

EGMONT PAPER 88

**PUTTING THE PARIS AGREEMENT AT
THE CENTRE OF EUROPE'S CLIMATE
AND ENERGY MAP**

CLÉMENTINE D'OULTREMONT
AND QUENTIN GENARD



EGMONT

September 2016

ABOUT THE AUTHORS

Clémentine d'Oultremont obtained a Master's degree in Law (2007) from the 'Université Catholique de Louvain' and a Master's degree in European Political and Administrative Studies (2009) from the College of Europe in Bruges. She was also an intern at UNIDO and a Junior Associate at Liedekerke Wolters Waelbroeck Kirkpatrick Law firm in Public International Law (2008). In November 2009, she joined the European Affairs Program of the Egmont Institute. As a Senior Research Fellow, she focuses on climate and energy policies.

Quentin Genard is Associate Fellow at Egmont and Researcher at E3G. His focus is on European climate and energy policies. He holds a bachelor in politics (2010) and a master in European policies (2012) from Liège University. He was an intern at the European Movement Belgium (2010) and the Research Group on Peace and Security (2013). He graduated from the College of Europe in Bruges before becoming an advisor on European and International affairs for the Walloon government in 2013. He joined E3G in 2014 and Egmont in 2016.

ABOUT THE EGMONT PAPERS

The Egmont Papers are published by Egmont – The Royal Institute for International Relations. Founded in 1947 by eminent Belgian political leaders, Egmont is an independent think-tank based in Brussels. Its interdisciplinary research is conducted in a spirit of total academic freedom. A platform of quality information, a forum for debate and analysis, a melting pot of ideas in the field of international politics, Egmont's ambition – through its publications, seminars and recommendations – is to make a useful contribution to the decision-making process.

Table of Contents

Introduction	2
The Paris Agreement: A Leap Forward in the Fight Against Climate Change .	3
A Dynamic Mitigation Framework to Keep Global Warming in Check ..	3
A Strengthened Recognition of Adaptation and Loss and Damage	8
A Rather Weak Climate Finance Commitment	11
An Enhanced Transparency Framework to be Further Developed	13
The Paris Agreement: A Benchmark for More Ambitious EU Energy and Climate Policies	16
Ratifying Paris As Soon As Possible	17
Revising Upward the Bloc’s 2020, 2030 and 2050 Targets	19
Ensuring the Paris Ambition is Reflected in the EU ETS and ESD	21
Addressing Europe’s Investment Gap	26
Further Developing EU External Climate Actions	28
Taking Care of the Social Dimension of the Transition	32
Conclusion	34
References	36

INTRODUCTION

The Paris Agreement achieved a positive outcome and sent a clear message to the world that the global transition to a low-carbon economy is an inevitability that requires commitment from countries but also from businesses, regions, cities and citizens. After the failure of the 15th Conference of the Parties (COP15) in Copenhagen in 2009 still lingering as an ugly reminder, the biggest achievement of the Paris Agreement was to elicit global political will to address the growing threat of climate change. The European Union (EU) played a crucial role in this success. It participated actively in the preparatory work by building bridges, it managed to speak at the conference with one voice and it contributed substantially in raising the ambition of the negotiations through its ‘high ambition coalition’ that started with the most vulnerable countries and ended up with half the world.

Currently, the agreement is hardly more than a skeleton that will need to be seriously fleshed out. In essence, it constitutes a soft governance approach based on the top-down system of the United Nations (UN) mixed with a bottom-up approach that accumulated all parties’ individual commitments to climate change. Consequently, the deal’s effectiveness will primarily rest on establishing trust and credibility in the implementation. The expected early entry into force of the deal – by the end of 2016 rather than by 2020 – is already a good indication of the parties’ commitment. This momentum is largely thanks to the US and China, the world’s two biggest polluters, ratifying the agreement in early September 2016. The coming years will be particularly crucial in telling whether the rules of the new agreement will be enacted in a credible manner to tackle climate change.

This paper thus aims to analyse the key aspects of the Paris Agreement (first part) so as to explore what they imply for the EU and its climate and energy policy (second part). The way in which the EU implements the outcome of the agreement will be crucial to prove its credibility on the international level and to enhance trust-based relations with developing countries.

THE PARIS AGREEMENT: A LEAP FORWARD IN THE FIGHT AGAINST CLIMATE CHANGE

The success of Paris can be explained by a radical change in the way parties have perceived their national interests with respect to climate change since COP15 in 2009. First, the effects of climate change across the world have become increasingly visible. Only a handful of financially and politically motivated sceptics could ignore the urgency of an inclusive and ambitious solution. Second, the cost of acting on climate change has decreased much more rapidly than foreseen. This reality proved especially true for solar and wind sources of energy, whose growing cost-effectiveness put them in a position to compete against conventional power plants, even without government subsidies. In 2015, renewable energy sources attracted more capacity investment worldwide than fossil fuels for the first time.¹ Finally, countries such as India, China and EU member states, which are largely reliant on increasingly unstable transit and producing regions for their costly fossil fuel imports, have additional incentives to increase their renewable portfolios and to push for a ‘green’ deal. Consequently, most countries across the world have realised that the political and economic risk of failing to act on climate change is much higher than investing in a low-carbon future.

Against this background, the following section will analyse the content of the Paris Agreement through the following four key aspects: mitigation, adaptation and loss and damage, climate finance and, transparency and accountability.

A Dynamic Mitigation Framework to Keep Global Warming in Check

Agreeing on a maximum temperature rise goal is a delicate but crucial exercise. Politically, it amounts to estimating the level of climate risks and impacts to which governments are willing to expose their population and economy. The Paris Agreement’s provision to limit the rise of the global temperature to “well below 2°C and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels” represents an ambitious breakthrough. Indeed, the inclusion of “1.5°C” surprised many governments and well-placed observers, given that in the run-up to the summit, preparations seemed fixed only on securing a “2°C limit”.² The diplomatic push favouring the inclusion of the 1.5°C target was led by the Alliance of Small Islands

¹ United Nations Environment Program, “Renewable Energy Investments: Major Milestones Reached, New World Record Set”, 24 March 2016, available on: <http://unep.org/newscentre/default.aspx?ArticleID=36112&DocumentID=27068>.

² Climate Analytics, “Turning up the heat: how the diplomatic push for 1.5? unfolded in Paris”, 17 December 2015, available on: <http://climateanalytics.org/blog/2015/turning-up-the-heat-how-the-diplomatic-push-for-1-5-unfolded-in-paris.html>.

States, whose very existence was threatened under a 2°C scenario.³ Aiming for a 1.5°C target does not guarantee their survival but reduces the probability they will disappear due to rising sea levels.

But while a long-term temperature goal is crucial, it is still too abstract to drive policies. Paris negotiators understood the need for a complementary target to provide an idea of the speed and magnitude of the needed transformation. The Paris Agreement thus foresees a peaking of greenhouse gas emissions “as soon as possible” and “a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century”. Although the balancing idea is attractive and represents a more concrete policy objective, most commentators agree the concept is not straightforward and would have preferred the inclusion of a clear net-zero objective.⁴ Also, the text does not specify what kind of sinks are concerned and if carbon capture and storage can be considered as such. The text addresses only methods while the specifics still have to be agreed. Nevertheless, it is clear that this long-term objective envisions decarbonisation of the global economy before the end of the century and already by mid-century for developed countries.

The Paris Agreement recognises that the world has changed since the signature of the Kyoto Protocol in 1997. Under this agreement, part of the United Nations Framework Convention on Climate Change (UNFCCC), only industrialised or developed countries had the obligation to reduce their carbon emissions because of their historic responsibility in causing man-induced climate change, while developing countries had no such obligation. However, the old divide between “developed” and “developing” countries is less clear than before. Today, some emerging economies, which used to be considered “developing” countries, are wealthier than many traditional industrialised countries and together emerging and developing countries are responsible for about two-thirds of global emissions. A crucial breakthrough in global negotiations was thus the acceptance by developing countries to break the old differentiation between “industrialised” and “developing” countries.

At COP19 in Warsaw in 2013, parties created the concept of Intended Nationally Determined Contributions (INDCs), according to which all countries determine their climate contributions in the context of their national priorities, circumstances and capabilities. These contributions set out the national level of ambition for mitigation

³ ClimateHome, “A brief history of the 1.5C target”, 10 December 2015, available on <http://www.climatechangenews.com/2015/12/10/a-brief-history-of-the-1-5c-target/>.

⁴ World Resources Institute, “INSIDER: Understanding the Paris Agreement’s Long-term Goal to Limit Global Warming”, 15 December 2015, available on <http://www.wri.org/blog/2015/12/insider-understanding-paris-agreement%E2%80%99s-long-term-goal-limit-global-warming>; Carbon Brief, “Analysis: the final Paris climate deal”, 12 December 2015 available on <https://www.carbonbrief.org/analysis-the-final-paris-climate-deal> and Forbes, “Inside The Paris Agreement: Why The World Agreed To ‘Balance’ Greenhouse Gas Emissions”, 3 February 2016, available on <http://www.forbes.com/sites/jeffmahon/2016/02/03/inside-the-paris-agreement-how-the-world-agreed-to-balance-greenhouse-gas-emissions/2/#33e9251b78ec>.

targets and policies, financial transfers and adaptation plans. In the lead-up to Paris, all parties were thus required to submit their post-2020 INDCs in accordance with what they believed their fair share should be. This mix between the old top-down system of a United Nations agreement and a bottom-up approach through which each country sets its own target and policies was a real success as all parties realised that the others were also committed to tackling climate change.

The differentiation between developed and developing countries still exists in the Paris Agreement, but to a much smaller extent. Most provisions establish common obligations for all parties, but include flexibility for developing countries and require developed countries to continue taking the lead.⁵ Developing nations are also classified in different groups of countries [i.e. Least Developed Countries (LDCs) and Small Island Developing States (SIDS)], which may have different rights and responsibilities. In a discussion paper, Kennedy Liti Mbeva and Pieter Pauw argue the Paris Agreement is breaking new ground for “subtle differentiation” as the text involves more fluid subsets of countries, issues and procedures.⁶ Nevertheless, every country should participate in the global effort against climate change.⁷

Overall, 188 countries have submitted their Intended Nationally Determined Contributions (INDCs) before the Paris Conference, covering 97.1% of global greenhouse gas emissions in 2011. This commitment by so many countries helped build the momentum in Paris.⁸ The UNFCCC notes⁹ that the current level of ambition would lead to “sizeably lower aggregate global emission levels than in pre-INDCs trajectories” (see Figure 1). However, the current Nationally Determined Contributions (NDCs) still fall short in putting the world on a “well below 2°C” path. An analysis by Climate Action Tracker shows that current NDCs, provided they are fully implemented, would result in 2.7 ° of warming by 2100.¹⁰ But it would have been illusory to believe that the Paris Agreement could deliver the emission reductions necessary for maintaining global temperature below 2°C, given the current economic situations in the big emitting countries.

⁵ Wolfgang Obergassel *et al.*, “Phoenix from the Ashes – An Analysis of the Paris Agreement to the United Nations Framework Convention on Climate Change”, Wuppertal, 26 January 2016.

⁶ Kennedy Liti Mbeva and Pieter Pauw, “Self-Differentiation of Countries’ Responsibilities. Addressing Climate Change through Intended Nationally Determined Contributions”, German Development Institute Discussion paper 04/2016, February 2016.

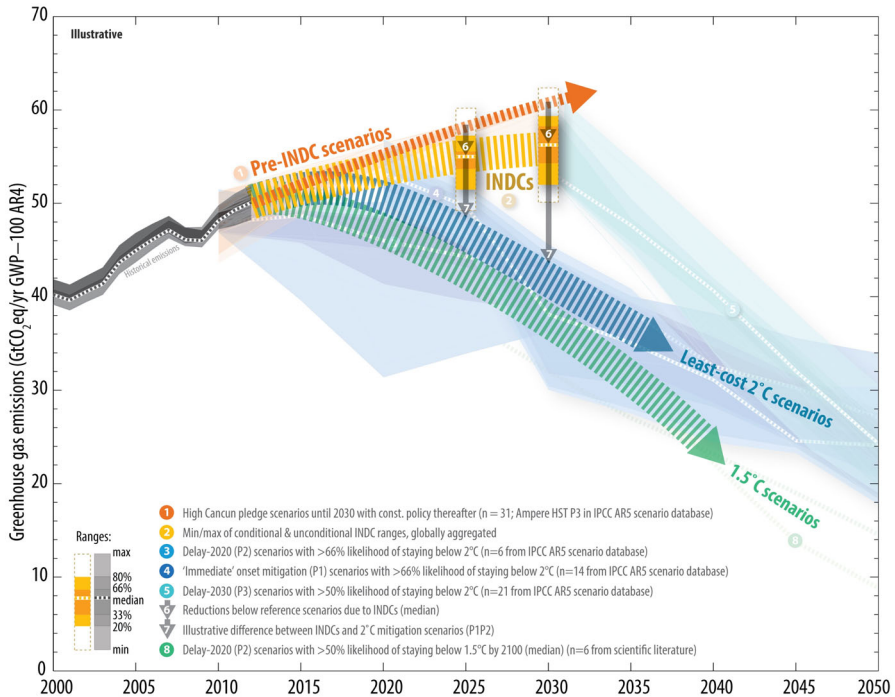
⁷ *Ibid.*

⁸ Netherlands Environmental Assessment Agency, PBL Climate Pledge INDC tool, available at <http://info-graphics.pbl.nl/indc/>

⁹ United Nations Framework Convention on Climate Change, “Aggregate effect of the indented nationally determined contributions: an update. Synthesis by the Secretariat”, 2 May 2016.

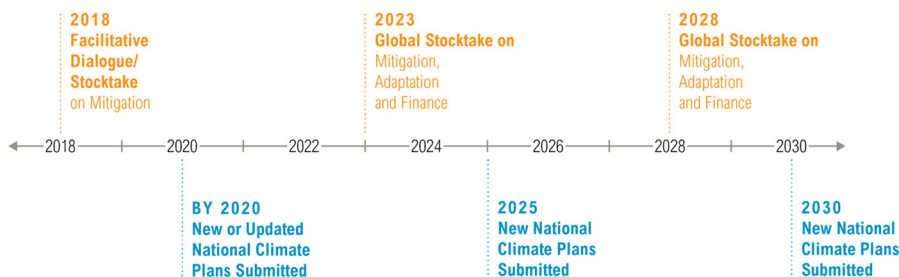
¹⁰ Climate Action Tracker, “Climate pledges will bring 2.7°C of warming, potential for more action”, 08 December 2015, available on <http://climateactiontracker.org/news/253/Climate-pledges-will-bring-2.7C-of-warming-potential-for-more-action.html>.

Figure 1 – Comparison of global emission levels in 2025 and 2030 resulting from the implementation of the intended nationally determined contributions and under other scenarios (UNFCCC, May 2016)



The heart of the Paris Agreement is thus the establishment of a review mechanism or ambition mechanism to fill the gap between the current level of ambition and the goal of limiting global warming between “well below 2°C” and 1.5 °C. Parties agreed to come together to take stock of their collective progress on mitigation in 2018 and submit new or updated NDCs by 2020. After that, this review mechanism will take place every five years to ensure fulfillment of climate obligations over time (see Figure 2). This level of accountability is a major change from the previous international climate regime. Never before has an international treaty set up mechanisms through which parties will revise their ambition upward on a regular basis over time.

Figure 2 – Ambition Mechanism in the Paris Agreement (World Resources Institute – 2015)



<http://ow.ly/VUFYe>



The Paris Agreement does not contain any legally binding obligations in terms of emission reduction targets. Several key emitters – including the US, China and India – would not have agreed to a treaty that establishes binding emission reductions which might impede their economic growth. While the parties are obligated to submit new NDCs every five years, they cannot be held accountable before a court of law for their content on the basis of the Paris Agreement.¹¹ As ECOLOGIC explains: “The assumption is that not prescribing specific measures or emission reductions will make it easier for countries to join the agreement and to develop ambitious NDCs, and that the transparency system and stocktake will create sufficient public pressure on states to do their fair share and implement their NDCs.”¹²

Alongside national governments that were directly involved in textual negotiations, cities, regions and businesses also gathered in Paris. Mayors and business leaders showed to national governments that cutting emissions cut is not only their responsibility. Paris mayor Anne Hidalgo, together with former New York City mayor Michael Bloomberg, now the UN Secretary-General’s Special Envoy for Cities and Climate Change, convened a “Climate Summit for Local Leaders” during which 640 local elites signed the Paris City Hall Declaration.¹³ These local entities committed to cover about 30% of the gap existing between the NDCs and the practical possibility of keeping path to limiting global warming below 2°C in the coming years.

¹¹ World Resources Institute, “Form AND Function: Why the Paris Agreement’s Legal Form Is So Important”, 16 December 2015, available on <http://www.wri.org/blog/2015/12/form-and-function-why-paris-agreement%E2%80%99s-legal-form-so-important>.

¹² Ralph Bodle, Lena Donat, and Matthias Duwe, “The Paris Agreement: analysis, assessment and outlook”, Background paper for the workshop *Beyond COP21: what does Paris mean for future climate policy?*, January 2016.

¹³ Climate Summit for Local Leaders, “Paris City Hall Declaration. A decisive contribution to COP21”, 04 December 2015.

Businesses also played their part. The WeMeanBusiness coalition, representing over USD 8 trillion in revenue and USD 20 trillion in assets under management, committed to support national governments in delivering NDCs and was pushing for a clear business signal out of Paris. The coalition's call was heard beyond Paris.¹⁴ So far, 614 companies and investors committed to act on climate change by taking measures such as adopting an emissions reduction target, procuring 100% of their electricity from renewable sources or putting a price on carbon.¹⁵

In brief, the Paris Agreement provides a clear message: decarbonising our economies is inevitable and consequently, the era of fossil fuels is over. After 25 years of UN climate negotiations, all countries agreed to take action on climate change through a common agreement. By integrating action through regions, cities and businesses, COP21 also spread the Paris momentum to the real economy. Although the deal does not put the world on the safe side in terms of emission reduction commitments, it introduces a clever review mechanism to ratchet-up ambition over time. But this is just the beginning. The real battle against climate change will depend on the future political will of countries to quickly increase their ambitions and implement their contributions.

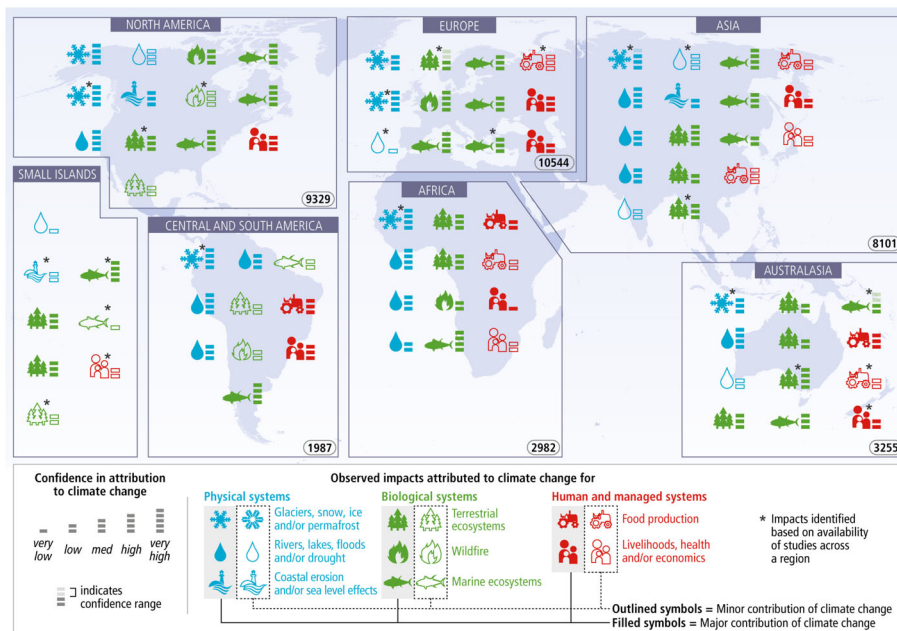
A Strengthened Recognition of Adaptation and Loss and Damage

The impacts of human-induced climate change will hit populations and ecosystems of countries around the globe even within a 1.5° C to 2° C range of global temperature increase. In fact, as Figure 3 shows, climate change is already affecting all regions of the world. Consequently, countries must develop adaptation plans to moderate the future impact of climate change. But adaptation has its limits too, as not all climate impacts can be avoided. In this case, the UNFCCC jargon refers to "loss and damages". The roles of both adaptation and loss and damage have been strengthened in the Paris Agreement.

¹⁴ WeMeanBusiness, "The Paris Agreement. What it means for business", 2016.

¹⁵ WeMeanBusiness, "Take Action", 2016, available on <http://www.wemeanbusinesscoalition.org/take-action>.

Figure 3 – Widespread impacts attributed to climate change based on the available scientific literature since the Fourth Assessment Report (IPCC – 2014)



The capacity to adapt to climate change is not evenly distributed. As the UNFCCC notes: “[d]eveloping countries are the most vulnerable to climate change impacts because they have fewer resources to adapt socially, technologically and financially”.¹⁶ It is thus no surprise that adaptation, together with loss and damage, have long been one of the most contentious issues in the framework of the UNFCCC.

The Paris Agreement recognises the importance of adaptation action at global and national level like never before.¹⁷ This recognition can be considered a victory for developing countries as adaptation has traditionally been marginalised *vis-à-vis* mitigation.

The global goals for mitigation are to enhance adaptive capacity, to strengthen resilience and to reduce vulnerability to climate change. Alongside mitigation and climate finance, adaptation is one of the three main objectives required by the Paris Agreement to strengthen the global response to the threat of climate change. Parties acknowledged that it is “a key component of and makes a contribution to the long-term global response to climate change to protect people, livelihoods and ecosys-

¹⁶ United Nations Framework Convention on Climate Change, “Climate Change: Impacts, vulnerabilities and adaptation in developing countries”, 2007.

¹⁷ Wolfgang Obergassel *et al.*, *op.cit.* 5.

tems". The text also recognises that the need for additional adaptation efforts will greatly depend on the capacity to act on mitigation.

At a national level, the agreement requires all parties to engage in adaptation planning processes and the implementation of actions. Although adaptation is not automatically a part of the NDCs, 137 parties have nonetheless decided to include it in their contributions.¹⁸ On the basis of the agreement, the adaptation action should follow "a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems". As part of the ambition mechanism, adaptation actions should be assessed during the future global stocktakes as well as updated and accelerated in the new NDCs submitted every five years.

There are some impacts of climate change that adaptation cannot prevent, including extreme weather events or slow-onset events such as the disappearance of low-lying territories. That is where loss and damages come into play. Since the beginning of international climate negotiations, developing countries have argued that developed countries are historically responsible for global warming and should be held accountable. However, developed countries have persistently rejected this liability as it would open the door to costly lawsuits in which no government is willing to engage. The Paris Agreement navigates this situation. On one hand, it formally recognises in Article 8 the importance of minimising and addressing loss and damage associated with the consequences of climate change. On the other hand, the agreement's accompanying decision explicitly rejects the use of this article as a basis for compensation claims and liability. This last clause was a necessary concession by developing countries to get the US to sign the deal. US Secretary of State John Kerry, when asked why loss and damages is such a contentious issue for his government, explained the Obama Administration's concerns. "We're in favor of framing it in a way that doesn't create a legal remedy," Kerry said, "because Congress will never buy into an agreement that has something like that, after witnessing what happened in Kyoto," referring to US lawmakers' refusal to ratify that agreement after President Bill Clinton signed it. "If you really want to get something done, don't go down that road," Kerry advised. "The impact of it would be to kill the deal. And we don't want to do that."

Beyond recognising loss and damages as an important issue, the Paris Agreement acknowledges the need to develop anticipatory compensation mechanisms through risk insurance and makes permanent the Warsaw International Mechanism for Loss and Damage established in 2013 at COP19. Noting that this institution has no real experience, since it started to operate only in late 2015, the Paris Agreement states that it may be enhanced and strengthened in the future. Such a mechanism ensures that scientific research will continue, policies will be implemented and awareness of

¹⁸ United Nations Framework Convention on Climate Change, *op. cit.*, 9.

the issue will be maintained in future discussions.¹⁹ Overall, the outcome from COP21 for loss and damage is thus quite positive.

A Rather Weak Climate Finance Commitment

Financing the mitigation of and adaptation to climate change is fundamental in establishing the required trust between parties to make the whole agreement work. Yet despite the fact that finance was considered one of the cornerstones to getting an agreement, the outcome of this part of the Paris agreement is rather weak. It is only through increased green investment that countries will achieve their NDCs and deliver on the Paris Agreement. At stake is also developed countries' credibility in helping the developing and most vulnerable countries already massively affected by the impacts of climate change. The way in which developed countries respect their financial contributions is thus absolutely key for future negotiations.

Generally, the language used in the Paris Agreement is very vague. In terms of commitments, it only stipulates that finance flows should be "consistent with a pathway towards low carbon emissions and climate resilient development" and that "developed country parties shall provide financial resources to assist developing country parties with respect to both mitigation and adaptation in continuation of their existing obligations under the convention". There is thus no quantitative target, and it would be useless to search for one in the convention. It is only in the agreement's accompanying decision text that one can find the developed countries' commitment made in Copenhagen in 2009 to mobilise USD 100 billion per year to help developing countries mitigate and adapt to climate change by 2020. This omission can be explained by the fact that a binding quantitative target would have implied a ratification of the agreement by the US Senate, which would probably not have happened.

Moreover, the agreement does not contain any obligation to scale up climate finance from current levels. The text only mentions that the mobilisation of climate finance "should represent a progression beyond previous efforts". This means that climate finance should increase compared to current levels but no indicative figure is mentioned. Again, it is only the accompanying decision text that explains that developed countries intend to continue their USD 100 billion goal through 2025 and that parties shall set a new bigger collective quantified goal by 2025. This result is disappointing for developing countries who wanted the USD 100 billion target to be considered a floor to be exceeded as soon as it is reached by 2020, and not by 2025 as agreed. Besides, it is highly likely that the establishment of a "new collective

¹⁹ World Resources Institute, "When adaptation is not enough: Paris Agreement recognises 'loss and damages'", 24 December 2015, available on <http://www.wri.org/blog/2015/12/when-adaptation-not-enough-paris-agreement-recognizes-%E2%80%99Closs-and-damage%E2%80%9D>

quantified goal” by 2025 will create conflicts over the participation of developing countries, particularly emerging economies, as contributors to this collective goal.

In the meantime, the agreement encourages developing countries “to provide or continue to provide [financial] support voluntarily”. According to the Climate Policy Initiative (CPI)²⁰, the so-called South-South Climate Finance (SSCF) amounted to USD 10 billion in 2013, which represents around 30% of the climate finance that was mobilised by developed countries to developing countries in the same year (USD 34 billion). There are some promising signs that the SSCF will make an increasing contribution to global climate finance. In September 2015, China announced that it would provide USD 3.1 billion to help developing countries combat climate change via SSCF.

There is no clear definition of what counts as climate finance, nor methodologies to measure it. Contrary to previous climate agreements, it is regrettable that the Paris Agreement does not mention that climate funding shall be “new and additional”. However, it recognises that climate finance is to be provided in continuation of developed countries’ existing obligations under the convention, which refers to this “new and additional” criterion. The problem is that the meaning of “new and additional” funding is one of the most critical issues in the negotiations on climate financing. Although developed countries have pledged funds, they have not predefined a baseline against which financial contributions could be assessed, which is causing mistrust between developed and developing countries. Developing countries insist on the importance of climate funding being new, i.e. not money already pledged in the past, and additional, i.e. not diverted from the developed countries’ Official Development Assistance (ODA). However, most developed countries have an interest in upholding an elusive and ambiguous definition of additionality.

Shortly before COP21, the OECD issued a report that calculated that developed countries mobilised USD 62 billion in climate finance in 2014, up from USD 52 billion in 2013.²¹ While these results were portrayed as extremely positive by developed countries, many developing countries questioned the methodology the OECD used, casting serious doubts on the figures. Without a clear accounting system for climate finance, this issue will continue to be a subject of tension between developing and developed countries. The Decision text accompanying the Paris Agreement requests the development of modalities for the accounting of public climate finance. However, these modalities will not be considered before COP24 in November 2018.

The scale-up of adaptation finance was considered a priority for developing countries during the negotiations. The Paris Agreement recognises the importance of adapta-

²⁰ Barbara Buchner *et al.*, “Global Landscape of Climate Finance 2014”, Climate Policy Initiative, 2014.

²¹ Organisation for Economic Co-operation and Development, “Climate finance in 2013-2014 and the USD 100 billion goal: A report by the OECD in collaboration with Climate Policy Initiative”, October 2015.

tion funds as it calls for a balance between adaptation and mitigation finance. However, according to the OECD report of 2015, only 16% of climate finance was devoted to helping developing countries cope with the impacts of climate change in 2014.²² This is far too little, particularly when one knows that, according to the 2016 Adaptation Gap Report from the United Nations Environment Programme, the level of finance required to meet adaptation could range from USD 140 billion to USD 300 billion per year by 2030, and between USD 280 billion and USD 500 billion by 2050.²³ Given these estimates, Paris' USD 100 billion goal for mitigation and adaptation until 2025 seems totally inadequate.

In a nutshell, trillions of dollars will have to be shifted away from fossil fuels investments in the coming decades towards new green and sustainable investments if we want to reach the goal of staying well below 2°C. The Paris Agreement is clearly not very ambitious in terms of climate finance and many modalities will have to be defined in the future. Consequently, many difficult discussions have been postponed despite the yawning gap between the current climate financing and what is needed to achieve the Paris objectives. In the short term, the Chinese G20 Presidency in 2016 provides an excellent opportunity to promote the adoption of long-term low greenhouse gas emission development strategies by G20 Member States while ensuring that international finance institutions will back them up.

An Enhanced Transparency Framework to be Further Developed

In order to ensure that parties deliver on their commitments and to build mutual trust, an enhanced transparency system in charge of monitoring, reporting and verifying climate action and financial support has been established by the Paris Agreement. The aim of the framework for transparency of action is “to provide a clear understanding” and to track progress on climate change action, including the NDCs and adaptation measures while the framework for transparency of support is “to provide clarity on support provided and received” and “to provide a full overview of aggregate financial support provided” as much as possible. Both these frameworks will be key to inform the global stocktake every five years.

Based on the current transparency arrangements under the convention, the enhanced transparency framework shall introduce the following elements (the use of *shall* or *should* in the agreement, which is reiterated here-under, clearly shows when parties are bound by these elements):

- **Reporting:** Parties *shall* regularly provide a report of their national greenhouse gas emissions inventories prepared by using the Intergovernmental Panel on Climate Change (IPCC)'s good practice methodologies as well as a report with

²² *Ibidem*.

²³ United Nations Environment Program, “The Adaptation Finance Gap Report”, May 2016.

information necessary to track progress made in implementing and achieving their NDCs. Except for the Least Developed Countries (LDCs) and Small Island Developing States (SIDS), all these reports *shall* be submitted at least every two years. Parties *should* also provide information on climate impacts and adaptation. In addition, developed countries *shall* provide information on financial, technology-transfer and capacity-building support provided to developing countries at least every two years as well. The developing countries that wish to provide support *should* do the same but they are not bound to do so.

- **Technical expert review:** All these national reports (except on climate impacts and adaptation) *shall* be subject to a technical expert review, which is to check the consistency of the national information provided with the common requirements and to evaluate the achievement of NDCs and support provided.
- **Multilateral process:** All parties *shall* participate in a facilitative, multilateral examination where they all mutually consider the progress they are making with respect to their NDCs and financial support.

While the previous transparency system for monitoring, reporting and verification (MRV) was differentiated between developed and developing countries, the Paris Agreement establishes a universal transparency framework for all parties. However, because some developing countries with limited capacity may not be able to implement all these common requirements, the agreement also provides flexibility in the implementation of the framework “to those developing country parties that need it in light of their capacities.” The particular non-binding rules for LDCs and SIDS clearly demonstrate this flexibility. To support these developing countries in meeting the requirements of the enhanced transparency framework, the agreement’s accompanying decision text establishes a “capacity-building initiative for transparency” that is meant to improve their institutional and technical capacity over time. As a key climate fund, the Global Environment Facility is requested to arrange and support this initiative as a priority financial need.

Despite these flexibilities, which will likely be difficult to define, the new transparency requirements of developing countries for mitigation actions will clearly be significantly increased. At the same time, the agreement responds to developing countries’ wishes by introducing adaptation into the transparency framework and by increasing the transparency requirements for financial support by developed countries.

Generally, the enhanced transparency framework should enable developed countries to more accurately match their financial contributions to the particular needs of developing countries. However, the fact there is still no definition of new and additional finance will continue to leave the transparency framework for finance vulnerable to inconsistencies, not least because developed countries tend to inflate the amount of their financial contributions to developing countries.

These common modalities, procedures and guidelines for MRV will be developed by the COP24 in 2018 and applied upon the entry into force of the Paris Agreement, which will likely occur by the end of 2016 rather than in 2020 as previously foreseen. Therefore, it is to be hoped that this new framework will be applied for the first round of NDCs.

Although most of the requirements on transparency are legally binding, the agreement requires the transparency framework to be implemented in a “facilitative, non-intrusive” and “non-punitive” manner. In order to promote its enforcement, two measures have thus been established. In addition to the technical expert review process explained above, the agreement has created a mechanism to facilitate implementation and compliance with its provisions. The functioning of this mechanism, which will consist of a committee of 12 experts from developed and developing countries, still has to be defined but one can already wonder if these measures will be sufficient to induce action in countries that do not want to comply with the requirements.

In a nutshell, the new transparency framework is expected to create unprecedented clarity in parties’ mitigation and adaptation actions, global emissions trends and support that will be key for the success of the stocktakes every five years. However, most of the modalities of this framework still need to be defined.



To conclude, the Paris Agreement is a good start for the implementation of an ambitious strategy to protect our planet from climate change but it is only a skeleton that will need to be seriously fleshed out if it is to produce results. And even once that is done, it remains to be seen how the parties will respect and implement it. The hybrid legally-binding nature of the agreement means its success depends on trust between developed and developing countries as well as on the political will of each country to implement the agreement. Indeed, the Paris Agreement does not include any binding obligations with regard to mitigation, adaptation or financial support, thus the binding nature of the agreement lies in the parties’ obligation to review their contributions every five years so as to foster the dynamism of the process. These stocktakes will be supported by mandatory transparency and review requirements. Instead of legal sanctions, the impetus for implementation of the agreement will thus rely on a system of public “naming and shaming” in which countries that do not fulfill their obligations would jeopardise their political and diplomatic reputations. However, if other parties neglect to take seriously such breaches, the Paris Agreement will rapidly become inconsequential. The next part of this paper will analyse the various measures the EU must enact in order to implement the agreement, to demonstrate its trustworthiness and to avoid public “naming and shaming”.

THE PARIS AGREEMENT: A BENCHMARK FOR MORE AMBITIOUS EU ENERGY AND CLIMATE POLICIES

Bringing Paris home is a complicated but necessary exercise for the EU, which spearheaded efforts to reach a deal. This leadership position is globally recognised but it needs to be maintained through continuous efforts. The bloc has more to lose than to gain by lowering its ambition at this stage, namely all the advantages of being the first mover along with its credibility on climate change. Despite these risks, however, the EU has shown little willingness to transpose the ambition of Paris into its climate and energy policies so far.

It is increasingly complicated to keep climate and energy high on the agenda while the EU is facing many crises including the fallout from Brexit, continued economic weakness, migration, security challenges, Greece's ongoing financial woes and perhaps even most worrying, an important crisis of values characterised by growing levels of populism and Euroscepticism. Given this context, the European Commission is taking an understandably cautious approach. It is all too used to having to make unsatisfactory compromises because of negative messages coming from capitals rejecting "too burdensome" or "unrealistic" climate and energy targets and regulations imposed by Brussels.

The outcome of the UK referendum to exit the EU will certainly not improve the situation. Although it is too early to know how Brexit will impact the EU's climate policy, some important issues seem unavoidable. The UK has traditionally been a leader of the EU's climate policy, advocating ambitious climate targets and cutting its carbon emissions at a faster rate than the EU average. With the UK's withdrawal from the bloc, the EU will need to recalibrate all its policies in accordance with 27 instead of 28 member states.²⁴ This might imply a review of the EU-wide climate contribution submitted in Paris as a 28-member bloc. If the EU maintains its more than 40% emissions reduction target by 2030, it will automatically require a greater contribution from the 27 other countries to make up for the UK's absence. Another key issue is whether the UK will continue to be part of the EU Emissions Trading Scheme (ETS). It seems very unlikely it will leave it but its departure from the EU has already had an immediate impact on the market. In the first two weeks after the vote, the carbon price plunged by 18%.²⁵ All these key issues will raise uncertainty about changes in climate policy that could create a risk premium for investors.

²⁴ Grantham Research Institute on Climate Change and the Environment, "How will Brexit affect climate change policy?", 30 June 2016, available on <http://www.lse.ac.uk/GranthamInstitute/news/how-will-brexit-affect-climate-change-policy/>

²⁵ Michele de Nevers, "What's Next for the UK on Climate Change after Brexit? Lemons to Lemonade.", Center for Global Development, 12 July 2016, available on <http://www.cgdev.org/blog/whats-next-uk-climate-change-after-brexit-lemons-lemonade>

The convergence of Brexit and all the other crises the EU has to face should be the ideal occasion to re-think the future of Europe, a future that focuses on specific projects that provide real added value for the future well-being of all EU citizens. The transition toward a low-carbon economy is definitely such a project. All European governments need to acknowledge the opportunity that this transition represents and urgently act in accordance as other countries and the climate impact will not wait. The current cautious approach of the EU is putting its climate credibility and its current competitive advantage at risk. Therefore, the EU should adapt its climate and energy policies to the new benchmark set by the Paris Agreement. The second part of this paper analyses the main measures the EU will have to take to champion the spirit of Paris, namely:

- Ratifying the Paris Agreement as early as possible;
- Revising upward the bloc's 2020, 2030 and 2050 targets;
- Ensuring that the Paris ambition is reflected in the EU ETS and Effort Sharing Decision legislation;
- Addressing Europe's investment gap;
- Further advancing the EU's external climate actions, particularly in terms of diplomacy, development aid and finance;
- Taking care of the social dimension of the transition to a low-carbon economy.

Ratifying Paris As Soon As Possible

The Paris Agreement will enter into force 30 days after ratification by at least 55 countries representing at least 55% of global emissions. It will then become legally binding for those parties that sign and ratify it, once it has entered into force. By early September 2016, 26 countries, representing 39.07% of global greenhouse gas emissions, had ratified the deal.²⁶ The bulk of this amount has been reached thanks to the September 3rd ratification by the world's two biggest emitters, namely China (20.09%) and the US (17.89%) whose joint ratification showed great commitment from the two largest economies to work together to tackle climate change. Before this announcement, 24 other nations had joined the deal, all of them developing countries except Norway, accounting for just about 1% of global emissions. The EU is responsible for 12.08% of global emissions. It is thus a major emitter whose contribution would be significant to the agreement's entry into force. However, this result might be difficult to achieve before the so-called "55/55 threshold" is reached by other countries.

The EU's ratification process will be complicated and long as both the EU and each member state individually need to ratify the agreement. This is logical considering

²⁶ Climate Analytics, "Paris agreement Ratification Tracker", August 2016, available on <http://climateanalytics.org/hot-topics/ratification-tracker.html>

that the EU and its member states negotiated the agreement together and committed to the same EU-wide climate contribution post-2020. The EU does not need to wait for member states' ratification to complete its own ratification procedure; however, it is expected that they demonstrate a united front by depositing their instruments of ratification with the United Nations simultaneously.

The EU is currently doing its homework. In June, the Commission released a proposal for ratification of the agreement on behalf of the EU, which is now waiting for European Parliament and Council approval. The EU could thus ratify the agreement in time for the next UN climate conference (COP22) that will take place in Morocco in November 2016. But as it will likely have to wait for the national ratification of its slowest member state, it is complicated to predict when the EU will complete the procedure.²⁷ So far, only Hungary and France have ratified the agreement in their respective home parliaments. Many member states have already started the procedure and are likely to ratify the agreement by the next COP22 but others are waiting for their national 2030 climate targets to be set before starting the process. In July 2016, the Commission issued a proposal for an Effort Sharing Decision in which the different national targets are defined. It is to be hoped that this proposal will be sufficient for governments to begin the ratification process as soon as possible.

In the meantime, the ratification by the US and China should encourage other major emitters to ratify the deal. Brazil, Argentina, Japan and South Korea are on course to complete their ratification processes.²⁸ According to Climate Analytics, at least 58 countries accounting for 59.88% of global emissions are expected to have ratified by the end of 2016, allowing the Paris Agreement to enter into force this year instead of 2020 as initially planned.²⁹ This shows an incredible willingness from most parties to implement the Paris Agreement as soon as possible. However, the EU and its member states will probably not be able to conclude their ratification processes before the entry into force of the agreement. While it would still be better for the EU's credibility on climate change to be counted among the early ratifiers, the slow European process should not be a calamity for either the Paris Agreement or the EU itself.³⁰

²⁷ S. Yeo, "Explainer: When will European Union ratify Paris Agreement?", Carbon Brief, June 2016, available on: <https://www.carbonbrief.org/explainer-when-will-european-union-ratify-paris-agreement>

²⁸ C. Parsons and M. A. Memoli, « U.S. and China ratify sweeping climate deal and urge other nations to follow their lead », Los Angeles Times, 3 September 2016, available on: <http://www.latimes.com/world/la-fg-us-china-climate-20160903-snap-story.html>

²⁹ Climate Analytics, "Projected Paris Agreement total ratification in 2016", June 2016, available on: <http://climateanalytics.org/hot-topics/ratification-tracker-projections.html>

³⁰ S. Yeo, *op. cit.* 27.

Revising Upward the Bloc's 2020, 2030 and 2050 Targets

The Paris Agreement invites the parties to limit the rise of global temperature to “well below 2°C and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels”. This strengthened objective, compared to the 2°C limit initially proposed, will require steeper and quicker cuts in the EU's greenhouse gas emissions than previously anticipated. Indeed the current European ambition was established with the goal of limiting the global temperature increase to 2°C, not 1.5°C.

The European Commission's 2050 roadmap published in 2011³¹ foresees a reduction of 80% in the EU's greenhouse gas emissions by 2050, with milestones of a 40% reduction by 2030 and a 60% reduction by 2040. This 2050 target is based on the IPCC's 4th Assessment Report issued in 2007, which recommended developed countries reduce their carbon emissions between 80% and 95% by 2050. The EU's long-term objective is thus to realise the lower end of this range to keep global temperature below 2°C.

In the run-up to Paris, European leaders agreed to reduce their greenhouse gas emissions by at least 40% compared to 1990 levels.³² This objective is the result of intense and difficult negotiations between countries that do not share the same level of ambition regarding the fight against climate change.³³ These 2050 and 2030 targets were certainly a credible enough offer to the rest of the world ahead of COP21. However, with the Paris Agreement, the EU pledges to pursue efforts to limit global warming to 1.5 °C. Accordingly, neither of these targets remain sufficient for realising the Paris ambition and need to be revised. A new EU 2050 roadmap with updated intermediate targets should be proposed as soon as possible. In order to be in line with the 1.5 °C limit agreed in Paris and to take into account its fair share as an industrialised region in the world, the EU should reduce its emissions by 95% by 2050. This revision would automatically imply an increased 2030 target that should be submitted to the UNFCCC in the framework of the ratchet mechanism by 2020.

If the EU really wants to capitalise on its first mover position and be coherent with itself, it should also revise its current 2020 target, which consists of a reduction of 20% of its GHG emissions compared to 1990 levels. There are two good reasons for such a move. First, the EU has already overachieved its target. In 2014, the EU had decreased its GHG emissions by 22.9%³⁴, overshooting by six years its initial target

³¹ European Commission, *Communication: A Roadmap for moving to a competitive low carbon economy in 2050*, COM/2011/0112 final, 8 March 2011.

³² European Council, *Conclusions of the European Council*, EUCO 169/14, 23-24 October 2014.

³³ EnergyPost, “EU deeply divided over 2030 climate and energy policy”, 5 March 2014, available on <http://www.energypost.eu/eu-divided-2030-climate-energy-policy/>.

³⁴ EUROSTAT, “Total greenhouse gas emissions trends and projections”, 21 June 2016, available on <http://www.eea.europa.eu/data-and-maps/indicators/greenhouse-gas-emission-trends-6/assessment>.

despite a low carbon price under the European Trading Scheme³⁵. In an analysis published in 2015, the environment NGO Sandbag estimated that Europe is even on track to deliver a reduction of 30% by 2020.³⁶ Knowing that reducing emissions will become more costly and difficult over time, the EU should capitalise on this over-delivery and reap the benefits of early action. Second, in the framework of 2009's COP15 in Copenhagen, the EU committed to increase its GHG reduction target from 20% to 30% by 2020 in case an ambitious and comprehensive global agreement would have been reached. This implied that other developed countries should commit to comparable emission reductions and that economically more advanced developing countries should make a contribution commensurate with their respective responsibilities and capabilities.³⁷ Although Copenhagen failed in fulfilling these conditions, six years later the Paris Agreement might be considered as doing so. Indeed, the Climate Action Tracker³⁸ rates the EU's target for Paris in the same 'medium' category as other countries' contributions such as the US, China, Mexico, Brazil and India.³⁹ For both these excellent reasons, the EU should move from a 20% to a 30% reduction target by 2020.

However, the European Commission currently shows no signs of willingness to increase the EU's 2020, 2030 and 2050 targets. To take stock of the Paris Agreement, the Commission released a Communication named "The road from Paris: assessing the implications of the Paris Agreement for the EU" which fails to consider more ambitious targets while prioritising implementation of the existing targets.⁴⁰ This approach has been criticised not just by civil society but also by European ministers for environment.⁴¹ Bert Metz, the EU's former chief negotiator to the UNFCCC, concurs when he writes: "So the key message from the Paris Agreement to the EU is to strengthen its long-term GHG reduction goal from 80% to 95%. All that is needed is the political will to do so."⁴²

³⁵ EUObserver, "EU carbon credits drop below €6", 29 January 2016, available on <https://euobserver.com/environment/132045>.

³⁶ Sandbag, "Europe is on track for 30% emissions cuts by 2020", 27 November 2015, available on https://sandbag.org.uk/site_media/pdfs/reports/EU_on_track_for_30_cuts_by_2020_9Dec15.pdf

³⁷ European Council, *Presidency Conclusions of the Brussels European Council, 17271/1/08 REV 1*, 11-12 December 2008.

³⁸ Climate Action Tracker, "Individual Country assessment", 2015, available on <http://climateaction-tracker.org/>

³⁹ Carbon Market Watch, "The impact of the Paris Agreement on the EU's climate policies", December 2015, available on http://carbonmarketwatch.org/wp-content/uploads/2015/12/The-impact-of-the-Paris-agreement-on-the-EU-climate-policies_FINAL.pdf

⁴⁰ European Commission, *Communication: The road from Paris: assessing the implications of the Paris Agreement*, COM(2016) 110 final, 2 March 2016.

⁴¹ Greenpeace, "Commission breaks pledge to bring EU targets in line with Paris climate deal", 2 March 2016, available on <http://www.greenpeace.org/eu-unit/en/News/2016/Commission-breaks-pledge-to-bring-EU-targets-in-line-with-Paris-climate-deal/> and Rosalind Cook, "Make your mind up time for the EU on Paris", E3G blog, 17 March 2016, available on <https://www.e3g.org/library/make-your-mind-up-time-for-the-eu-on-paris>.

⁴² Bert Metz, "Adjusting the EU's climate target to meet the Paris Agreement", 24 February 2016, available on <https://www.euractiv.com/section/climate-environment/opinion/adjusting-the-eus-climate-targets-to-meet-the-paris-agreement/>

In the same communication, the Commission seems to indicate that if the bloc is going to increase its ambition, that won't happen before the global stocktake in 2023. The paper states, "Starting from 2023, parties will come together every five years in a 'global stocktake' to consider progress in emission reductions (...)",⁴³ ignoring the first "facilitative dialogue" or stocktake on mitigation that will take place as early as 2018. Yet, this first rendez-vous of the ambition cycle would be an excellent opportunity for the EU to prove its commitment to the Paris Agreement by increasing its ambition. To do otherwise could undermine the very spirit of an agreement Europeans fought hard to reach.

Ensuring the Paris Ambition is Reflected in the EU ETS and ESD

The EU's climate contribution to the Paris agreement is to decrease its carbon emissions by at least 40% by 2030 compared to 1990. This target will be implemented through both pillars of EU climate legislation, namely the EU's Emissions Trading Scheme (EU ETS) and the Effort Sharing Decision (ESD). While the ETS covers around 40% of the EU's carbon emissions coming from the industry and power sectors, the ESD accounts for almost 60% coming from all the other non-ETS sectors, i.e. transport, agriculture, building and waste. In order to achieve the 2030 target, the ETS and ESD sectors must respectively achieve 43% and 30% emissions reduction targets by 2030 compared to 2005. The ESD is meant to establish binding annual carbon emission targets for member states in line with this 2030 target. The Commission's proposals for the revisions of both these pieces of legislation for the period 2021-2030 have already been published⁴⁴ and the decision-making processes are under way. However, these legislative proposals will need to be amended in the coming months or further adapted in the future if the EU wants to live up to the Paris ambition. Five elements deserve particular attention.

First, if the EU decides, as recommended, to revise upward its 2020, 2030 and 2050 targets in order to be in line with the objective of keeping global temperature between 1.5°C and 2°C, then mechanisms will have to be found to increase ambition in the ETS and ESD as well.

In the ETS, changes should be made in both the short- and long-term. In the short-term, the EU should adapt the scheme in order to reach a higher 2020 emissions reduction target. Not taking advantage of the 2020 overachievement could significantly undermine the success of the scheme in the future. The efficiency of the ETS lies in its ability to deliver cost-effective emission reductions and to promote invest-

⁴³ European Commission, *op. cit.* 40.

⁴⁴ European Commission, *Proposal for a Directive amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments*, COM/2015/0337 final, 15 July 2015 and European Commission, *Proposal for a Regulation on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 for a resilient Energy Union and to meet commitments under the Paris Agreement*, COM/2016/0482 final, 20 July 2016.

ments in low-carbon technologies. However, the ETS has not been able to deliver this potential so far. The economic recession, the massive use of international offsets, the overlapping EU policies and other inflexible policy features have led to a huge surplus of pollution rights called “emission allowances”. Consequently, the price of these allowances has dropped so much since 2008 that it has not been possible to incentivise investments in low-carbon technologies. Moreover, the surplus is expected to reach between 2.6 and 4.4 billion allowances by 2020.⁴⁵ The overachievement of the 2020 target is largely the result of this huge surplus of allowances on the market that can continue to be used by European companies to pollute in the next period 2021-2030. Ideally, therefore, the EU should cancel this surplus of emission allowances in order to be in line with its actual level of emissions by 2021 and to reach a higher 2020 reduction target. However, the current revision of the scheme shows no indication that such a move will take place. In order to address the surplus issue, the Commission proposed a market stability reserve (MSR)⁴⁶ that will start operating in January 2019. This MSR is an excellent step forward but it will not be sufficient to restore the credibility of the scheme. The surplus will be only temporarily set aside and, according to economic forecasts, the market will continue to be oversupplied until at least 2025.⁴⁷

In the longer term, if the EU plans to achieve a carbon emissions reduction of at least 95% by 2050 in order to be in line with the Paris goal, it will need to review the ETS’ annual linear reduction factor (LRF) by 2030. The LRF determines the pace of emission reductions every year in the EU ETS. As the sectors under the ETS have to meet a 43% reduction target by 2030 compared to 2005, the Commission proposed to increase the LRF from 1.74% to 2.2% from 2021 onward.⁴⁸ However, it should be increased well above this percentage in order to address the surplus of allowances and reap the benefits of early action to reach the 2050 target cost-effectively with an increased 2030 target.

In the ESD, the 2030 target should also be revised upward in order to avoid delaying efforts to bring the EU to an ideal reduction of 95% of its carbon emissions by 2050. In addition to the annual and five-year review of member states’ ESD targets proposed by the Commission, the ESD should adopt a provision that allows increasing these targets on a pro-rata basis based on any revision of the ESD overall

⁴⁵ 2.6 billion is the European Commission’s estimate in its “Impact Assessment Accompanying the Proposal for a Decision Concerning the Establishment of a Market Stability Reserve”, SWD(2014)17, 15 July 2016; 4.4 billion is Sandbag’s estimate cited in “Europe is on track for 30% emissions cuts by 2020”, *op. cit.* 36.

⁴⁶ “The Market Stability Reserve institutionalises a surplus of ETS allowances between 400 and 833 million tonnes. When the surplus is more than 833 million, 12% excess allowances enter the MSR. When the surplus is less than 400 million, 100 million allowances exit the MSR. The 400 and 833 million thresholds will be reviewed in 2026.” from Change Partnership, “ETS Market Stability Reserve”, available on: <http://www.changepartnership.org/campaigns/msr/>

⁴⁷ CAN Europe, “CAN Europe Position: the EU ETS reforms the Paris Deal requires”, February 2016, available on: <http://www.caneurope.org/docman/position-papers-and-research/eu-ets-2/2876-can-ets-position-reform-priorities-after-paris/file>

⁴⁸ Proposal of the European Commission for the revision of the EU ETS (2021-2030), *op.cit.* 44.

target. Moreover, to support the achievement of national targets and to ensure the realisation of emissions reductions in all sectors under the ESD, various EU-wide policy measures – notably on energy efficiency, renewables, CO₂ emissions of road vehicles, waste and sustainable agriculture – should be reinforced. Member states' taxation policies also are and will be very important to incentivise emission reductions in the non-ETS sectors.

Second, the EU's proposed next 10-year mitigation cycle (from 2021 to 2030) will not be in line with the Paris Agreement's five-year ambition cycles, a situation that could produce legislative and policy complications. On average a legislative file needs between 17 and 33 months to be enacted into law,⁴⁹ which does not include the transposition delay of 12 months usually granted for directives nor the time needed for the actual transposition of energy and climate legislation into national law.⁵⁰ Consequently, the ink will not have dried on the text before it will need to be reopened in order to be adapted for updated ambition. Given the current difficulty of member states to agree on the post-2020 ESD, this scenario seems highly undesirable. Moreover, the long-term credibility of the carbon market might be undermined by too frequent interventions from policymakers. It is hard to comprehend how the EU will avoid worsening regulatory uncertainty for investors in the carbon market if it introduces political changes every five years. However, this might just be the price to pay to translate the ambition mechanism in both these pieces of legislation.

The best way forward would be to create built-in flexibility in the ETS and the ESD. For the 2020-2030 period, the revision of these texts should include a provision that would allow for a mid-term review in accordance with a potentially updated European contribution in 2025. Many organisations have proposed adopting five-year cycles in line with the Paris' ambition mechanism⁵¹ but the likelihood of that happening is very low considering that the Commission's proposals for both these pieces of legislation have already foreseen 10-year mitigation cycles in accordance with the EU's 2030 target. Nevertheless, for the future periods post-2030 it would be more convenient to adopt five-year mitigation cycles for the ETS and the ESD. By then, the uncertainty created by these shorter ambition periods should be largely compensated by the adoption of a clear 2050 roadmap in accordance with the Paris objectives.

Third, the argument of preserving the European competitiveness in the EU ETS should be redefined with regard to the universal character of the Paris Agreement. In its proposal to revise the scheme post-2020, the Commission maintains the carbon

⁴⁹ European Parliamentary Research Service, *European Parliament: facts and figures*, Briefing, November 2014.

⁵⁰ European Commission, *Monitoring the application of European Union law. 2015 annual report*, COM(2016) 463 final, 15 July 2016.

⁵¹ Carbon Market Watch, *op. cit.* 39; CAN Europe, *op. cit.* 47; Carbon Market Watch and 22 other organisations, "Letter (to the Commission) to ensure that the 2030 ESD, the EU's largest climate instrument, is fit for purpose", April 2016, available on http://carbonmarketwatch.org/wp-content/uploads/2016/04/ESD-Letter-to-COMMISSION_Commissioners_FINAL.pdf

leakage provisions that allow some industries within the EU as well as some electricity generators in Central and eastern European countries to receive free allowances in order to prevent them from relocating abroad and escaping the costs of EU's climate policies. However, considering that 188 countries, covering around 95% of global emissions, committed to adopt climate policies in order to reduce their GHG emissions in view of COP21, this argument becomes difficult to justify. Yet, the Commission's proposal foresees an allocation of around 6.3 billion free allowances in the period 2021-2030. This would amount to subsidising the carbon emissions of some European companies for an amount of around EUR 160 billion whereas the risk of carbon leakage is becoming increasingly unlikely.⁵² The Commission's proposal was issued before the Paris Agreement was concluded. It is thus now up to the European Parliament and the Council to update the carbon leakage provisions so as to gradually phase out free allocation of allowances in the ETS and avoid undue protectionist measures.

Fourth, the environmental integrity of the climate targets in the EU ETS and in the ESD needs to be ensured. In the EU ETS, the Commission has already proposed to prevent the use of international offset mechanisms, such as the clean development mechanism (CDM) and the joint implementation (JI), in the next period so as to promote domestic climate efforts. Correspondingly, the EU should also make sure that future decisions to link the EU ETS with foreign carbon markets will not result in the purchase of foreign permits by European companies that would divert them from domestic mitigation efforts. Any decision to link the EU ETS with compatible schemes in other countries should therefore be accompanied by a corresponding increase in the EU's overall carbon emissions target. In the ESD, member states should be prevented from using the surplus of ETS allowances to meet their climate targets in the non-ETS sectors. This would amount to using pollution permits from non-actual emissions in one sector to comply with the emissions reduction target in another sector, providing an easy way out for sectors like transport and agriculture. The environmental integrity of the member states' 2030 targets would be undermined, while the EU's GHG emissions would be globally increased. Despite this argument, the Commission proposed a flexibility mechanism for the ESD 2021-2030 that would allow eligible member states to use surplus allowances from the EU ETS up to a certain percentage of their targets as a flexibility mechanism to make their contributions easier and less expensive.⁵³

Fifth, with respect to the sectors covered by the ETS and the ESD, some changes are needed. The 2030 EU ETS should include all maritime emissions and part of aviation emissions. Shipping and aviation are two sectors that seriously need to be taken into account to limit the rise in global temperatures to between 1.5 and 2°C. According to the European Commission, global shipping emissions are expected to grow between

⁵² Carbon Market Watch, *op. cit.* 39; CAN Europe, *op. cit.* 47.

⁵³ Proposal of the European Commission for an Effort Sharing Decision (2021-2030), *op.cit.* 44.

50% and 250% by 2050, depending on future economic and energy developments.⁵⁴ As for global aviation emissions, the International Civil Aviation Organisation (ICAO) predicts an increase between 300% and 700% by 2050.⁵⁵ In both these sectors, a global approach should be favoured in order to tackle bunker emissions. However, the International Maritime Organisation (IMO) and the ICAO have so far shown no intention of taking efficient actions in the future. In fact, in 2015, the IMO refused to even consider a target for the sector.⁵⁶ Therefore the EU should set the right example and start acting to reduce maritime emissions by including this sector in the EU ETS. Regarding the aviation sector, ICAO agreed to develop a proposal for a global market-based mechanism by October 2016 that is to be implemented from 2020. This mechanism should stabilise aviation emissions at 2020 levels through the purchase of offsets and allowances from mechanisms in other sectors, such as the CDM. According to Carbon Market Watch, this objective is not in line with limiting global warming to 1.5°C.⁵⁷ Therefore, unless ICAO proposes an appropriate mechanism in October 2016, the EU ETS should review its aviation requirements so as to cover 50% of all outgoing and 50% of all incoming flights from 2017 onwards.⁵⁸

As for the ESD, carbon removals from the land use, land use change and forestry (LULUCF) sector should not be allowed to be used to offset the carbon emissions from the ESD sectors. Yet, the ESD Commission's proposal allows up to 280 million tonnes CO₂ to be credited from LULUCF over the period 2021-2030 as a new way for member states to meet their national targets. Each member state can thus use a certain amount of credits that will replace emissions reduction efforts in the ESD sectors. Although the Commission limited the use of such credits, the environmental integrity of the LULUCF sector cannot be guaranteed as a flexibility mechanism. The reliability of data from the LULUCF sector is highly uncertain due to large annual variations. The carbon removals from this sector are thus not suitable to compensate the stable emissions from the ESD sectors.⁵⁹ Accordingly, the LULUCF sector should be a separate system outside the ESD.

In conclusion, if Europe wants to incentivise investments in the global green race, it will have to strike the right balance between the certainty of its climate targets and policies in the future and the flexibility to adapt them according to internal or external unintended circumstances such as an international climate agreement like Paris or an economic crisis.

⁵⁴ European Commission, "Reducing emissions from the shipping sector", available on http://ec.europa.eu/clima/policies/transport/shipping/index_en.htm.

⁵⁵ European Commission, "Reducing emissions from aviation", available on: http://ec.europa.eu/clima/policies/transport/aviation/index_en.htm.

⁵⁶ Carbon Market Watch, *op.cit.* 39.

⁵⁷ *Ibidem.*

⁵⁸ *Ibidem.*

⁵⁹ Carbon Market Watch, "Flexibilities in the EU's 2030 Effort Sharing Decision – Reducing the costs of tackling 60% of the EU's climate problem", Carbon Market Watch Policy Briefing, June 2015, available on http://carbonmarketwatch.org/wp-content/uploads/2015/06/Flexibilities-in-the-EU%E2%80%99s-2030-Effort-Sharing-Decision_Poicy-Brief_final-June-2015.pdf

Addressing Europe's Investment Gap

The energy sector is set to make a major contribution to Europe's decarbonisation goals. Estimates indicate that more than EUR 150 billion per year needs to be invested to decarbonise the energy sector alone between now and 2030.⁶⁰ In 2015, Europe's clean energy market attracted USD 58.5 billion (about EUR 53 billion), far behind China (USD 110.5 billion).⁶¹ An analysis by the international law firm Linklaters shows there is no shortage of money to be invested: institutional investors are ready to deploy at least EUR 850 billion in infrastructure over the next 10 years (2014-2023) in the EU economy⁶² and 2016, the "year of delivery of the Energy Union"⁶³, represents a major opportunity to develop an investor-friendly framework. Europe needs to be able to attract this capital. As the Commission has written in its most recent communication, "[t]his transition is necessary in order to provide jobs, growth and investment opportunities for present and future generations of Europeans, while mitigating dangerous climate change. If the EU does not maintain and exploit its first mover advantage when fostering renewable energy, energy efficiency and competing on the development of other low carbon technology markets globally, other regions will."⁶⁴

This international competition means Europe needs to step up its game regarding innovation. Although it remains the largest source of financing for energy-related research and development worldwide (EUR 3.9 billion in 2014, amounting to 36% of the total)⁶⁵, its leadership cannot be taken for granted anymore and the bloc needs to reinvent itself to find new markets. In order to do so, the Commission is expected to propose an integrated Energy Union strategy for research, innovation and competitiveness by the end of 2016. In this context, an interesting strategic action would be to focus on system integration rather than specific technologies as is currently the case.⁶⁶ As research by Industrial Innovation for Competitiveness and Capgemini Consulting shows, "[t]here is no room for complacency and much room for improvement, in particular to reap the benefit from investments made early in the innovation cycle (i.e. research and innovation). But Europe's starting position is

⁶⁰ Christian von Hirschhausen, Franziska Holz, Clemens Gerbaulet and Casimir Lorenz, "European energy sector: large investments required for sustainability and supply security", DIW Economic Bulletin 7.2014, July 2014.

⁶¹ Bloomberg New Energy Finance, "Clean Energy defies fossil fuel price crash to attract record \$329bn global investment in 2015", 14 January 2016, available on <http://about.bnef.com/press-releases/clean-energy-defies-fossil-fuel-price-crash-to-attract-record-329bn-global-investment-in-2015/>.

⁶² Linklaters, "Set to revive: investing in Europe's infrastructure", 2014, p.6, available on <http://www.linklaters.com/Insights/Thought-Leadership/investing-europe-infrastructure/Pages/Index.aspx>

⁶³ European Commission, "One year of the Energy Union", 25 February 2016, available on <https://ec.europa.eu/energy/en/news/one-year-energy-union>.

⁶⁴ European Commission, *Communication: Accelerating Europe's transition to a low-carbon economy*, COM(2016) 500 final, 20 July 2016.

⁶⁵ *Ibidem*.

⁶⁶ Clémentine d'Oultremont and Quentin Genard, "Report: Boosting European innovation after COP21: a prerequisite for a low-carbon future", March 2016, available on <http://www.egmontinstitute.be/wp-content/uploads/2016/03/Report-1st-Symposium-innovation-final.pdf>

a relatively strong one. It has structural strengths that it can build upon, including the size of the European market, the recognised skills of its workforce, and the quality of its research institutes.”⁶⁷ Nevertheless, the EU should facilitate the access of its innovations to market, particularly by making them commercially viable. In June 2016, the Commission joined “Mission Innovation”, an initiative in which 20 of the world’s biggest economies, representing over 80% of global clean energy research budgets, have committed to double their public funding in clean energy research and innovation over the next five years. It is an important step taken by the Commission on behalf of the EU to accelerate global clean energy innovation with the goal of making clean technology affordable worldwide.

The Capital Markets Union, aimed at unlocking funding for Europe’s growth, is also a priority area, which needs to go hand-in-hand with the Energy Union. The finance sector is threatened by a carbon bubble: fossil fuel companies are being overvalued because of misleading assumptions about their future market prospective. These companies are continuing to invest into infrastructure that will not provide the returns they hoped for and they risk ending up stranded. The orderly transition to a low-carbon economy requires regulators to intervene to limit these investments and facilitate investments into projects compatible with a low-carbon future.⁶⁸

Then, fossil fuel subsidies need to be phased out. Europe’s austerity era of the late 2000s has dramatically reduced the public money available. Every Euro invested should thus be compatible with a low-carbon world. The Paris Agreement has made clear fossil fuels have no future. Infrastructure built for the exploitation of such fuels presents a major risk of being stuck in a world where it will not be used anymore. Investors should be aware of the risks and more transparency measures need to be taken.⁶⁹ As the world’s most advanced economies, the G7 leaders committed in 2016 to eliminate government support for coal, gas and oil by the end of 2025.⁷⁰ The EU also moved towards phasing out fossil fuel subsidies, while being careful of security of supply concerns. However, despite these pledges, these subsidies are continuing to increase in the EU. They represented a cost of EUR 73 per European citizen in 2015, up from 11% in 2013.⁷¹ In an economic context where every euro counts to

⁶⁷ J. Reinaud *et al.*, “Scaling up innovation in the Energy Union to meet new climate, competitiveness and societal goals”, Industrial Innovation for Competitiveness and Capgemini Consulting, 2016, available on https://www.capgemini.com/resource-file-access/resource/pdf/scaling_up_innovation_in_energy_union_capgemini_and_i24c_report_1.pdf

⁶⁸ Ingrid Holmes, “Future-proofing the EU Capital Markets Union”, E3G Briefing paper, October 2015, available on https://www.e3g.org/docs/Future_proofing_the_Capital_Markets_Union.pdf

⁶⁹ Financial Times, “Fossil fuel groups warned not to ignore Paris accord”, 6 June 2016, available on <http://www.ft.com/cms/s/0/2e5972a4-2b21-11e6-a18d-a96ab29e3c95.html>

⁷⁰ G7, “Ise-Shima Leaders’ declaration”, 26-27 May 2016, available on <http://www.mofa.go.jp/files/000160266.pdf#page=26&zoom=auto,-158,326>

⁷¹ EURONEWS, “Fossil fuel subsidies continue rising in EU despite pledges to phase them out”, 04 August 2015, available on <http://www.euronews.com/2015/08/04/fossil-fuel-subsidies-rising-in-eu-despite-pledges-to-phase-them-out>

reboot the economy, the money spent supporting fossil fuel subsidies should be redirected to supporting the transition to a low-carbon economy.

There has been a constant lack of investments in the EU since the economic and financial crisis in 2008, particularly in energy efficiency projects. The European financial instruments – such as the European Fund for Strategic Investments (EFSI or the so called “Juncker Plan”), the updated European Strategic Energy Technology Plan, the Horizon 2020 programme or the European Structural and Investment Funds – can help bridge the current funding gap. For instance, according to the Commission, the EFSI is on track to deliver on mobilising at least EUR 315 billion in additional investments by mid-2018, with more than 50% of the investments approved so far being climate relevant.⁷² In the framework of the 2030 climate package, member states are required to develop plans setting out how they intend to reach the 2030 targets. These upcoming national energy and climate plans should include, among other items, a view on future infrastructure development projects, policies and measures to support energy efficiency, renewables, and research and innovation. They can thus be instrumental for investors. These national plans are an opportunity to communicate to public and private investors the member states’ expectations for projects that will seek financing in the future. Provided these plans are robust, thorough and realistic, they should reinforce investors’ certainty and make Europe a better investment destination.

Further Developing EU External Climate Actions

More than implementing the Paris Agreement at home, maintaining the positive momentum of Paris will require further developing the EU’s external climate actions by⁷³:

- Maintaining climate change advocacy in the EU’s diplomatic relations;
- Reinforcing the synergy between climate action and development aid and cooperation so as to help developing and emerging countries implement their contributions and increase their ambition over time;
- Raising more funds and being more innovative about climate finance for developing countries.

Working on these three fronts will reinforce the credibility of the EU as global climate leader. As the old adage says, “trust takes years to build, seconds to break and forever to repair.” Let’s hope the EU will do nothing but reinforce this trust over time.

⁷² European Commission, *op.cit.* 64.

⁷³ The two first external actions are largely inspired from the three strands of action for continued climate diplomacy in 2016 developed by the Council of the EU on 8 February 2016, available on: <http://data.consilium.europa.eu/doc/document/ST-5853-2016-INIT/en/pdf>

First, the EU and its member states should make sure that climate change and the implementation of the Paris Agreement are promoted in key international fora, such as the G20, the G7 and the UN, as well as in bilateral, regional and multilateral dialogues. They should prevent diplomatic backsliding of the globally defined climate goals by leading by example, promoting innovative solutions, building and maintaining coalitions. For instance, the “High Ambition Coalition” – a group of more than 100 developed and developing countries led by the EU that greatly contributed to the success of COP21 by consistently advocating an ambitious deal – should be kept alive and even strengthened in future UN negotiations. This coalition could indeed increase pressure for strengthening NDCs quickly. All relevant EU diplomatic channels should also be used to raise awareness about climate change as a threat multiplier that will exacerbate risks to global security and human rights, such as water scarcity, food security, migration, social and economic instability and gender inequality. Finally, through the EU Green Diplomacy Network (GDN), a flexible, informal and innovative tool, the EU member states and the Commission’s extensive diplomatic networks should increasingly work together and share experiences to bring more coherent and effective EU messages to third parties all over the world, while gathering partners’ views.

Second, in order to support developing and emerging countries in tackling climate change, the EU should reinforce the climate dimension of its global development aid and cooperation. A key objective of the European Commission and the European External Action Service is to assist developing countries in implementing their NDCs and in establishing a transparent MRV system. This implies, for instance, the EU’s involvement in the Africa Renewable Energy Initiative.⁷⁴ Capacity building for transparent monitoring and reporting systems should also clearly be part of the EU’s cooperation programmes, particularly in the LDCs and SIDS where institutional and technical capacity is very limited. Then, in its cooperation instruments with emerging countries such as China, Brazil and India, the EU should increasingly include measures such as technology transfer, research and innovation and capacity building. More generally, the synergy between climate objectives and the Sustainable Development Goals (SDGs) as part of the UN’s 2030 Agenda for Sustainable Development needs to be further developed in the next years.

Third, it will be crucial that the EU scales up its climate finance for developing countries in the future if it wants to remain a credible partner. On the basis of OECD calculations estimating that climate finance reached USD 62 billion in 2014⁷⁵, developed countries are on track to achieve the USD 100 billion goal. In the same year, the EU and its member states mobilised EUR14.5 billion in public climate funds⁷⁶ without including private funds. After the Copenhagen (2009) and Cancun (2010) climate

⁷⁴ European Commission, *op. cit.* 40.

⁷⁵ Organisation for Economic Co-operation and Development, *op. cit.* 21.

⁷⁶ European Commission, “European Union climate funding for developing countries in 2015”, 2015.

conferences, developed countries pledged USD 30 billion in public climate finance from 2010 to 2012, out of which the EU and its member states provided USD 9.3 billion. Using the same proportions, Bruegel estimates that by 2020 the EU could raise around USD 31 billion of public funds per year.⁷⁷ Since this doesn't include private funding, the EU should thus be a key provider of the USD 100 billion goal. However, for the world to have a chance of meeting the 1.5 to 2°C target agreed in Paris, the EU will need to increasingly mobilise public, private, bilateral and multilateral funds plus alternative sources of financing, while taking care in the way these funds are delivered and administered.

With respect to public sources of climate finance, in the run-up to and during the Paris conference, the EU and 18 member states pledged to increase climate funding in the coming years. The EU committed to ensure that 20% of the Multiannual Financial Framework 2014-2020 is directed to climate-related actions and policies. The European Commission estimated that this could more than double climate finance to developing countries, representing around EUR 14 billion.⁷⁸ There is currently no burden sharing of climate finance among EU governments,⁷⁹ but a clear, efficient and common European framework on how to deliver commitments is much needed.⁸⁰ In the meantime, each member state decides its own contribution to climate finance. Some of them made serious pledges in the context of Paris. In France, the government promised to increase the country's current annual contribution of EUR 3 billion to EUR 5 billion by 2020. Germany is set to double its climate contribution by 2020, which is expected to reach EUR 3.97 billion.⁸¹ As for the UK, it committed to provide GBP 5.8 billion to developing countries, which means that the country's climate finance will increase by 50% between 2016 and 2020, reaching an annual contribution of GBP 1.76 billion by 2020⁸². With the Brexit referendum, however, London's contributions to climate finance will no longer bolster the EU's overall climate finance efforts.

Although these increases of climate finance from the EU and its member states are most welcomed, the picture is not all rosy. It is already clear that a significant share of the EU's climate public finance by 2020 will come from the development aid budgets of the EU and its member states. Therefore, the EU should have the courage to distinguish its development financing from its climate finance and agree on a clear

⁷⁷ Guntram B. Wolff and Georg Zachmann, "A European approach to climate finance ahead of the Paris summit", Bruegel, 2015, available on <http://bruegel.org/wp-content/uploads/2015/09/Bruegel-draft-on-Climate-Finance-embargoed.pdf>

⁷⁸ European Commission, *op. cit.* 40.

⁷⁹ It would imply to create compensations for some Eastern Member States, which are currently not recognised as developed countries contributors of climate finance.

⁸⁰ Guntram B. Wolff and Georg Zachmann, *op. cit.* 77.

⁸¹ Charlotte Flechet, "Climate finance: the EU's best chance for action", EU Observer, 2015, available on: <https://euobserver.com/opinion/131466>.

⁸² Karl Mathiesen, "UK's £6 bn climate finance pledge is welcome – but not its fair share", The Guardian, 2015, available on: <https://www.theguardian.com/environment/2015/sep/28/uks-6bn-climate-finance-pledge-is-welcome-but-not-its-fair-share>.

definition of what constitutes new and additional climate funds. This is key to establishing clear common rules on the MRV of climate funding, which is paramount to ensure accountability and mutual trust between developed and developing countries. Moreover, if the EU is to be considered a credible partner for developing and vulnerable countries, its public sources of climate finance should be particularly aimed at financing adaptation, and in the next years, at supporting developing countries' cross-cutting development challenge through the provision of capacity building, technical assistance and pilot actions. However, out of the USD 14.5 billion of public climate finance mobilised by the EU and its member states in 2014, only 16% of this amount was dedicated to adaptation and 21% to crosscutting, while the lion's share of 63% went to mitigation.⁸³ Besides adaptation, European public funding should be used to finance mitigation actions in areas the private sector is likely to neglect, particularly in LDCs and SIDS, and to leverage private investment.

There are three main ways for the EU to mobilise new and additional climate finance. The first and best one is to allocate a part of the EU ETS' auctioning revenues to climate finance, which should then be automatically, sustainably and predictably channelled to the UN's Green Climate Fund. The current revision of the EU ETS for the period post-2020 provides the opportunity to establish such a reserve. According to Oxfam⁸⁴, the introduction of a 10% reserve for international climate solidarity could generate EUR 34.88 billion over the period 2021-2030, with an estimated average carbon price of EUR 22.5 over the same period. This would provide over EUR 3 billion per year for the Green Climate Fund.

The second way is the adoption of a financial transaction tax (FTT), from which a share of revenues would be used by member governments for climate finance. Such a tax was proposed at the EU level in 2010. However, unanimity is required in order to pass a European tax of this nature and a number of member states were clearly not in favour. Therefore, the proposal was made to use the "enhanced cooperation" mechanism for those states that wish to participate in the establishment of the tax; currently, 11 are due to participate in the FTT scheduled to come into force in 2017. France's climate finance pledge leans heavily on this future tax to raise additional funds.

The third way is the establishment of a tax on carbon that would be applied to non-ETS sectors, such as heating and transport.⁸⁵ This European tax could provide its own resources to the EU budget that could be re-injected to finance climate change. However, just like for the FTT, the adoption of such a tax would require unanimity among member states, which would seem difficult to reach at present.

⁸³ European Commission, *op. cit.* 76.

⁸⁴ Oxfam, "The ETS International Climate Action Reserve – The EU's Emission Trading Scheme as a source of international climate finance", 2015, available on https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/the_eus_emission_trading_scheme_as_a_source_of_international_climate_finance_.pdf

⁸⁵ Guntram B. Wolff and Georg Zachmann, *op. cit.* 77.

Regarding private financial sources, they are expected to cover the majority of climate finance. However, in order to have an investment-friendly environment, countries need to have a stable, credible and predictable climate regulatory framework. Private investments are crucial for ensuring developing countries' transition towards a low-carbon economy. Leveraging private flows from developed countries will be essential for mitigation and technology transfers, but it is also important for many investment decisions in adaptation. These investments can be stimulated through a more efficient use of public funds in order to support risk-sharing instruments and provide revenue support through concessional loans, grants and guarantees.⁸⁶ Development bank instruments can also play a significant role in widening the sources of and access to climate finance. In 2015, the European Investment Bank promised to increase its annual support to developing countries by more than EUR 2 billion and ensure that a minimum 25% of its efforts will be dedicated to climate change by 2020.⁸⁷

Finally, the EU and its member states should try to rationalise and coordinate the vast array of bilateral and multilateral funds through which climate finance will be channelled. This requires enhanced transparency and accountability to ensure that climate finance is delivered in an efficient, effective and timely manner. In order to do so, early financial support should be directed to build up institutional and technical capacity in recipient countries in order to ensure they can absorb and use new financial flows effectively.

Taking Care of the Social Dimension of the Transition

The Paris Agreement sent a clear message to investors around the world: high-carbon assets are not a good investment anymore. For the last decades, high-carbon and fossil fuel industries have been the centre of the economic development of many regions in Europe. Consequently, a phase-out should be orderly and require the intervention of policy makers.

An orderly transition requires starting with coal but it does not end there. Coal is the worst fossil fuel producing the highest percentage of carbon dioxide emissions and it must be phased out as quickly as possible for the world to stay within 2° C warming.

A just transition to a low-carbon economy requires political will and government support to redirect a region's economic development toward green jobs and opportunities.⁸⁸ The European Commission acknowledges that when it states that "(i)t is our shared responsibility to ensure that the transition is fair and based on solidarity,

⁸⁶ Clémentine d'Oultremont, "Financing the answer to climate change: challenging but feasible", Egmont Paper n°51, September 2011.

⁸⁷ European Commission, *op. cit.* 76.

⁸⁸ International Journal of Labour Research, "Climate change and Labour: the need for a "just transition", Vol. 2 No. 2, 2010

so that none are left behind. The Energy Union framework strategy contributes to this goal.”⁸⁹ Some analysts have already remarked on workers that “(s)ome of them, and their families, will feel that they are the losers of the low-carbon transition. Therefore, making the low-carbon transition socially fair is not only the right thing to do –it is also essential to gain the support of workers, trade unions, and the affected regions”⁹⁰. The transition to a low-carbon economy will reduce job opportunities in traditionally carbon-intensive industries. At the same time, the transition will create new green jobs in energy efficiency, renewables or electric mobility. Political attention needs to be given to this shift in employment opportunities to ensure workers are supported to seize the new opportunities offered to them by the transition. For that purpose, the recent “Skills Agenda for Europe” adopted by the European Commission is a move in the right direction but needs to be complemented by national and regional strategies.⁹¹

The way forward could be the establishment of a European Just Transition Fund⁹². The fund could be financed through ETS revenues and focus on the requalification of workers with a comprehensive approach to the transition. European funds, such as the European Structural and Investment Funds, also need to be revamped to focus more on where the challenges will emerge rather than focusing only on where challenges currently exist. The European regions that will require the most attention due to the impact of the low-carbon transition can be easily identified. It is of the utmost importance to start preparing the transition in these regions now by developing and financing economic deployment planning. This would help bring the European Union closer to its citizen by ensuring workers are not the losers of the transition.

⁸⁹ European Commission, *op. cit.* 64.

⁹⁰ Sabrina Schulz, “Coal: divestment and the just transition”, E3G Blog, 5 December 2016, available on <https://www.e3g.org/library/coal-divestment-and-the-just-transition>.

⁹¹ European Commission, “New skills agenda for Europe”, 7 June 2016, available on <http://ec.europa.eu/social/BlobServlet?docId=15621&langId=en>

⁹² Change Partnership, “Integrating the “Just transition” into Europe’s industrial, climate and energy framework”, December 2014, available on <http://www.changepartnership.org/wp-content/uploads/2015/03/Integrating-the-Just-Transition1.pdf>

CONCLUSION

As an opinion piece in *The Guardian* describes it: “By comparison to what it could have been, [the Paris Agreement] is a miracle. By comparison to what it should have been, it’s a disaster.”⁹³ Basically, in terms of international political governance, COP21 has been a real breakthrough. For the first time in history, a consensus was reached among the 197 UN parties to act all together against climate change. But in terms of global climate science, the result of the conference is far – very far – away to put the planet on a track that is safe for humanity.

The mix between the old top-down approach and a bottom-up approach was key to the success of Paris. The top-down system of the UN agreement only provides the general framework and the rhythm upon which each party will have to continuously strengthen and implement its national climate contributions. Although it may be regrettable that the agreement does not contain any legally binding obligations with respect to national contributions for emission reduction, adaptation and climate finance, it nevertheless obliges all parties to provide new and updated contributions every five years. This new soft approach is based on trust and will be successful as long as parties commit to ambitious targets and deliver them. In this regard, the updated transparency framework, which still needs to be fleshed out in the coming years, will be crucial. By forcing countries to regularly report and review the implementation of their contributions, it creates an instrument of public ‘naming and shaming’ that is hoped to be a strong driver of implementation. The most disappointing part of the agreement is climate finance for developing countries. The annual USD 100 billion goal by 2020 has been reiterated with a commitment to agree on a new collective financial target by 2025. But, given the huge estimated needs in adaptation and mitigation in the future, funding will need to be seriously scaled up if parties want to limit global warming to “well below 2°C”.

The Paris Agreement represents a good foundation upon which a safe and sustainable house can be built for everybody but all the construction remains to be done. As in the story of the “Three Little Pigs”, this house can be made out of straw, sticks or bricks. As builders, the parties must have the ambition to build a solid house of bricks on this reliable foundation. Otherwise the wind will certainly huff, puff and blow the straw and sticks down.

The EU has been instrumental in delivering this foundation. The bloc’s tactful diplomacy and leadership helped close gaps between developed and developing countries. However, the EU seems to be unable to bring Paris home. Despite many

⁹³ The Guardian, “Grand promises of Paris climate deal undermined by squalid retrenchments”, 12 December 2015, available on <https://www.theguardian.com/environment/georgemonbiot/2015/dec/12/paris-climate-deal-governments-fossil-fuels>.

occasions to revise its climate and energy policies, business as usual continues to apply. This cautious approach may be understandable given all the accumulated crises but the EU and its member states should seize the opportunity which the transition to a low-carbon economy represents for all EU citizens and act urgently as the climate impacts and other competitor countries won't wait.

If the European Union wants to maintain its climate credibility, keep its competitive advantage and wrap up all the economic, social and environmental benefits of the transition towards a low-/zero-carbon future, it needs to adapt its climate and energy policy to the new benchmark set by the Paris Agreement by:

- Ratifying the Paris Agreement as soon as possible;
- Revising upward the bloc's 2020, 2030 and 2050 targets in order to be in line with the Paris objective to limit global warming to between 'well-below 2°C' and 1.5 °C;
- Ensuring that the Paris ambition is reflected in the EU ETS and Effort Sharing Decision legislation through a suitable compromise between flexibility and regulatory stability;
- Addressing its investment gap in order to maintain its first mover advantage as many other competitor countries are already investing more and quicker;
- Further developing its external climate actions, particularly in terms of diplomacy, development aid and finance;
- Taking care of the social dimension of the transition to a low-carbon economy so that none in the outdated high-carbon and fossil fuel industries are left behind.

The coming years will tell whether the EU and the world are serious about the challenge of moving toward a low-carbon society. The window of opportunity to avoid dramatic climate consequences is closing extremely rapidly. A sustainable brick house for humanity is still possible but it requires turning away from fossil fuels now and increasing the ambition of national targets starting in 2018.

REFERENCES

- Bloomberg New Energy Finance, "Clean Energy defies fossil fuel price crash to attract record \$329bn global investment in 2015", 14 January 2016
- Bodle, Ralph, Lena Donat, and Matthias Duwe, The Paris Agreement: analysis, assessment and outlook, Background paper for the workshop "Beyond COP21: what does Paris mean for future climate policy?" January 2016
- Buchner, Barbara et al., Global Landscape of Climate Finance 2014, Climate Policy Initiative, 2014
- CAN Europe, "CAN Europe Position: the EU ETS reforms the Paris Deal requires", February 2016
- Carbon Brief, "Analysis: the final Paris climate deal", 12 December 2015
- Carbon Brief, "Explainer: what are 'intended nationally determined contributions'?", 31 March 2015
- Carbon Market Watch and 22 other organization, "Letter (to the Commission) to ensure that the 2030 ESD, the EU's largest climate instrument, is fit for purpose", April 2016
- Carbon Market Watch, *Flexibilities in the EU's 2030 Effort Sharing Decision – Reducing the costs of tackling 60% of the EU's climate problem*, Carbon Market Watch Policy Briefing, June 2015
- Carbon Market Watch, *The impact of the Paris Agreement on the EU's climate policies*, December 2015
- Change Partnership, Integrating the "Just transition" into Europe's industrial, climate and energy framework, December 2014
- Climate Action Tracker, "Climate pledges will bring 2.7°C of warming, potential for more action", 08 December 2015
- Climate Analytics, "Turning up the heat: how the diplomatic push for 1.5? unfolded in Paris", 17 December 2015
- Climate Analytics, "Paris agreement Ratification Tracker", 23 August 2016.
- Climate Analytics, "Projected Paris Agreement total ratification in 2016", June 2016.
- Climate Summit for Local Leaders, Paris City Hall Declaration. A decisive contribution to COP21, 04 December 2015
- ClimateHome, "A brief history of the 1.5C target", 10 December 2015
- ClimateHome, "Paris climate agreement set to become law this year", 18 August 2016
- ClimateHome, "Poland 'cannot afford' share of EU 2030 climate target", 21 July 2016
- Cook, Rosalind, "Make your mind up time for the EU on Paris", E3G blog, 17 March 2016
- Council, Presidency Conclusions of the Brussels European Council, 17271/1/08 REV 1, 11-12 December 2008
- EnergyPost, "EU deeply divided over 2030 climate and energy policy", 5 March 2014
- EUObserver, "EU carbon credits drop below €6", 29 January 2016

- EURONEWS, “Fossil fuel subsidies continue rising in EU despite pledges to phase them out”, 04 August 2015
- European Commission, “New skills agenda for Europe”, 7 June 2016
- European Commission, “One year of the Energy Union”, 25 February 2016
- European Commission, Communication: A Roadmap for moving to a competitive low carbon economy in 2050, COM/2011/0112 final, 8 March 2011
- European Commission, Communication: Accelerating Europe’s transition to a low-carbon economy, COM(2016) 500 final, 20 July 2016
- European Commission, Communication: Europe investing again, COM(2016) 359 final, 1 June 2016
- European Commission, Communication: The road from Paris: assessing the implications of the Paris Agreement, COM(2016) 110 final, 2 March 2016
- European Commission, European Union climate funding for developing countries in 2015, 2015
- European Commission, *Impact Assessment accompanying the Proposal for a Decision concerning the establishment of a market stability reserve*, SWD(2014)17, 15 July 2016
- European Commission, *Monitoring the application of European Union law. 2015 annual report*, COM(2016) 463 final, 15 July 2016
- European Commission, *Proposal for a Directive amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments*, COM/2015/0337 final, 15 July 2015
- European Commission, *Proposal for a Regulation on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 for a resilient Energy Union and to meet commitments under the Paris Agreement*, COM/2016/0482 final, 20 July 2016
- European Council, Conclusions of the European Council, EUCO 169/14, 23-24 October 2014
- European Parliamentary Research Service, European Parliament: facts and figures, Briefing, November 2014
- EUROSTAT, “Total greenhouse gas emissions trends and projections”, 21 June 2016
- Financial Times, “Fossil fuel groups warned not to ignore Paris accord”, 6 June 2016
- Forbes, “Inside The Paris Agreement: Why The World Agreed To ‘Balance’ Greenhouse Gas Emissions”, 3 February 2016
- G7, “Ise-Shima Leaders’ declaration”, 26-27 May 2016
- Grantham Research Institute on Climate Change and the Environment, “How will Brexit affects climate change policy?”, 30 June 2016
- Greenpeace, “Commission breaks pledge to bring EU targets in line with Paris climate deal”, 2 March 2016
- Flechet, Charlotte; “Climate finance: the EU’s best chance for action”, EU Observer, 2015
- Holmes, Ingrid, Future-proofing the EU Capital Markets Union, Briefing paper, October 2015
- International Journal of Labour Research, Climate change and Labour: the need for a “just transition”, Vol. 2 No. 2, 2010
- Linklaters, Set to revive: investing in Europe’s infrastructure, 2014

Liti Mbeva, Kennedy and Pieter Pauw, Self-Differentiation of Countries' Responsibilities. Addressing Climate Change through Intended Nationally Determined Contributions, German Development Institute Discussion paper 04/2016, February 2016

Mathiesen, Karl, "UK's GBP6bn climate finance pledge is welcome – but not its fair share", The Guardian, 2015

Metz, Bert, "Adjusting the EU's climate target to meet the Paris Agreement", 24 February 2016

Netherlands Environmental Assessment Agency, PBL Climate Pledge INDC tool

de Nevers, Michele, "What's Next for the UK on Climate Change after Brexit? Lemons to Lemonade.", 12 July 2016

New Security Beat, "What next? Climate adaptation after Paris", 8 April 2016

Obergassel, Wolfgang, et al., Phoenix from the Ashes – An Analysis of the Paris Agreement to the United Nations Framework Convention on Climate Change, Wuppertal, 26 January 2016

Organisation for Economic Co-operation and Development, Climate finance in 2013-2014 and the USD 100 billion goal: A report by the OECD in collaboration with Climate Policy Initiative, October 2015

d'Oultremont, Clémentine "Financing the answer to climate change: challenging but feasible", Egmont Paper n°51, September 2011

d'Oultremont, Clémentine and Quentin Genard, "Report: Boosting European innovation after COP21: a prerequisite for a low-carbon future", March 2016

Reinaud Julia, Clinckx Nicolas, Ronzeau Katia and Faraggi Paul, Scaling up innovation in the Energy Union to meet new climate, competitiveness and societal goals, Industrial Innovation for Competitiveness and Capgemini Consulting, 2016

RollingStone, "John Kerry on climate change: the fight of our time", 1 December 2015

Sandbag, Europe is on track for 30% emissions cuts by 2020, 27 November 2015

Schulz, Sabrina, "Coal: divestment and the just transition", E3G Blog, 5 December 2016

The Guardian, "Grand promises of Paris climate deal undermined by squalid retrenchments", 12 December 2015 Reiterate its commitment at the highest level.

The Guardian, World governments vow to end fossil fuel era at UN climate signing ceremony, 22 April 2016

United Nations Environment Program, "Renewable Energy Investments: Major Milestones Reached, New World Record Set", 24 March 2016

United Nations Framework Convention on Climate Change, Aggregate effect of the indented nationally determined contributions: an update. Synthesis by the Secretariat, 2 May 2016

United Nations Framework Convention on Climate Change, Climate Change: Impacts, vulnerabilities and adaptation in developing countries, 2007

United Nations Framework Convention on Climate Change, Information provided in accordance with paragraph 104 of decision 1/CP.21 related to entry into force of the Paris Agreement (Article 21), FCCC/CP/2015/10, 2015

von Hirschhausen Christian, Franziska Holz, Clemens Gerbaulet and Casimir Lorenz, "European energy sector: large investments required for sustainability and supply security", DIW Economic Bulletin 7.2014, July 2014

Yeo Sophie, "Explainer: When will European Union ratify Paris Agreement?", Carbon Brief, 23 June 2016.

WeMeanBusiness, "The Paris Agreement. What it means for business", 2016

Wolff, Guntram B. and Georg Zachmann, A European approach to climate finance ahead of the Paris summit, Bruegel, 2015

World Resources Institute, "Form AND Function: Why the Paris Agreement's Legal Form Is So Important", 16 December 2015

World Resources Institute, "INSIDER: Understanding the Paris Agreement's Long-term Goal to Limit Global Warming", 15 December 2015

World Resources Institute, "When adaptation is not enough: Paris Agreement recognises "loss and damages"", 24 December 2015

Egmont – Royal Institute for International Relations
Rue des Petits Carmes 15, 1000 Brussels, Belgium
www.egmontinstitute.be

Lay-out : punctilio.be

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the permission of the publishers.