THE EUROPEAN UNION’S 2030 CLIMATE ENERGY PACKAGE AND THE COP 21

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ABSTRACT

The 2030 Climate Energy package adopted by the European Council at the Brussels Summit of 23/24 October 2014, sets the European Union’s new climate and energy targets for 2030. These targets include a reduction of greenhouse gas (GHG) emissions by at least 40% by 2030 compared to 1990 levels, at least 27% of renewables as a share of the EU’s final energy consumption by 2030, and an indicative target of 27% for energy efficiency (energy savings) by 2030, based on 2007 projections. These targets are deliberately flexible and ambiguous, allowing for an agreement to be concluded between the 28 Member States which includes significant concessions granted to the Visegrad + countries while preserving the long term objective of a transition towards decarbonized energy systems.

The 2030 Energy-Climate package is the European Union’s contribution to international climate change negotiations leading up to the Paris Climate Conference (COP21). The EU was the first to have put forward its contribution ahead of the Conference. The adoption by the EU of an ambitious GHG reduction target for 2030 was followed by the joint United States-China climate declaration, a positive dynamic having thus been launched one year ahead of the COP21 Conference. However, the EU has also opted for a pragmatic approach, the 2030 package allowing for the revision of the objective of GHG reduction according to the outcome of the Paris Conference. In the context of the unanimity rule at the level of the European Council Poland and the Visegrad + countries, played crucial roles in shaping the outcome of negotiations surrounding the EU’s 2030 Climate Energy package.
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INTRODUCTION

The European Council, composed of the heads of state and government of the 28 Member States of the European Union, adopted the 2030 Climate-Energy package at the Brussels summit of 23-24 October 2014. This followed months of negotiation between Member States which highlighted deep divergences between Western and Eastern European countries, with significant concessions being granted to Poland and the countries of the Visegrad + group1.

The 2030 Climate Energy package sets the EU’s climate and energy targets for 2030, replacing from 2020 onwards the 2020 Climate Energy package which was adopted by the Council in December 2008 – the objectives of the 2020 package remaining however fully applicable beyond 2020. The 2020 package set the terms of the debate by introducing three objectives: a reduction of the EU’s greenhouse gases emissions (GHG), an increase in the share of renewable energies as a percentage of the EU’s gross energy consumption and an increase in energy efficiency (i.e. energy savings) compared to 2007 projections2.

The 2030 Climate Energy package distinguishes itself from its predecessor with the paradigm of sustainability being replaced with that of competitiveness. This change of paradigm took place in the context of the 2008 financial crisis and of the economic recessions which hit EU countries as a whole.

The EU targets for the 2030 package are the following: a reduction of GHG emissions by at least 40% by 2030 below 1990 levels through measures which for the time being remain internal to the EU; at least 27% of renewable energy as a share of final energy consumption by 2030; a 27% energy efficiency target by 2030 compared to 2007 projections, a review of this indicative target being scheduled for 2020 with a view to bringing it up to 30%. At the same time, the carbon market system, or EU-ETS (Emissions Trading Scheme) was confirmed in its role as the EU’s prime instrument in its fight against global warming3. The new objective of a reduction of GHG by 40% by 2030 below 1990 levels is to be met by a reduction of 43% for sectors covered by the EU-ETS system and by a reduction of 30% for non EU-ETS sectors (construction, transport, agriculture) compared to 2005 levels.

The 2030 Climate Energy package also includes a reform of the carbon market whose price has collapsed from 30 euros per ton of CO2 (tCO²) in 2008 to 6 euros by tCO² in 2014, the European Commission setting forth its proposals for a reform of the ETS in July 20154. The EU’s Climate Energy packages are inscribed in the EU’s long term objective of reducing GHG emissions by 80 to 95% by 2050 compared to 1990 levels, this objective having been adopted by the European Council in 2009 in line with the conclusions of the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC)5, in the context of developed countries acting as a group6.

Two elements are characteristic of the EU’s Climate Energy packages. First, the packages reflect the EU’s approach to treating energy and climate policies jointly. Second, the elaboration and adoption of these packages have been aligned with international climate change negotiations: while the 3X20 package was adopted in December 2008 ahead of the

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1 The Visegrad + group includes Poland, Hungary, The Czech Republic, Slovakia, in addition to Romania and Bulgaria.
2 A « Climate Energy package » refers both to an action plan and to a « legislative package » which includes directives, regulations and decisions. It is first the subject of a political agreement at the level of the European Council before being adopted by Parliament and the Council of Ministers.
3 This system, which was set up in 2005, covers at the moment over 12 000 installations throughout the EU and over 40% of the EU’s carbon emissions. See ec.europa.eu/clima/policies/ets/index_en.htm.
4 Cf infra as well as ec.europa.eu/clima/policies/etc/reform/index_en.htm and “What’s needed to fix the EU’s carbon market”, Carbon Market Watch Policy Briefing, July 2014. See below for the July 2015 proposals of the European Commission for a reform of the ETS.
5 Set up in 1988 by the United Nations Environment Programme (UNEP) and by the World Meteorological Organization (WMO), the IPCC is the leading international body for the assessment of climate change. See www.ipcc.ch.
Copenhagen Conference of December 2008, the 2030 Climate Energy package was adopted in October 2014 in the context of negotiations leading up to the Paris Conference of December 2015.

The 2030 Climate Energy package represents the EU’s contribution to international negotiations, the 195 signatory countries of the United Nations Framework Convention on climate change (UNFCCC), an international treaty on climate change adopted at the Rio Summit in 1992, having for the first time committed themselves to reduce their GHG emissions with the Lima Agreements of December 2014 (COP 20)7 and agreed to present their national contributions by the end of March 20158. The EU was thus the first to present its contribution ahead of the Paris Climate Conference or COP 21/CMP 11. The EU’s 2030 Climate Energy package marked a key moment in international climate change negotiations. By committing itself on climate targets ahead of the Paris Conference, the EU kept the leadership role which it took over after the non-ratification of the Kyoto Protocol by the United States10.

In order to fully understand the intricacies of the 2030 Climate Energy package, it is necessary in the first instance to consider the modalities of the 3X20 package and the context in which it was adopted, before turning in the second instance to considering the contents of the 2030 package as well as the conditions in which it was negotiated by the Member States before being adopted by the Council in October 2014. Finally, the future of the 2030 Climate Energy package are considered, both in terms of the EU’s objective of a transition to a low-carbon energy system and in terms of its role in international climate negotiations up to COP 21.


The content of the 3X20 package

The “three times twenty” by 2020 formula included three unilateral targets: a reduction of GHG emissions by 20% by 2020 below 1990 levels and possibly by 30% in the event of a “satisfactory” international agreement being concluded at the Copenhagen Conference; an increase in the share of renewables to 20% of primary energy consumption; and a 20% improvement in energy efficiency (energy savings) compared to 2007 projections of 2020 consumption.

8 See below.
9 The Paris Conference of COP 21 corresponds to the 21st Conference of the Paris or COP of the signatory countries of the UNFCCC (195 in total), as well as to the 11th Conference of the Parties to the Kyoto Protocol (CMP11). Adopted in 1997 and ratified by 192 countries, the Kyoto Protocol includes binding targets for the reduction of GHG for Member Countries of the Organization for Economic Cooperation and Development (OECD) as well as for countries in transition (Annex 1 countries of the Protocol), developing countries (or non-Annex 1 countries) being dispensed with having to reduce their GHG emissions.
While the first two targets for the reduction of GHG emissions and for an increase in the share of renewables were legally binding, (the target for renewables being legally binding at both the EU level and at the level of each Member State), the third objective for energy efficiency remained indicative only. It is also possible for Member States to meet their obligations for the reduction of GHG emission by using offsets i.e. through the import of emissions credits.

The 2020 Climate Energy package represented a new beginning in the way in which the EU envisaged energy and climate issues : while energy and climate were up until then considered separately, with the package adopted at the end of 2008 the EU began for the first time to define its energy and climate policies jointly. The EU was the first major economic zone to have adopted such a combined approach, the “three time twenty” package was thus distinguished by its originality.11

The IPCC’s fourth assessment report and the EU target of a reduction of greenhouse gases emissions by 80 to 95% by 2050

This transformation in the approach of the EU is to be understood within the context of an increased awareness at this time of the urgency of global warming, both in environmental terms and in economic terms. Two reports were particularly influential and instrumental in this change of mentality, with specific implications in terms of the targets for the reduction of the EU’s GHG emissions.

In the first instance, the Stern report, published by the British government in 2006, raised the alarm by highlighting the economic consequences of global warming. Its main conclusion was that the benefits to be derived by taking rapid and significant action to fight against global warming outweigh the cost associated with these actions.12

Second, the conclusions of the IPCC’s Fourth Assessment Report (AR4) published in 2007 acted as a catalyst in the debate on climate change by stressing the human origins of global warming.13 The IPCC’s AR4 report concluded that “global GHG emissions due to human activities have grown since pre-industrial times, with an increase of 70% between 1970 and 2004 “ while “most of the observed increase in global average temperatures since the mid-twentieth century is very likely due to the observed increase in anthropogenic GHG emissions” 14.

The IPCC’s conclusions had very concrete consequences in terms of the EU’s targets. The IPCC set out the list of commitments which the Parties to the Rio Convention needed to take in order for the increase in world temperatures to remain below 2°C compared to pre-industrial levels (before 1850), the reference to a ceiling of 2°C having been adopted at the international level in the context of the Copenhagen Agreements of 2009 and the Cancún Agreement of 2010, under the decisive impulse of the EU.15 As part of its AR4 report, the IPCC issued recommendations for the reduction of GHG for countries included in Annex 1 of the UNFCC (countries which were members of the OECD in 1992 and countries in market transition) as well as for non-Annex 1 countries (developing countries and emerging countries).

The effort to be made by EU Member States as Annex 1 countries involved, according to IPCC estimates, a reduction in GHG emissions by 80 to 95% below 1990 levels by 2050. It is thus this (non-binding) target which the EU formally adopted as a group, within the framework of Annex 1 countries. The target of a reduction of GHG emissions by 20% by 2020 set out in the 3X20 package was thus an intermediary objective towards the long term objective of a reduction of GHG

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11 See ec.europa.eu/clima/policies/package/index_en.htm
This analysis is also to be found in the more recent New Climate Economy Report, which aims to show that “countries at all levels of income can achieve economic growth while combating climate change “. See www.newclimateeconomy.report/
13 See ipcc.ch/report/ar4/.
15 See cancun.unfccc.int/cancun-agreements/main-objectives-of-the-agreements/# and unfccc.int/resources/docs/2009/cop15/eng/107.pdf. Some scientists and experts do however recommend that the 2°C target be abandoned, having become according to them already clearly unattainable. See Oliver Geden “Warming world, it’s time to give up the two degree target”, Der Spiegel, 7 June 2013 and “Impending paradigm shift, international climate negotiations and their impact on EU energy policy” KAS Reports, September 2012, pp. 25-27, see www.notre-planete.info/actualités/actu_2846_limite_2_degres_temperature_Terre.php.
emissions by 80 to 95% below 1990 levels by 2050\textsuperscript{16}. This ambitious climate target for 2050 necessarily implied energy reforms since CO\textsubscript{2} emissions, which account for 80% of GHG emissions at EU level, are mainly due to energy consumption\textsuperscript{17}. Since the conclusions of the European Council summit in March 2007, the EU’s climate and its energy policies thus together seek the objective of keeping the increase in temperatures below the 2°C limit\textsuperscript{18}.

\textit{The logic of the 3x20 package and the progress accomplished}

The 3X20 package thus embodied a logic of sustainability in the context of the fight against global warming. It also corresponded to a logic of “soft power” which the EU sought to promote in the years which preceded the 2008 financial crisis, at a time when the unilateralist policy of George Bush’s America stood in contrast to the multilateral values and international norms championed by the EU. The fight against global warming represented an opportunity to disseminate values of respect for the environment, altruism and international cooperation.

It also offered an opportunity to reinforce European integration, at a time when the victory of the “no” in the referendums organized in the Netherlands and in France in the spring of 2005 appeared to mark a halt in the process of European construction. Moreover, some Member States, such as the United Kingdom, were at the time receptive to the idea of abandoning part of their sovereignty in favor of the creation of a common European energy policy; the 2020 Climate Energy package thus launched the first decade of the creation of a European market for gas and electricity\textsuperscript{19}.

The 2020 Climate Energy package also embodied a logic of energy security with regards to Russia, bringing on board new Member States skeptical with regard to the idea of a sustainable energy policy combining energy with environmental objectives. The 3X20 package was framed not in terms of a systemic break at the level of the EU but instead introduced the idea of a progressive transformation within a preexisting framework. The objectives of the 3X20 package were thus acceptable to all parties concerned\textsuperscript{20}.

At the moment, nearly all the objectives of the 3X20 package are on course to being met. In particular, the EU will probably reach its target of a reduction in GHG emissions of 20% before 2020: while the EU’s GDP growth reached 45% between 1990 and 2012, the GHG of the 28 Member States – including international aviation emissions – had decreased by 19.2% in 2012 compared to 1990 levels\textsuperscript{21}. The fact that the fundamental objective of a decoupling between GDP growth and an increase in GHG emissions is assured is in part the result of economic recession having led to a reduction in demand and in the production of energy, as well as the development of renewables and gains in energy efficiency\textsuperscript{22}.

With regard to renewables, good progress is being made, their share in final energy consumption having increased from 8.7% in 2005 to 14.9% in 2012 thanks to public policies which support investment in renewables, in particular in photovoltaic (PV) and onshore wind technologies. However, the target of 20% of renewables by 2020 will not be entirely met unless initiatives are taken which stimulate the market in certain countries and for certain technologies. As for the


\textsuperscript{17} 80% of GHG emissions originate in the energy sector. The European Commission has proposed in its roadmaps that emission from the energy sector be reduced by 85% and those from the electricity sector by 95%. See Oliver Geden and Severin Fischer “Moving targets, the EU’s energy and climate objectives for the post 2020 period and the implications for the German energy transition”, SWP Research Paper, March 2014, p. 11.

\textsuperscript{18} See \url{www.boursier.com/actualités/economie.les-émissions-de-co2-ont-recule-de-plus-de-2-l-an-dernier-au-sein-de-l-ue-28-23871.html}.

\textsuperscript{19} Severin Fischer « La politique énergétique de l’Union Européenne après le sommet d’octobre », contribution to the workshop EDF R&D/CERI « The geopolitics of energy », Paris, 20 November 2014. A summary of the workshop is available at \url{sciencespo.fr/ceri/fr/content/energie-et-cohesion-gouvernance-regulations-et-négociations}.

\textsuperscript{20} ibid.

\textsuperscript{21} See COM (2014) 689 final: 13 Member States will have to undertake additional efforts and 15 Member States will be able to fulfill their engagements with existing measures, pp. 6 and 7.

\textsuperscript{22} This decoupling can moreover be observed at the level of each Member State. See the report by the Commission to the European Parliament and to the Council, \textit{Progress accomplished in the realization of assigned objectives in the context of the Kyoto protocol and of the objectives of the Union for 2020}, COM 2014(689) final, p.5, available at \url{ec.europa.eu/transparency/regdoc/rep/1/2014/EN/1-2014-689-EN-F1-1.Pdf}.
energy efficiency target, the UE could reach 18% or 19% of energy efficiency by 2020 with existing measures; however, reaching the 20% target remains a challenge.\(^{23}\)

While the EU is getting closer to achieving the targets set in the 3X20 package in particular with regard to the reduction of GHG emissions, the main problem is that of the carbon market which at the moment does not play its role as a mechanism by which to regulate and to reduce carbon emissions within the EU. The system suffers from a surplus of emissions quotas, its price having decreased from 30 euros/TCO\(^2\) in 2008 to 6 euros/TCO\(^2\) in 2014\(^{24}\). The 2008 financial crisis and the recession indeed led to a decrease in the production of energy, while the system has not been elaborated so as to be able to manage the problem of an offer of quotas superior to demand. Thus the carbon market has not encouraged investment in low carbon technologies.

The positive results obtained concerning the process of decarbonization of the EU are hence for the moment mainly the result of national policies in support of renewables and of energy efficiency\(^{25}\). One of the priorities of the 2030 Climate Energy package is thus to undertake a reform of the carbon market system in order to reduce the EU’s carbon emissions (see infra)\(^{26}\).

\section*{2. THE 2030 CLIMATE ENERGY PACKAGE}

\textit{The content and dispositions of the package : the three targets, the reform of the carbon market and energy security}

The 2030 Climate Energy package includes a reduction of GHG emissions by at least 40% below 1990 levels by 2030, a share of at least 27% of renewables in energy consumption by 2030 and an energy efficiency target of at least 27% by 2030 compared to 2007 projections of energy consumption. The GHG emissions reduction target is legally binding at the level of the EU: it is to be met by a 43% reduction in emissions for EU-ETS sectors and by a 30% reduction for non EU-ETS sectors (construction, transport and agriculture).

At this stage, the target of a reduction of GHG emissions, contrary to what was set out in the 3X20 package, does not allow for the import of emissions credits; it will be met by a contribution from each Member State, ranging from 0% to 40% (which remains to be determined). The target of 27% of renewables in energy consumption by 2030 is also legally binding, but only at the EU level, which means that there is no legal constraint, whether it be at the level of Member States or at the level of sectors, in contrast with the dispositions of the 3X20 package\(^{27}\).

This evolution is partly a result of the perception that Brussels had been too intrusive in the case of the 2020 package. It is also linked to the idea that renewables ought to develop as much as possible within the framework of market mechanisms. Member States also wished to remain in control of their respective national energy strategies and be able to determine their energy mix in a flexible manner\(^{28}\). The fact that this target is not legally binding at the level of States means that the new structures of governance referred to in the package will be crucial, whereas they remain as yet still undefined. As for the 27% energy efficiency target, it is the weakest of the three targets, whereas it is considered as having a major role to play in the reduction of GHG emissions. It is purely indicative and is inferior to the recommendation of the Commission for a 30% target. Alongside these three objectives, the 2030 Climate Energy


\(^{24}\) Ibid, p.13.

\(^{25}\) According to the International Energy Agency’s \textit{World Energy Outlook 2014}, the total value of renewables subsidies in 2013 was 52 billion euros, or 57% of world subsidies for renewables, with 22 billion euros of subsidies for solar PV and 11 billion euros of subsidies for wind energy. See IEA, op.cit.p. 13

\(^{26}\) The EU-ETS system is directly linked to the provisions of the Kyoto Protocol, the use of mechanisms specified in the Protocol being possible for installations which operate within the framework of the carbon market (in particular the Clean Development Mechanism and the Joint Implementation Projects), Ibid., p. 70.


\(^{28}\) IEA, p. 52.
package also includes an interconnection target which, from 10% in the 3X20 package, reaches 15% by 2030. The
reinforcing of interconnections with Spain, Portugal, Malta, Cyprus and Greece as well as with the Baltic States are noted
as being priorities.

The package also includes dispositions for the reform of the carbon market, in particular with the creation of a Market
Stability Reserve to address the problem of a surplus in emissions quotas (estimated at over 2 billion emissions
allowances), the increase in the linear reduction factor from 1.7 to 2.2 in 2025 and the postponement of the auction of
900 million emissions quotas (“backloading”).

The European Parliament, in the context of an informal agreement reached during the Latvian presidency of the Council,
adopted in July 2015 legislation for the creation of the Market Stability Reserve, which could according to some experts,
bump up the price of carbon to 17 euros in 2020 and 30 euros in 2030, compared to a current trading price of between
5 and 10 euros per t/CO2. Due to start operating on 1 January 2019, the new system will automatically take a portion of
ETS allowances off the market and place it in a reserve if the surplus exceeds a certain threshold. In the opposite
scenario, allowances could be returned to the market.

The European Commission also put forward in July 2015 its legislative proposal for a wider reform of the ETS system in
the form of a Summer Package, in accordance with the objectives of the 2030 Climate Energy package and in particular
with the objective of a reduction of GHG emissions by at least 40% by 2030 below 1990 levels.

First, the package stipulates that this objective will have to be met by a reduction in GHG emissions by 43% compared
to 2005 for those sectors covered by the EU ETS. The legislative proposal the Commission put forward in July 2015 thus
stipulates that the overall number of emission allowances will have to decrease at an annual rate of 2.2% from 2021
onwards compared to 1.74% currently. This translates into an additional emissions reduction in the sectors covered by
the ETS of 556 million tons over the period 2021-2030 - equivalent to the annual emissions of the UK.

Second, the package also aims to improve the rules to address carbon leakage, in the context of a revision of the system
of free allocation which accounts for 43% of emissions allowances (the emissions allowances which are auctioned will
remain at 57% of the total of allowances for the period 2021-2030). The number of sectors which will benefit from free
allowances will be reduced to 50 (from 180 currently). These improvements will also include the updating of benchmarks
to take into account advances in technology, a greater number of free allowances to be set aside for new entrants, and
more flexible rules to better align the amount of free allowances with closures and production increases.

Third, two new support mechanisms would be created. An Innovation Fund will extend existing support for the
demonstration of innovative technologies to breakthrough innovation in industry and allocate free allowances to the
modernization of the power sector in lower income Member States. A Modernization Fund will facilitate investments in
modernizing the power sector and wider energy systems and boost energy efficiency in these countries. The European
Commission’s Summer Package still needs to be approved and adopted at the level of the European Parliament and of
the Council.

Finally, a directive on Energy Security is associated to the 2030 package. Adopted in June 2014 in the context of the
crisis in Ukraine it includes, amongst other provisions, the integration of the gas market through priority infrastructure
projects (North-South corridor from Finland to the Baltic states to the Southern corridor, new gas hub in the
Mediterranean), as well as a consistent external policy at the level of the EU and of Member States, in particular with

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30 ec.europa.eu/climat/publications/docs/factsheet_etc_en.pdf and ec.europa.eu/clima/policies/ets/reform/index_en.htm, as
well as « Reforming the EU-ETS » in IEA op. cit., pp. 68-69. Measures are also included in order to support companies which are
exposed to carbon leakage – a delocalization of their activities towards those countries whose legislation concerning carbon
emissions is more flexible than in the EU can lead to an increase in the global emissions of those companies.
32 For the full text of the European Commission’s Summer package, see COM (2015) 337 final
33 This directive takes up the recommendations of the European Council of May 2014, COM (2014) 330 final.
regard to strategic partners and major sources of supply. Stress tests undertaken to simulate disruptions in the supply of gas have underlined the overall resilience of the European system\textsuperscript{34}.

A change of paradigm: from sustainable or “environmental” energy to competitiveness

The modalities of the 2030 Climate Energy package are first and foremost linked to a change in paradigm, with this not becoming clearly apparent until the European Council of May 2013 when discussions focused on the question of the evolution of energy prices\textsuperscript{35}.

Indeed, the EU Roadmaps published during 2011 continued to underline the logic of sustainable energy, only Poland having openly expressed its disagreement with this approach. The paradigm of sustainable energy was however replaced by that of competitiveness in the wake of the 2008 financial crisis and in the context of the economic recession which affected a majority of Member States. From then onwards, the issue of energy prices, in particular when compared to those of the United States, took pride of place in EU discussions and mobilized coalitions of Member States in what is traditionally a fairly divided sector\textsuperscript{36}.

The failure of international climate change negotiations, with in particular the failure of the Copenhagen Conference to deliver a new treaty in 2009, had at the same time the effect of dampening the manner in which the EU envisaged its climate ambitions and its GHG emissions reduction target\textsuperscript{37}. In the context of the 3X20 package, the deadline of the Copenhagen conference and the EU’s desire to position itself as a leader in climate policy on the international scene and encourage other States to also opt for ambitious objectives, were directly linked to the EU’s target of a reduction of GHG emissions which was set at 20%, but which could be increased to 30% depending on the outcome of the Conference.

By contrast, in the case of the 2030 Climate Energy package, the link between international negotiations and the EU’s target was the subject of a debate between Member States, Eastern European countries in particular rejecting the idea of a unilateral climate target. The new objective of a reduction by at least 40% of the EU’s GHG emissions by 2030 included for this reason a clause allowing for a possible revision of this target after the Paris Conference, which opened the door to any type of interpretation\textsuperscript{38}.

Moreover, whereas the energy and climate policies of the EU were aligned in the context of the 3X20 package, the new Climate Energy package reflects a division which took place at this level as well. Countries were undergoing a period of crisis, with their economies and energy trajectories diverging greatly. The environmental ambitions of certain Member States were also revised downwards, such as in the case of the United Kingdom and in Spain\textsuperscript{39}. However, it is clear that the fight against global warming also has important economic implications: while China or the United States are investing in new green technologies, the EU runs the risk of being outpaced on this level in the absence of clear and certain objectives for the development of renewable energy and energy efficiency\textsuperscript{40}.

While a greater europeanisation of electricity and gas markets is taking place, this kind of trend cannot be observed with regard to energy policies. Member States wish to return to a greater degree of independence in the context of a

\textsuperscript{34} IEA, op.cit. p. 49.
\textsuperscript{35} The three paradigms of the Climate Energy packages are sustainability, security of supply and economic competitiveness. Ibid, p. 11.
\textsuperscript{38} Severin Fischer, op.cit.
\textsuperscript{40} « Our collective interest. Why Europe’s problems need global solutions and global problems need European action », European Think Tanks Group, September 2014, p. 15 available at ecdpm.org/publications/europeas-problems-need-global-solutions-ettg-report/.
renationalization of energy policies and of international climate change negotiations which have not been conclusive up until now. Moreover, Eastern European countries, having gained since 2008 greater experience in the three objectives of the EU as well as with regard to their own trajectories and national policies, were able to negotiate the EU’s 2030 Climate Energy package in a more informed and better organized manner, promoting flexible energy objectives at the national level and defending the paradigm of competitiveness against that of sustainable or “environmental” energy.

Energy security and energy efficiency

Finally, another element which invited itself into the debate was the Ukrainian crisis which underlined yet again the importance of a reduction in the EU’s energy dependency towards Russia. The EU is dependent on Russia for 33% of its oil imports, 39% of its gas imports and 26% of its solid fuel imports, while six Member States are 100% dependent on Russia for their gas supplies.

The Russian-Ukrainian conundrum (with 15% of imports of gas from Russia transiting through Ukraine) and the previous crises of 2006 and 2009 had already had an impact in the past on the energy policies of Member States – contributing for instance to the emergence of a consensus in the United Kingdom on nuclear energy at the end of the 2000s and the 2014 crisis, with in particular the annexation of Crimea by Russia in March, coincided with the negotiation of the 2030 Climate Energy package, highlighting the role of renewables and, in particular, of energy efficiency in the reduction of the energy dependency of the EU as a whole.

While the fight against global warming and the quest for energy independence thus go hand in hand, and in spite of the impact of the Ukrainian crisis on negotiations for the 2030 Climate Energy package, the energy efficiency target remains weak and is inferior to the recommendations of the European Commission which considers that a 1% increase in energy efficiency could translate into a 2.6% reduction in the EU’s gas imports.

3. THE NEGOTIATION PROCESS AND THE NEW OBJECTIVES OF THE 2030 CLIMATE ENERGY PACKAGE

Objective of a reduction in GHG by at least 40% by 2030: the compensations granted to the Visegrad + group of countries

The negotiations for the 2030 Climate Energy package were characterized by deep divergences between the EU Member States which were much more pronounced than at the time of the negotiations for the 2020 3X20 package in 2008. In particular, divergences separated Western European countries and Eastern European countries (first and foremost Poland) with the United Kingdom standing in the middle, negotiations being conducted on the basis of the propositions formulated by the European Commission in January 2014 (i.e. a 40% reduction in GHG, 27% of renewables as a part of energy consumption) and in July (a 30% improvement in energy efficiency).

In the context of the negotiations concerning the objective of a 40% reduction in GHG by 2030, countries such as Germany, France and Sweden favored an ambitious approach with a target of a reduction of at least 40% in GHG by

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41 Oliver Geden, Severin Fischer, op.cit. p. 12.
43 This is underlined in COM (2014) 520 final, « Energy efficiency : what contribution to energy security and to the 2030 action framework for climate and energy ? ”
44 IEA, op.cit. p.19.
45 COM (2014) 15
46 COM (2014) 520
2030. This position was rejected by the countries of the Visegrad + group, their economies being for some of them very dependent on fossil fuels – Poland being highly dependent (at 80%) on its coal installations for the production of its electricity\textsuperscript{47}. In order to obtain the agreement of Poland and of Eastern European countries, a series of significant concessions and financial compensation measures were included in the package which was adopted by the Council\textsuperscript{48}.

A clause inserted at the last moment concerning the target of a reduction of GHG emissions moreover allows for the reexamination of this objective after the Paris Conference, depending on the efforts which will have been made by other countries. This corresponds to an additional concession granted to Central and Eastern European countries, who had expressed a preference for a GHG emissions reduction target which would be determined not before but after the Paris Conference.

Hermann van Rompuy, the President of the Council, did however indicate that the objective of a reduction by at least 40% of GHG emissions by 2030 would not be revised downwards, whatever the outcome of the Paris Conference\textsuperscript{49}. In spite of such divergences, the objective of a reduction in GHG emissions is the subject of a wide consensus between the 28 Member States, with even Poland not questioning the need to act against global warming\textsuperscript{50}.

\textbf{Flexible objectives for the development of renewables and of energy efficiency}

Divergences between Member States were also manifest with regard to the objective for renewables: on the one hand, countries such as Denmark, Sweden and Germany were the most in favor of an ambitious target, alongside France and the United Kingdom who were also in favor of developing renewables; on the other hand, Central and Eastern European countries voiced a preference for a 2030 Climate Energy package which would limit itself to one single target, that of a reduction of GHG emissions.

The fact that national trajectories with regard to renewables diverged quite widely between Member States, with in particular a contrast between Northern Europe and Southern and Eastern Europe, also explains why there was so little enthusiasm for a target for renewables which would be legally binding at the national level. A system of governance and monitoring is to be set up in order to reach the 27% target at the level of the EU. This system remains however to be clarified, in the context of the absence of an instrument or mechanism at the level of the EU in support of the objective of a development of renewables, as opposed to the objective of reduction in GHG emissions which is, at least in theory, supported by the EU-ETS.

As for the energy efficiency target, the intervention of the United Kingdom in particular has limited the objective of improvements in energy efficiency to 27% only (compared to 2007 projections), a reassessment of this target being however scheduled for 2030 which would bring the target up to 30%. The United Kingdom’s desire to limit the intervention of Brussels in national policies in general and on this specific point in particular thus had the effect of further weakening the EU’s target for energy efficiency.

\textsuperscript{47} Poland thus insists that the economic situation of each Member State be much more taken into account, while the countries of the Visegrad group consider that the EU’s GHG emissions reduction target be strictly conditional, i.e. established according to the outcome of international negotiations for a new treaty on climate change. See Oliver Geden, op. cit. pp. 11 and 18.

\textsuperscript{48} Poland and the poorest Eastern European countries will thus benefit from solidarity mechanisms which will enable them to use revenues from the carbon market, such as the reserving of 2% of emissions quotas in order to finance projects to modernize and develop electricity and energy efficiency infrastructures in countries whose income per capita is inferior to 60% of the European average. These countries will also receive free emissions quotas for their coal installations up until 2030. 10% of auctions for coal emissions quotas will moreover be transferred to countries whose per capita revenue is inferior to 90% of the European average, within the framework of solidarity, growth and interconnections: this represents a gesture towards Spain and Portugal which, given their fragile economic situation, tacitly supported the Visegrad + group and made a request to obtain outlets for their renewable energy production – which suffers from overcapacity – towards the French market in particular. In return, at the request of rich countries, it was agreed that burden sharing across sectors not regulated by the carbon market would not be decided upon solely on the basis of income per capita. See Laurence Caramel, « L’Europe se fixe un cap ambitieux sur le climat », Le Monde, 24 octobre 2014, and « Climat : une bonne base de départ », Le Monde, 25 Octobre 2014.

\textsuperscript{49} Christian Oliver, Peter Spiegel, « EU agrees target to cut gas emissions », Financial Times, 24 October 2014.

\textsuperscript{50} Oliver Geden, Severin Fischer, op.cit. p. 11.
The unanimity rule and the key role played by Poland in the negotiations

Negotiations for the 2030 Climate Energy package were conditioned by two factors: first, the rule according to which the European Council must take its decisions on the basis of unanimity among all 28 Member States and, second, the issue of Poland, i.e. the EU Member State which objected the most to the package.

The issue of the EU’s climate objectives as well as the EU’s joint energy-climate approach are a controversial topic in Poland which fears the costs associated with EU policy and in particular that it might lead to a steep increase in energy prices. The Polish economy is highly dependent on coal whereas the potential for renewables is quite limited, with Poland preferring to focus on the development of shale gas and nuclear energy, while trying to modernize its infrastructures in the coal sector51.

Poland’s reticence, in the context of the unanimity rule, meant that Polish domestic politics played a determining role in the negotiation process for the EU’s 2030 package and in the outcome of the debates. Moreover, the arrival of a new Prime Minister of Poland, Ewa Kopacz, following Donald Tusk’s resignation - the latter having been elected President of the European Council in replacement of Herman van Rompuy - highlighted the issue of Polish domestic politics and of the role of Poland within the EU. That these changes in Polish leadership occurred just a few weeks ahead of the Brussels summit at the end of October only served to increase their potency 52.

However, in spite of their objections, the Poles were overall in favor of the process, in particular with regard to a reduction of the EU’s GHG emissions. Their criticism focused more on the tempo and modalities of such a reduction, the Poles arguing that the energy and economic situation of each Member State should be taken more closely into consideration.

The year 2015 moreover corresponded to an important electoral year in Poland, with a presidential election followed by legislative elections being scheduled. It was thus preferable from a Polish point of view to reach an agreement on the 2030 Climate Energy package in October 2014 rather than see an agreement postponed and the issue of the 2030 package become a potentially destabilizing electoral issue in Poland. The final result was thus the conclusion of an agreement in October with, in return, important concessions granted to Poland and to the countries of the Visegrad + group and a formulation of targets which was flexible53.

Ambiguous and consensual objectives, determined by domestic political considerations

The 2030 Climate Energy package is indeed characterized by targets which are deliberately ambiguous and thus able to obtain the support of each of the 28 Member States, each objective being preceded by the formula “at least”.

With regard to the target for the reduction of the EU’s GHG emissions by “at least” 40% by 2030 below 1990 levels, a clause allows for this target to be revised according to the outcome of the Paris Conference. Thus formulated, it satisfies the Western European countries who would wish to see it revised upwards after the Paris Conference. It also satisfies Eastern European countries but for opposite reasons, given that they would prefer to see the target revised downwards after the Paris Conference.

In particular, the Visegrad group countries are satisfied with the fact that the only legally binding target at the national level is the one for the reduction of GHG emissions, while Western European countries and the Nordic countries were for their part able to preserve the idea of a transition to low carbon economies as the long-term objective of the EU.

52 The election of a new President of the European Council hailing from Poland gave rise to some apprehension with regard to the EU’s climate targets and to the idea that the position of the Council on the 2030 Climate Energy package should be set before Herman van Rompuy’s departure and replacement by Donald Tusk. See www.euractiv.fr/sections/developpement-durable/la-nomination-de-donald-tusk-fragilise-la-position-climat-de-lue.
53 Severin Fischer, op.cit.
As for renewables, which must represent “at least” 27% of the energy mix by 2030, the fact that this target is not legally binding at the level of States satisfies those members which wish to keep control of their energy policies, while the formula “at least” satisfies those in favor of a more ambitious objective. Concerning the energy efficiency target, the fact that it is inferior to the recommendation of the Commission satisfies countries such as the United Kingdom which wishes to repatriate certain prerogatives from Brussels, whereas its reexamination set for 2030 with the aim of bringing it up to 30% satisfies those favorable to a more ambitious approach.

The crucial part played by Poland in the negotiations reflects the role played by those States which are the most recalcitrant in the face of the EU’s climate and energy policies. In other words, it was those countries whose transition towards a decarbonated energy system was the least advanced and the most gradual which had the greatest impact on the negotiations and modalities of the final package. Certain Member States who are experiencing a certain amount of Eurosceptic or Europhobic fever also had a decisive impact, such as the United Kingdom, whose intervention weakened the energy efficiency target. Fine domestic political considerations thus determined the content and modalities of the 2030 Climate Energy package.

4. EPILOGUE : WHAT FUTURE FOR THE 2030 CLIMATE ENERGY PACKAGE AND FOR INTERNATIONAL CLIMATE NEGOTIATIONS ?

The 2030 Climate Energy package is the product of negotiations between Eastern European countries and Western European countries which led to flexible targets characterized by constructive ambiguity. The emergence of a two tiered Europe can be observed in terms of the transition to low carbon energy systems: Western European countries and the Nordic countries who are putting into place active energy transition policies; and, on the other hand, the Eastern European countries who are proceeding with their energy transition at a much slower pace and in a more partial manner.

The impact of the objectives of the 2030 Climate Energy package on the policies of the EU Member States, and in particular on Eastern European countries, remains uncertain, in particular due to the flexible and non-binding nature of nearly all of these objectives, which weakens the package. The idea of a European Energy Union was first expressed by Jacques Delors before being taken up again by Donald Tusk, to whom befalls the task of implementing the 2030 package. While as Prime Minister of Poland Donald Tusk was a fervent defender of the coal industry, the President of the Council will from now onwards have to act for the fight against global warming in the interest of the EU as a whole. The EU’s capacity to reduce its emissions will however depend in great part on the reform of the carbon market, which is currently underway.

As for the terms of the debate concerning the Paris Conference, these were set with the publication in November 2014 of the IPCC’s Fifth Assessment Report (AR5) as well as with the first Emissions Gap Report (EGR) of the United Nations Environment Programme (UNEP) published in November 2010.

The conclusions of the IPCC’s AR5 confirm the role of man in the warming of the atmosphere and of the oceans, this role being even more strongly stressed than in the IPCC’s Fourth Assessment Report (AR4). The probability that man is the origin of global warming is now set at 95% (compared to a degree of certainty of 90% in the IPCC’s 2007 report, of 66% in the 2001 report and of 50% in the 1995 report). According to the conclusions of the 5th report, were gas emissions to continue on their current pathway, temperatures could rise by 4.8° C by 2100 compared to the period 1986-2005, in the

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54 However, it could in practical terms be more difficult to modify the targets of the Climate Energy package due to the unanimity rule and in spite of the flexible manner in which they have been deliberately formulated, such flexibility having been introduced more in the idea of arriving at an agreement between all parties concerned than with a view to modifying targets at a later stage (with the exception perhaps of the energy efficiency target). See Oliver Geden who underlines the difficulty inherent in attempts to modify the targets of a Climate Energy package once it has been adopted, op.cit. p.12.

55 See Severin Fischer, op.cit.


57 See above, chapter 2.
most pessimistic scenario. According to AR5, world greenhouse gas emissions would have to be reduced by 70% by 2050 below 2010 levels in order to keep the temperature rise below 2°C compared to the pre-industrial era (before 1850). This objective could be within the reach of the EU if Member States manage to meet their target of a 40% reduction in EU GHG emissions by 2030 and if they continue on their current path. As for the EGR, it stresses that there is a 1000 GT carbon budget which must be respected in order to limit the temperature rise to below 2°C, with this budget set however to be exhausted by 2025 if no action is taken.

In a speech on climate change delivered in November 2013, the Secretary-General of the OECD (Organization for Economic Cooperation and Development) Angel Gurria also stressed the necessity of arriving at zero emissions stemming from the combustion of fossil fuels and proposed a target date of 2050, noting that, as opposed to the situation with regard to the 2008 financial crisis, the world does not have the option of a “bail out” with regard to climate change.

With the adoption of the 2030 Climate Energy package at the European Council Summit of October 2014, the EU was the first to put forwards its targets for a reduction in GHG emissions – the 196 parties to the UNFCCC having until March 2015 to make public their objectives before the Paris Conference. The EU thus continues in its role as a leader in the context of international climate negotiations.

The EU’s commitment to reduce its GHG emissions by 40% by 2030 below 1990 levels was followed by the surprise joint declaration of the United States and China in November 2014: these two countries made public their objectives for 2020, making a reference to the objective of a transition towards decarbonated economies in order to limit the increase in temperatures to 2°C: the United States thus set an objective for the reduction of their emissions at 26 to 28% in 2025 below 2005 levels (with America’s first national standards to limit carbon-dioxide emissions from power plants being subsequently introduced by the Barack administration), while China aims to reach a peak in its CO² emissions by 2030 and increase the share of non fossil fuels in its primary energy consumption to around 20% by 2030.

With the objectives of the Climate Energy package, the EU thus contributes alongside China and the United States to the creation of a dynamic ahead of COP 21 which is to lead to “a protocol, legal instrument or agreed outcome with legal force “. This is all the more important given that China, the United States and the European Union are together responsible for nearly half of the world’s GHG emissions. The EU’s share tends to diminish, currently representing 13% of world emissions, while the modalities of the Climate Energy package reflect climate objectives which, while ambitious,

58 The IPCC report includes four new reference scenarios (Representative Concentration Pathways or RCP), which correspond to representative profiles for the evolution of GHG, ozone and aerosol precursor concentrations for the twenty-first century and beyond. These scenarios correspond to more or less important efforts in the reduction of GHG emissions, leading to more or less important increases in temperature, in the context of different scenarios of anthropogenic radiative forcing – thus not taking into account changes in temperature due to natural causes. These scenarios for 2100 show a peak followed by a decline (the RCP2.6 scenario with an increase in temperatures between 0.3°C and 1.7°C), a stabilization without overreach (the RCP 4.5 scenario with a rise in temperatures between 1.1°C and 2.6°C) and the RCP6 scenario with an increase between 2.6°C and 4.8°C). The IPCC considers that the RCP2.6 scenario is unlikely, while scenario RCP 4.5 is likely (i.e. a 2°C increase in temperatures by 2100 compared to 1750), and scenarios RCP 6.0 and RCP 8.5 are more than likely (i.e. an increase in temperatures of more than 2°C by 2100). See ipcc.ch/pdf/assessment-report/ar5/ipcc_wg3_ar5_summar-t-for-policymakers.pdf.

59 According to the EGR, a carbon budget of 1 000 GT remains and whose limit must be respected in order to limit the temperature increase to 2°C. However, current emissions total between 35 and 40 GT per year and more, which means that the carbon budget will be exhausted by 2025 if no action is taken to reduce emissions. Moreover, according to the report, the world must reach zero carbon emissions by 2065 in order to remain under the 2°C limit. The EGR for 2015 will be published in early November 2015. See www.unep.org/publications/ebooks/emissionsgapreport/
60 See www.oecd.org/env/the-climate-challenge-achieving-zero-emission.htm
61 See www.whitehouse.gov/the-press-office/2014/11/11/us-china-announcement-climate-challenge and Laurence Caramel President Obama moreover introduced in July 2015 America’s first national standards to limit carbon-dioxide emissions from power plants, a move which in political terms is momentous, though not so much from the point of view of their impact on the climate or on America’s energy sector, according to The Economist. See “United States- Climate change and the president, Hotter than August”, The Economist, August 8th 2015.
also reflect a more prudent approach than the package adopted in 2008. This is revealed in the clause which includes the possibility of a revision of the prime objective of a reduction of GHG emissions according to the outcome of COP 21.

Other than the action of the United States, China and the EU, the communiqué which was published at the Brisbane Summit of the G20 in November 2014 includes a significant passage on the issue of global warming which was imposed in spite of the determined opposition of Australia, whose then Prime Minister was a staunch defender of the coal sector. Thanks to several members of the G20, including the United States but also the EU, reference was made to the “necessity to rationalize inefficient fossil fuel subsidies”, while support for the Green Fund was reaffirmed following tense negotiations at the summit.

Through its decisions, the EU also seeks to incite other countries to adopt ambitious climate targets, in keeping with the Lima Agreements in December 2014 (COP 20/CMP 10) which rest on the principle of voluntary action and contribution on the part of the signatories of the Rio Convention. With the COP 20 Agreements, the distinction between Annex 1 countries and non-Annex 1 countries has become outdated – which in itself is revolutionary – so that, for the first time, all the signatories to the Convention agreed to reduce carbon emissions linked to oil, gas and coal. In this fundamental evolution lies the strength of the Lima Agreements, but also their weakness due to the fact that the contributions pledged by each country are not legally binding.

Each country thus promised to vote legislation to reduce carbon emissions, as well as to propose, by 31 March 2015, targets for the post 2020 period – the end of the second engagement period of the Kyoto Protocol – for GHG emissions reduction. Each country also has to report on the measures and actions which it will be taking to reach these targets. However, no punitive action or sanction is provided for in case a country does not follow through on its commitments. The idea of the Lima Agreements is that these targets and measures being made public (with publication on the website of the UNFCCC), any country which would not respect its commitments or whose commitments would be insufficient, would be publicly exposed.

The Lima COP 20 thus opted for an approach which is based on the voluntary engagement of States and on peer pressure as well as pressure from the international community as a whole. By this novel approach, States commit themselves to putting into place targets and plans for the reduction of emissions according to their specific economic and political situations, rather than following top-down mandates and targets decided upon by an international agreement, in order to limit global warming to below 2°C. Intended Nationally Determined Contributions which will be proposed by each State by the end of the first semester of 2015 will thus form the basis of negotiations at the Paris Conference, the concept of common but differentiated responsibilities also having an important role to play.

The fact that the EU was the first to make public its contribution ahead of COP 21 through the emissions reduction target contained in the 2030 Climate Energy package contributes not only to create a positive dynamic ahead of the Paris Conference whose outcome looks more promising than that for the Copenhagen Conference in 2009, but also shows that it is possible for a great number of countries whose situation and interests are divergent to reach an understanding on common objectives. Moreover, the EU intends to preserve its image and status as an internationally responsible actor in the fight against climate change through the proposal of the Commission in its Summer package (July 2015) that a share of EU ETS auction revenues be devoted to supporting climate mitigation actions in third countries, including in developing countries.

Finally, the stakes of COP 21 are all the more important for the EU since they are not only climate and environment related, but are also economic and migratory. The multidimensional implications inherent in climate change underpin the EU’s...
decision to integrate these more fully into its external affairs agenda. This is underlined by the adoption by the European Council in July 2015 of an enhanced Climate Diplomacy Strategy, in which reference to the “risk multiplying threats” of a changing climate are highlighted. The EU’s commitment to assisting developing countries in implementing climate mitigation and adaptation measures is also reiterated in the Strategy.

The link between climate change and other key international agendas, in particular the sustainable development agenda to be adopted at the UN in New York next September, is indeed another key aspect of the climate change challenge and of the importance of a successful outcome at the Paris Conference. As the OECD Secretary-General highlighted in his second climate change lecture, delivered in July 2015, “if we fail to make sufficient progress, we will be plunged later into an even more costly and disruptive round of national adaptation responses, where the costs will fall most heavily on the least resilient societies. In other words, if we fail on climate, we will fail on the sustainable development goals too”.

Angel Gurria also notes that “after the failure of Copenhagen, it has taken six years to get back to the same level of focus” and now the international community needs to take advantage of the current “window of alignment” as “the carbon clock is ticking”. For COP 21 to lead to an agreement which would bring real results, the EU will have to act in favor of significant key measures. The progressive ending of fossil fuel subsidies - which represented over US $544 billion globally in 2012 - improvements in energy efficiency and the financing of the Green Fund launched in Durban to bring financial assistance to countries of the South, are among the key frontiers which must be pushed forward in order to limit global warming over the next decades.

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70 See European Council Press release 20 July 2015, “Council conclusions on climate diplomacy”.
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73 IEA, World Energy Outlook 2013, pp. 93-98.
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