thirdly, ‘Environmental Governance’ as an essential and viable component for the future of world politics.

During our thesis we were able to conclude that in the present settings, and having in account the complexity of today’s international world politics, ‘Environmental Governance’ can be seen as an essential and viable component for the future of world politics.

⁹² This can be perceived by the Union’s common policies, namely regarding Energy, Water and sustainable goals.



Climate changes and the challenges it brings cannot be postponed or ignored anymore. The time is now, and most of the world leaders and decision makers have finally agreed on that point. The COP21 allowed states and countries to get a real grip about where which one stands and should stand in relation to the environment. Like UN Secretary-General, Ban-ki Moon said ‘history has been made’, with the agreement, but only the full commitment of all states and countries will allow achieving environmental sustainability in the future.

All things considered, we believe that the European policy analyzed for this thesis can be perceived as part of the Environmental Governance approach by the EU. We also argue that this policy was the reflection of a long setting of other policies that had been in place and also a presented in it a sturdy basis for other future common policies in this area. This can represent the full commitment by the EU to pursue a more sustainable future for itself and the world, and in order to do so, perhaps a ‘European global governance’ approach is in the making, even though we recognize that some of the critics made to the GG approach should be taken in account, namely the need for this approach to become more flexible and adaptable to today’s world politics. The GG movement leaders shouldn’t think of themselves as leaders in the sense of authority figures, but rather as in the sense of examples. The GG was never meant to be a competition for who reduces the CO₂ emissions the fastest. It has risen as one possibility, and a very good one, to achieve some of the objectives that the world leaders have been trying to achieve since the end of the Cold War period- peace, development and sustainability.

The following quote from Edmund Burke, truly expresses the main point we have argue during this thesis: that Environmental Governance funds its relevance in the

simple fact that it represents the future. The future of all of us, and of future generations, is being defined by how we choose to act towards the planet sustainability today.

“Society is, indeed, a contract. Subordinate contracts for objects of mere occasional interest may be dissolved at pleasure; but the state ought not to be considered as nothing better than a partnership agreement in a trade of pepper and coffee, calico or tobacco, or some other such low concern, to be taken up for a little temporary interest, and to be dissolved by the fancy of the parties. It is to be looked on with other reverence; because it is not a partnership in things subservient only to the gross animal existence of a temporary and perishable nature. It is a partnership in all science, a partnership in all art, a partnership in every virtue and in all perfection. As the ends of such a partnership cannot be obtained in many generations, it becomes a partnership not only between those who are living, but between those who are living, those who are dead, and those who are to be born”. Edmund Burke (1865), Reflections on the Revolution in France and on the Proceedings in Certain Societies in London Relative to that Event: in a Letter Intended to Have Been Sent to a Gentleman in Paris, The Works of the Right Honorable Edmund Burke, Vols. III, Revised Edition, Boston: Little, Brown, and Company., p. 359.

The present needs us to act. The planet needs us to act. And our children need us to commit to act, for their future. In order to ensure a future for the planet, and consequently for mankind, we need to take seriously our commitment to become sustainable. Utilizing Edmund Burke’s words in the quote above, just like the state is indeed an intergenerational unspoken contract that should be preserved by the sake of future generations, so it is with our planet. Our unspoken contract with planet Earth must not be broken, the future, our future, depends on it.



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