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EU environmental policy and diplomacy from Copenhagen to Paris and beyond

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1. Introduction

The UN Climate Summit in Paris was a major success for EU climate diplomacy, far away from Copenhagen's blow to the EU's self-image as a global climate leader; stood-off by China in 2009, or the disappointing round of negotiations in Warsaw in 2013, when the EU wanted to offer more, but could not due to its internal divisions and crises. Divided by the economic and financial Euro crisis, and the recent major migration influx, the tendency to prioritize national over regional issues has further eroded the EU's credibility as a leader in climate negotiations.

The UN Climate Summit in Paris has been a resurrection of European credibility in international climate negotiations as the Union's negotiation strategy in the run-up to the summit and the alliance with developing countries, as well as with major emitters played a key role in making the agreement possible. The following discussion paper looks at recent developments in the European Union's internal and external environmental policy, from disaster at the UN Climate Summit in Copenhagen in 2009 to the success in Paris in 2015, highlighting how dividing interests have been overcome, so internal and external consensus and alliances could be built. It provides insights into the making of the Paris Agreement, the EU's role in building it and the issues that need to be discussed for its effective application. As the agreement itself is a piece of paper, everything will depend on its implementation efforts. Thus, the paper concludes with suggestions for the EU's environmental policy towards implementing the

agreement with a particular view until 2018 (when the first UNFCCC facilitative dialogue will present a first opportunity to assess collective efforts in achieving the long-term goal of the Paris Agreement) and the transition road to a sustainable carbon neutral economy in the long-run.

2. EU Environmental Policy from Copenhagen to Paris

The 20-20-20 Climate and Energy Package

The EU Environmental Policy has come a long way since the UN Climate Summit in Copenhagen in 2009 where the EU negotiated with rather unambitious environmental targets based upon the 20-20-20 Climate and Energy Package adopted in 2008.[1] The package included three major goals: Firstly, to reduce greenhouse gas (GHG) emissions by 20% until 2020 (compared to 1990 levels). Secondly, to raise the share of renewables in the energy mix to 20%. Thirdly, to improve energy efficiency by 20%.

The first goal of the 20-20-20- Package is reducing CO_2 emissions by 20% until 2020 (compared to 1990). The 20% reduction target was translated into a 21% reduction target between 2005 and 2020 for the EU's Emissions Trading Scheme (ETS) on the one hand, and a 10% reduction target for the sectors not covered by the ETS, on the other, over the same period.[2] Analysis by the Climate Action Tracker rated the 20% CO_2 emission reduction goal as inadequate, as it is only in-line with the very least stringent of categories. Partly due to the financial and economic crisis, the 2020 goal has already been met in 2012.[3]

1 The EU's Climate and Energy 20-20-20 Package was adopted by the European Council in March 2008, and by the European Parliament on 18 December 2008, respectively. The targets were reconfirmed again in 2010 as part of the EU's 10-year strategy "*EUROPE 2020 – A European strategy for smart, sustainable and inclusive growth*".

2 The reduction undertaken through the ETS is higher because it costs relatively less to reduce emissions from sectors covered by the system.

3 See Climate Action Tracker, available at: http://climateactiontracker.org/countries/EU.

Furthermore, the goal included a promise to scale up emission reduction commitments to 30% *"if other developed countries commit themselves to comparable emission reductions and economically more advanced developing countries contribute adequately to a global effort according to their responsibilities and respective capabilities"*[4]. This condition further cemented the negotiating firewall between developed and developing countries around the issue of Common but differentiated responsibilities (CBDR) that has stalled climate negotiations for decades.

CBDR is a principle of international environmental law and was enshrined in the United Nations Framework Convention on Climate Change (UNFCCC) since the creation of the UNFCCC at the Rio Earth Summit in 1992. It refers to the issue of equity within a goal of universality, balancing the need for all states to take responsibility for global environmental problems and, on the other hand, the need to recognize the wide differences in levels of economic development between states and the historic responsibilities for environmental degradation.

The second goal of the 20-20-20 Climate and Energy Package was integrating and raising the share of renewables in the energy mix up to 20%. The Climate Action Tracker projects that this target will be met by 2020. In 2009, under the Renewable Energy Directive, EU member countries have taken on binding national targets for raising the share of renewables in their energy consumption by 2020.[5] To reflect countries' different starting points for renewables production and ability to further increase it, these targets vary, from 10% in Malta to 49% in Sweden. They also include a specific goal of a 10% share of renewables in the transport sector.

4 See: Questions and answers on the Communication Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage, October 2010, available at http://ec.europa.eu/clima/policies/strategies/2020/faq_en.htm (updated 21 March 2016, accessed 25 March 2016).

5 Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources.

The third goal was to increase energy efficiency by 20% by 2020 which is roughly equivalent to turning off 400 power stations. As of 2010, energy efficiency had only increased by 9.8%. The EU would thus need to double its efforts in order to reach the target. Measures for increasing energy efficiency are set out in the Energy Efficiency Plan (2011) and include inter alia:

- Reduction of energy consumption in the construction sector (which accounts for nearly 40% of final energy consumption);
- Preparation of National Energy Efficiency Action Plans (NEEAPs) every three years;
- Reinforcement of the Eco-design Directive and stricter energy efficiency standards;
- Rollout of close to 200 million smart meters for electricity and 45 million for gas by 2020;
- Support for new, green equipment and infrastructures.

These measures are financed by instruments such as the Intelligent Energy Europe Programme and the European Energy Programme for Recovery.[6] Consequently, the EU passed on further environmental legislation and strategies (such as the the Low Carbon Economy Roadmap, the Energy Efficiency Plan and a White Paper on Transport) in the following years.

In October 2010, the European Commission reconfirmed that raising ambitions on CO_2 emission reduction targets was made dependent upon other countries' commitments. As these conditions had not yet been met, it proposed not to move to a 30% target. Long-term planning of GHG emissions by 80–95% below 1990 levels by 2050 was also still made conditional on necessary reductions to be collectively achieved by developed countries in line with the Intergovernmental Panel on Climate Change (IPCC).[7]

6 EU Energy Efficiency Plan 2011.

7 EU Commission Staff Working Paper: *Analysis of options beyond 20% GHG emission reductions: Member State results*, SWD(2012) 5, Brussels, 1 February 2012.

The EU proceeded, however, in translating the region-wide target into binding annual greenhouse gas emission (GHG) limits for each country under the Effort Sharing Decision in 2011. The Effort Sharing Decision sets national emission targets for 2020, expressed as percentage changes from 2005 levels, for sectors not part of the ETS (such as housing, agriculture, waste and transport). Targets are set according to a linear path, while allowing for some flexibility between time periods and member states, allowing for carbon trading through the Clean Development Mechanism (CDM) and Joint Implementation (JI). They differ according to national wealth – from a 20% cut for the richest countries to a maximum 20% increase for the least wealthy. The decision also lays down how the annual emission allocations (AEAs) in tonnes for each year from 2013 to 2020 are to be calculated. AEAs were approved by the EU Climate Change Committee in October 2012, adopted by the European Commission in March 2013 and adjusted in October 2013. For individual member states' GHG emission limits (see Table 1 in the Annex).[8]

In 2012, scenario analysis by the the European Commission suggested that a more integrated approach to environmental protection is needed as increasing the share of renewables in the energy mix requires reliable and intelligent infrastructure and smart grid connections. While the EU might be well on track to reaching its emission reduction targets, energy efficiency is still lagging behind.

The Juncker Comission

After the years of apathy described above, the Juncker Commission was a fresh start for the environmental policy of the EU. The new commission merged the Climate Action and Energy portfolios, as well as the Environment, Maritime and Fisheries portfolios. This choice was controversially discussed among environmental observers and non-

8 Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020.

governmental organisations who wrote an open letter to the Commission, highlighting their concern about the new Commission structure and the choice of Commissioners which would *"all reveal a serious downgrading of environment and a roll back of EU commitments to sustainable development, resource efficiency, air quality, biodiversity protection and climate action."*[9] Magda Stoczkiewicz, Director of Friends of the Earth Europe, pointed out that *"while climate and energy are inextricably inter-related, there is a real danger that by merging these two departments climate concerns will be side-lined by energy issues."*[10] The Commissioner chosen to lead the work for Energy and Climate Action was the centre-right Spanish politician Miguel Arias Cañete. Critics questioned his commitment to climate action given his prior involvement with and shares in the oil company Petrolifera Ducar.

The 2030 EU Framework for Climate and Energy Policies

With the Juncker Commission, the EU raised its ambition to a 40% GHG reduction by 2030 under the newly adopted EU Framework for Climate and Energy Policies. Under the merged Climate Action and Energy portfolio, environmental targets were also incorporated into the objectives of the European Union's Energy Policy which combines five closely related and mutually reinforcing dimensions:

1) ***Energy and foreign policy unity*** by removing technical or regulatory barriers in order to create a fully-integrated internal energy market, connecting networks and pooling pool resources, leading to lower prices and increased competition, as well as a better negotiating position towards non-EU countries.
2) ***Less dependence on energy imports and supply security*** by diversifying energy sources (increasing the share of renewables and lowering imports from the East).

9 See Friends of the Earth Europe (2014): *New Commission sidelining environment*, Friends of the Earth Europe, 11 September 2014, available at http://www.foeeurope.org/new-Commission-judged-action-100914.
10 Ibid.

3) ***Energy efficiency:*** reduce overall energy use by at least 27% by 2030, as set in the EU 2030 strategy, also contributing to diminishing import dependence.

4) ***Lower GHG emissions by at least 40% by 2030***, as set in the EU 2030 strategy, by reforming the EU Emissions Trading System, (ETS) pushing for the Paris Agreement and its implementation, and encouraging private investment in new infrastructure and technologies.

   The European Council decided to pass on 43% of the emission reduction effort to the sectors already covered by the carbon market and 30% to other sectors such as agriculture and transport. A reserve of 2% of the carbon quotas was also to be set aside for the member states whose GDP is below 60% of the EU average.[11]

5) Become a global leader in renewable energies and lead the fight against global warming by investing in ***climate research and innovation,*** supported by Private Public Partnerships (PPPs).

The EU is well on track to achieve its target to reduce region-wide emissions by "at least" 40% by 2030. For individual Member States' GHG emission limits, see Table 1 in the Annex. However, the target itself is rated only medium in terms of ambition by the Climate Action Tracker.[12] Some observers argue a reduction target of 55% would be a more equitable share in regard to historic responsibilities and capacity.

The process of agreeing on a target demonstrated the internal division within the EU, as particularly Eastern European states wanted to make the overall goals less ambitious, non-binding and – yet again – dependent upon other actors' commitments. Several other member states and non-state actors (notably the UK, and the Dutch consultancy Ecofys) have argued that a higher target of 50% would be required to demonstrate fairness from Europe (notably conditional on other ambitious climate actions by

11 Carbon Market Watch (2014): *Analysis of Europe's 2030 Climate Ambition*, 31 October 2014, available at http://carbonmarketwatch.org/wp-content/uploads/2014/10/2030-Council-Conclusions-Analysis_final.pdf.

12 See Climate Action Tracker, available at http://climateactiontracker.org/countries/EU#Footnotes.

countries such as China). Reaching an agreement on the 40% target was only possible as it was horse-traded against passing a future (Post-2030) EU climate and energy framework by unanimous vote. This will make further ambitions much harder to achieve. For individual member states' positions on the EU Framework for Climate and Energy Policies see Table 2 in the Annex.

The second binding goal set in the 2030 EU Framework for Climate and Energy Policies is increasing the share of renewables in total energy consumption to at least 27%. The framework supports progress made towards the transformation of the energy system e.g. by extending production capacities and grid connection; securing an affordable and secure energy supply, while at the same time benefitting health and environment and creating opportunities for growth and employment. The plan will require investments of an estimated EUR 38 billion per year within the period from 2011 to 2030 with more than half of it being necessary in the construction and service sector. The majority of these investments shall be covered by savings in fossil fuel imports, reducing import dependency.[13] According to the Climate Action Tracker, the EU is well on track to achieve its goal in regard to increasing the share of renewables in the energy mix.[14]

The third goal, energy efficiency, targets a 27% decrease in primary energy consumption with a review towards a 30% target being foreseen in 2020. In July 2014, the EU was expected to achieve energy savings of 18%-19% by 2020, missing the 20% target by 1%-2%, even though energy efficiency has often been described as the low hanging fruits of the energy transition.[15] Different to the first two targets, the energy efficiency target is not legally binding.

13 See European Commission (2014): *A policy framework for climate and energy in the period from 2020 to 2030*, Communication from the Commission to the european parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Brussels, 22 January 2014.

14 See Climate Action Tracker.

15 The Commission had originally proposed to reduce energy use by 30%, but the European Council only endorsed a target of 27%.

The goals set in the 2030 EU Framework for Climate and Energy Policies are implemented through a wide variety of instruments and political directives laid down in the Roadmap for Industry and the Energy Roadmap 2050, the Effort Sharing and the Renewable Energy Directives and new indicators for competition, supply diversification and the integration of member countries' electricity networks. Furthermore, there is a wide range of other EU wide regulations influencing GHG emissions such as binding emission targets for new car and van fleets, a new regulation on fluorinated gases, and further implementation of the Ecodesign legislation for boilers and water heaters (EEA, 2014). Overall, and even though plans for a new, more coordinated and coherent governance system (that allows for a more long-term planning and thus, investment security) are needed to make European Climate Policy more efficient, the set of EU policies is still one of the most comprehensive climate packages on a global level.

Last but not least, the Emissions Trading Scheme (ETS) is an important – but, despite several reforms still malfunctioning – instrument of European climate policy. In May 2015, the European Council agreed on another mayor ETS reform by introducing the Market Stability Reserve (MSR) which aims at adjusting the surplus supply of emission allowances on the market and, thus, their price. This new instrument shall become operational in January 2019, so that 900 million allowances taken away from the market in 2013 can be directly transferred to the reserve instead of flooding the market and contributing to further decrease in the prices.[16]

In 2015, the European Environment Agency (EEA) sees the EU well on track to meeting and overachieving its 20% GHG emission reduction target as defined in the second commitment period of the Kyoto Protocol (2013-2020) as region-wide GHG emissions decreased by 23% between 1990 and 2014.[17] The Union is heading for a 24% reduction in 2020 on track to

16 See European Parliament and Council of Europe (2015): Decision 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme, 6 October 2015.

17 In the same period the EU economy grew by 46%. Emission reductions are averaged over the respective time period as defined by the Quantified Emission Limitation and Reduction Objective (QELRO) in the Second Commitment Period of the Kyoto Protocol.

significantly over-achieving its Kyoto second commitment period target. However, current policies are projected to reduce domestic emissions by 23–35% below 1990 levels and hence do not -yet -put the EU on promising a trajectory towards meeting either its 2030 goal of a a 40% reduction (as ratified by the Council with the Doha Amendment in July 2015) or 2050 targets.[18]

Building external consensus and ambition

The European External Action Service (EEAS), established by the Lisbon Treaty in 2009, was one crucial element for bringing more consistency to the EU's relations with third countries and regions. The effect was already visible two years later during the Durban Summit, where the EU did not only speak with a unified voice but was also central to the "Durban alliance" of least developed countries (LDCs) and small island developing states (SIDS) threatened by rising sea levels, as well as the Cartagena group of progressive countries. Together, the bloc is thought to have restricted the less climate-friendly stances from China or India. But the EU's global stock has declined a bit since then, as its politicians have appeared torn between the desire to help global decarbonisation, while balancing oppositions to more climate aid during a time of austerity. During the disappointing round of negotiations in Warsaw in 2013, the EU wanted to offer more, but could not due to its internal division and crisis. In the meantime, other countries (such as Costa Rica and the SIDS) became more ambitious in regard to climate mitigation actions and more flexible and creative in regard to international diplomacy (e.g. Brazil). At the Conference of the Parties (COP) to the UNFCCC in Lima in 2014, the EU was not able to push its goal of a more transparent and competitive ongoing evaluation of Intended Nationally Determined Contributions (INDCs). Instead, targets were reviewed only after all pledges have been summited.

18 See European Environment Agency (2015): *Trends and projections in Europe 2015 – Tracking progress towards Europe's climate and energy targets, European Environment Agency (EEA)*, Report No 4/2015, Luxembourg, 2015, available at http://www.eea.europa.eu/publications/trends-and-projections-in-europe-2015 and Climate Action Tracker, available at http://climateactiontracker.org/countries/EU#Footnotes.

In the same year, a new phase of the EU's flagship climate initiative, the Global Climate Change Alliance (GCCA, later GCCA+) started as part of the European Commission's new Multiannual Financial Framework (2014-2020). Established by the EU in 2007 to strengthen dialogue and cooperation with developing countries, in particular least developed countries (LDCs) and small island developing States (SIDS), the GCCA+ supports 51 technical and financial support programmes around the world with a budget of more than EUR 300 million. It also serves as a platform for dialogue and exchange of experience between the EU and developing countries, focusing on climate policy and bringing renewed attention to the issue of international climate finance. The results continue to feed into negotiations under the United Nations Framework Convention on Climate Change (UNFCCC).[19]

3. The role of the EU in the run-up to COP21

COP21 was a major success for EU climate diplomacy, far away from Copenhagen's blow to the EU's self-image as a global climate leader. Building internal consensus and speaking with a unified voice was achieved by shaping and revitalizing the EU's internal climate action by passing the 2030 EU Framework for Climate and Energy Policies in October 2014. One year before the UN summit in Lima, the European Union had already agreed to a unified negotiating position as member states had agreed to reduce CO_2 emissions by 'at least' 40% by 2030 compared to 1990 levels (and did not make further commitments dependent on those of others as it was the case at COP15 in Copenhagen). The harmonized negotiation position clearly strengthened the voices of member states, who vote individually during negotiations of the United Nations Framework Convention on Climate Change (UNFCCC). The harmonized negotiation position clearly strengthened the voice of member states, who vote individually during UNFCCC negotiations. Due to the early build-up of internal consensus, the EU was not as divided as in Copenhagen and could clearly advance regional interests in unity.

19 See GCCA, available at http://www.gcca.eu/about-the-gcca/what-is-the-gcca.

On 19 January 2015, EU Ministers endorsed a major diplomatic plan to push for an ambitious deal on global warming with over 90,000 diplomats in over 3,000 missions as well as A-list celebrities lobbying to make climate action a strategic priority at G7, G20 and Major Economies Forum summits and to win new pledges for ambitious greenhouse gas cuts (INDCs), mobilising maximum pressure on key countries in international climate negotiations, while managing climate finance expectations at the same time.[20]

The EU's more detailed Paris Protocol, published on 25 February 2015, states that COP21 should set a long-term 2050 climate goal, as part of a legally binding climate agreement applicable to all countries. It proposes a 60% cut in global emissions by 2050 against a 2010 baseline. This is consistent with the latest science, which says global emissions should be between 40 and 70% below 2010 levels in 2050, reaching net zero between 2080 and 2100, if global warming is to be limited to two degrees above pre-industrial temperatures.[21]

On 6 March 2015, the EU was the first major economy to submit a region-wide INDC of *"at least 40%"* emissions reductions until 2030 to the UNFCCC, providing another boost to the Paris momentum.[22] Compared to other INDC submissions, such as Mexico's (which was the first major developing country to submit an INDC) or Gambia (whose ambitious targets were a surprise during negotiations), the EU target is rated only *medium* by the Climate Action Tracker[23]. Non-governmental observers such as the WWF has described it as *"thin on details and low on ambition"*. [24] This is partly due to preferences of Eastern European

20 Neslen, Arthur (2015): *EU to launch diplomatic offensive ahead of Paris climate talks*, euractiv, 20. Jan. 2015 (updated: 23. Jan. 2015, accessed 23 March 2016), available at https://www.euractiv.com/section/climate-environment/news/eu-to-launch-diplomatic-offensive-ahead-of-paris-climate-talks/.

21 Ibid.

22 The EU is the only regional economic community (REC) that is recognized as Party to the UNFCCC.

23 See Climate Action Tracker.

24 See World Wildlife Fund (2015): *The EU's climate commitment is thin on details and ambition*, WWF, 6 March 2015, available at http://www.wwf.org.uk/about_wwf/press_centre/index.cfm?7502.

countries that had advocated for lower targets upfront.[25] Nevertheless, the proposed INDC target is still twice as high as the target for 2020, and – differently to the period before 2020 – will not make use of international credits as it refers to domestic emission reductions only. Moreover, the INDC of the EU is broadly consistent with the 2050 target, which reinforces the EU's intent to reduce its emissions by 80–95% by 2050 compared to 1990, and hopefully, increased policy coherence.[26] Furthermore, the current INDC does not include emissions and removals from Land Use, Land-Use Change and Forestry (LULUCF) – something that had been initially proposed by the EU but which was largely criticized as it would reduce the EU's overall climate ambition by offsetting carbon absorbed by forests could against reduced efforts in other parts of the economy, de facto backsliding in overall ambition. Inclusion of LULUCF has been left open for the next round of submissions.

Despite the critique, the target set by the EU was convincing enough to mobilize the support for other nations, as they were underpinned by substantial pledges to the Green Climate Fund (GCF) particularly by Germany, France and the UK. This was topped up with the European pledge to allocate €475 million to support climate action, resilience building and the environment in ACP countries, as agreed upon in the 11th European Development Fund Intra-ACP Strategy, running from 2014 to 2020.[27] These pledges reinforced the credibility of the EU ambitions, as emission reduction targets were substantially higher than at COP15 in Copenhagen (increase from 20 to 30 percent) and financial aid more tangible than at COP19 in Warsaw. For further information, see chapter "Climate finance and the Green Climate Fund" on page 18.

25 See Table 2 in the Annex for individual countries positions to the 2030 Environmental Package.

26 See Climate Action Tracker.

27 See Intra-ACP Cooperation – 11th European Development Fund, *Strategy Paper 2014-2020*, establishing the EU's position for the UN climate change conference in Paris, available at: https://ec.europa.eu/europeaid/sites/devco/files/intra-acp-strategy-11-edf-2014-2020_en.pdf.

Intended Nationally Determined Contributions (INDCs)

Compared to the Kyoto Protocol INDCs include the following additional rules:

- A single 1990 base-year for all parties and gases;
- No recognition of surplus Assigned Amount Units (AAUs) from the Kyoto Protocol's first commitment period;
- Legislation foresees the need to include international maritime emissions (which together account for 3% of global emissions).
- No inclusion of emissions and removals from LULUCF

Source: Climate Action Tracker

On 18 September 2015, the EU Environment Council adopted conclusions for the EU's position for the UN climate change conference in Paris, calling for a *"durable, legally binding, agreement, preferably a protocol"*.[28] Ministers agreed that the EU would aim to reach an ambitious and dynamic agreement, with the objective of keeping global warming below 2°C. To achieve this objective, the Council stressed that global greenhouse gas emissions need to peak by 2020 at the latest, be reduced by at least 50% by 2050 compared to 1990 and be near zero or below by 2100. Regarding CBDR, the agreement should include *"mitigation commitments for all Parties, to be updated every five years"*.[29] Concerned about the slow progress of the negotiations, the Council proposed early ministerial engagement before COP 21 as a way forward. Five days later, the Committee on the Environment, Public Health and Food Safety (ENVI) adopted a report, calling for a five-year review and reinforcement cycle, as well as a a roadmap for scaling up EU climate finance and earmarking revenues from emission allowances and from future taxes on aviation and shipping emissions for that purpose.[30]

28 See European Parliamentary Research Service (2015): *EU approach to the Paris climate conference*, October 12, 2015, available at: http://epthinktank.eu/.

29 Ibid.

30 Ibid.

Building on these "stick and carrot" tactics of financial promises and fairly (but not too) ambitious targets, the EU member states – together with a group of Small lsland Developing States (SIDS) through the Alliance of Small Island States (AOSIS) – played a leading role in driving forward the ***high ambition coalition*** in the run-up to and during the Paris negotiations. The group was joined by the African, Caribbean and Pacific (ACP) Group of States, and soon after by other countries, including deal breakers such as Brazil, Canada, Japan and the US. The EU had been preparing this coalition since the beginning of the year, with outreach efforts going to the Caribbean, the Pacific, Latin American (AILAC) countries, and Morocco. This was a very smart move, indeed, reminiscent of the strategic alignment of the EU with ACP countries during the UN Climate Summit in Durban in 2011, and other UN summits, when the EU played a key role as a "leadiator" in climate change negotiations: Being a moral leader by example, while mediating between others in order to build a bridge between developing and developed countries.[31] Danish foreign minister Martin Lidegaard saw the EU in a *"unique position"* for facilitating this bridge-building which would be *"a precondition for success in Paris"* as the divide over CBDR has stalled UN climate talks for decades.[32]

The high ambition coalition caused a big media show. This put the necessary pressure on China and lndia, weakening their role within the G77 and isolated hardliner countries like Saudi Arabia and South Africa, particularly in regard to climate finance and time-bound commitments. Doing so, the coalition was successful in blurring the lines between rich and poor countries and in rallying broad support on the key elements of an ambitious deal. As of the 8th December 2015, three days before the end of the Paris round of negotiations, the high ambition coalition represented more than 100 countries and the majority of parties at the UN climate talks,

31 See Bäckstrand, Karin; Elgström, Ole (2013): *The EU's role in climate change negotiations: from leader to 'leadiator'*, Journal of European Public Policy, Volume 20, Issue 10, 2013, pages 1369-1386.

32 Neslen, Arthur (2015): *EU to launch diplomatic offensive ahead of Paris climate talk*s, the Guardian, Brussels, 20 January 2015, available at:http://www.theguardian.com/environment/2015/jan/20/eu-to-launch-diplomatic-offensive-ahead-paris-climate-talks.

including both, developed and developing countries, big and small, rich and poor.[33]

The ***key negotiating goals of the high ambition coalition*** were based upon the agreement signed by its initiators, the EU and the ACP group which states that the Paris Agreement must be *"legally binding, inclusive, fair, ambitious, durable and dynamic"* and that *"it must set out a clear and operational long-term goal which is in line with science"*. They also agreed on the establishment of a *"review mechanism for countries to come together every five years to consider progress made and to enhance collective and individual efforts as appropriate"*.[34] Overall, the agreement broadly summarises the EU's negotiation position and became a major part of the Paris Agreement.

4. The Paris Agreement – the beginning of a new era of climate diplomacy?

The Paris Agreement was largely received very positively, even by large international NGOS such as Greenpeace and WWF. It was coined a *"revolution"* (Francois Hollande), a *"turning point"* (Barack Obama) and a *"diplomatic triumph"* (Jeffrey Sachs) in longstanding climate negotiations. The mere fact alone that after 21 years of negotiations, 195 countries signed an international climate change agreement is indeed an extraordinary accomplishment. For the first time in history, all nations, including the largest emitters, have crafted a universal and (partially) legally binding agreement on climate change. The ambition of the agreement is to keep global warming well below 2°C and declaring an effort to cap it at 1.5°C, while allowing for some flexibility through carbon trading between nations.

33 Miguel Arias Cañete EU Commissioner for Climate Action and Energy, in: European Union (2015): *EU and 79 African, Caribbean and Pacific countries join forces for ambitious global climate deal*, EU Press Release, Paris, 8 December 2015, available at: http://europa.eu/rapid/press-release_IP-15-6273_en.htm.

34 Ibid.

Furthermore, the conference organisation and the excellent leadership of the COP21 president, the French environmental minister Laurent Fabus, were praised from all sides. Even though security was particularly high after the terrorist attacks in Paris in November 2016, the conference organisation and negotiations went largely smoothly – as compared to Copenhagen where protests and chaos broke out, with the venue finally being shut to outsiders during the last days of negotiations, and where the upfront leaking of the Copenhagen Accord sowed distrust among negotiators.

Paris was also a Master class in international negotiation and diplomacy: The diplomatic tit-for-tat included major trade-offs between developing and developed countries such as trading the long-term target of greenhouse gas neutrality in the second half of the century against the inclusion of the goal to cap global warming at 1.5°C.[35] While the EU inititially supported a target of a maximum global average temperature rise of 2°C, it later agreed upon the negotiation target of the ACP group of 1.5°C which marks the difference between drowning and surviving in many SIDS. The 1.5°C target was included in the non-binding part of the Paris Agreement, dropped against the inclusion of GHG emission neutrality, a provision that OPEC countries had fiercely resisted.[36] Another diplomatic manouver was to make the document an "agreement" as agreements are binding, yet not ratifiable, and thus, do not need to pass through the US Senate.

The Paris Agreement succeeded in blurring the division between rich and poor countries, polluters and sufferers, introducing a new era of climate diplomacy where global collective action meets national interests in a pledge-and-review mechanism and giving hope for life after

35 Greenhouse gas (GHG) emissions neutrality refers to net zero anthropogenic GHG emissions from all sectors, achieved by substantial reductions as well as removals (such as enhanced sequestration in the land sector) or negative emissions (like future technologies for carbon capture and sequestration). Differently to carbon neutrality, GHG neutrality covers all greenhouse gas emissions, which means emissions from carbon dioxide as well as other greenhouse gases like methane.

36 See European Commission (2015): *COP21 – EU-led ambition coalition growing stronger*, European Commission News, 10 December 2015, available at http://ec.europa.eu/news/2015/11/20151125_en.htm.

multilateralism. The forward-looking interpretation of *Common but Differentiated Responsibilities and Respective Capabilities* (CBDR–RC, before CBDR) through a dynamic pledge-and-review system, aimed at ramping up ambitions via a five year review and scaling-up mechanism (which allowed negotiators to circumvent the long-standing "firewall" between developed and developing countries), mixing a top-down with a bottom-up approach. Thus, the agreement may itself be fair enough in terms of climate justice *in case* climate finance and emission reduction commitments are implemented as projected. Until now, climate finance pledges have been promising and nations have seriously increased their emission eduction targets in the run-up to COP21.

Climate finance and the Green Climate Fund

The target of USD 100 billion for the Green Climate Fund by 2020 had already been defined in 2010 during COP16 in Cancun in 2010, Mexico, when nations agreed to contribute 30 billion dollars each year up until 2012, rising to 100 billion US dollars as from 2020. Right after COP19 in Warsaw in 2013, the Fund's Independent Secretariat in Songdo, South Korea, began its work. An important milestone was the first replenishment of the GCF where it received commitments of just over 10 million US dollars in 2014. Since then the GCF Board has been working on all necessary regulations, modalities and funding criteria at its regular meetings. Of the money channeled through the GCF, half will go to funding adaptation measures in developing countries (such as better flood defences, drought monitoring schemes, and water management systems) out of which at least half will go to countries that are most at risk from the impacts of climate change. The other half of the GCF's money will go towards helping developing countries curb their emissions, by decarbonising their energy and transport infrastructure (mitigation).

In the run-up to COP21, nations have significantly increased their pledges to the GCF, first and foremost the fund's biggest contributors such as the US (USD 3 million), Japan (USD 1.5 million), UK (USD 1.2 million),

France (USD 1 million) and Germany (USD 1 million).[37] GCF funding was topped up with the European pledge to allocate €475 million for climate action, resilience building and the environment in ACP countries until 2020.[38] In 2014 alone, the EU earmarked EUR 14.5 billion for climate action in developing countries (ca. 20% of overall development funding), pledging ambitions to do even more in the years to come.[39] The objective is for all pledges to be converted into contribution agreements within one year from the time at which they are made.

Another public sector climate funding initiative that was announced during COP21 was ***Mission Innovation*** – a coalition of 20 governments, representing 75 percent of the world's CO_2 emissions from electricity and 80 percent of the world's investment in clean energy research and development, including some of the largest largest oil and gas producers as well as many countries with a high penetration of renewables in their power sectors.[40] Each country pledged that it will *"seek to double its governmental and/or state-directed clean energy research and development investment over five years",* and that *"[n]ew investments will be focused on transformational clean energy technology innovations that can be scaled to varying economic and energy market conditions that exist in participating countries and in the broader world".*[41] Overall, pledges amount to a doubling of funds for clean energy research totalling USD 20 billion over five years. For comparison: As of February 2016, the Green Climate Fund

37 See GCF Pledge Tracker, available at: http://www.greenclimate.fund/contributions/pledge-tracker.

38 See European Commission: 11th European Development Fund, *Intra-ACP Strategy Paper 2014-2020*, available at: https://ec.europa.eu/europeaid/sites/devco/files/intra-acp-strategy-11-edf-2014-2020_en.pdf.

39 Miguel Arias Cañete, Speech on the follow-up to COP21 at the public session of the Environment Council, Brussels, 4 March 2016, available at http://europa.eu/rapid/press-release_SPEECH-16-586_fr.htm.

40 The 20 Mission Innovation countries include: Australia, Brazil, Canada, Chile, China, Denmark, France, Germany, India, Indonesia, Italy, Japan, Mexico, Norway, Saudi Arabia, South Korea, Sweden, United Arab Emirates, United Kingdom, United States. For further information, see http://mission-innovation.net.

41 Mission Innovation (2015): *Joint Launch Statement*, Paris, 30 November 2015, available at http://www.mission-innovation.net/wp-content/uploads/2015/11/Mission-Innovation-Joint-Launch-Statement.pdf.

stood at USD 10.2 billion – a third of the amount promised by 2012 in Cancun.[42]

This scale-up in public climate funding was equally matched by the private sector, as pledged by 20 wealthy private investors, including Bill Gates and Mark Zuckerberg, as part of the ***Breakthrough Energy Coalition.*** The coalition is expected to raise several billion dollars to fund start-ups within the sector. Acknowledging the fact that climate change poses immense potential risks to businesses, investors and markets, the aim of the Breakthrough Energy Coalition is to *"form a network of private capital committed to building a structure that will allow informed decisions to help accelerate the change to the advanced energy future our planet needs".* [43]

Its vision for doing so may be summarized by investing early, broadly, boldly, wisely and together. It will be implemented by an industry-led disclosure task force as part of the Financial Stability Board (FSB) and under the chairmanship of Michael Bloomberg, the ***Task Force on Climate-related Financial Disclosures*** *(TCFD)*. This Task Force will *"develop voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to lenders, insurers, investors and other stakeholders"* [44], providing its first report by the end of the year.

Loss and Damage

Another major breakthrough for developing countries was the recognition of loss and damage, separately from adaptation, as well as the inclusion of Reducing Emissions from Deforestation and Forest Degradation (REDD) and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+). However, the Paris Agreement could have been much stronger in regard to safeguarding equity: Even though it acknowledges loss and damage, there

42 See GCF Pledge Tracker, available at: http://www.greenclimate.fund/contributions/pledge-tracker.

43 Breakthrough Energy Coalition, see http://www.breakthroughenergycoalition.com/en/index.html.

44 Ibid.

is no legitimate legal claim or liability for compensation. In the particular case of forests, their support to human adaptation has not been acknowledged and result-based adaptation funding and its effective channeling to smallholder farmers is still an unsolved issue. Nevertheless, the agreement is a major success for the African Group of Negotiators and the ACP Group as it reaffirms the view that climate change is the single greatest challenge to the sustainable livelihood, security and well-being of ACP citizens, posing significant immediate and long-term risks to their sustainable development efforts, and even mentions Africa's particular vulnerability to climate change and *"the need to promote universal access to sustainable energy in developing countries, in particular in Africa"*.[45]

Still a long way to go

Despite all these successes, it is still questionable whether the deal will make *"our children and grandchildren [...] see that we did our duty*" as David Cameron promised, as the agreement itself is a piece of paper and ***everything depends on its implementation efforts***: 187 nations pledged their INDCs to the global emission reduction targets together before the Paris Conference, together with plans for comprehensive Nationally Appropriate Mitigation Actions (NAMAs). Critics like Bjorn Lomborg, Director of the Copenhagen Consensus Center, and MIT Scientist Joan Sterman consider the deal to be a *lemon* because it will make little change to actual global temperature rises. In an open letter some of the world's top climate scientists (including i.a. Prof. Peter Wadhams and Prof. Stephen Salter, of the Universities of Cambridge and Edinburgh) called the agreement a *false hope* that could ultimately prove to be counter-productive in the battle to curb global warming as actions agreed are far too weak to get anywhere close to the targets and voluntary carbon markets may create

45 Herrero Cangas, A., Knaepen, H. (2015): *COP21: A historic, but still fragile milestone for climate change*. ECDPM Talking Points Blog, 18 December 2015, available at: http://ecdpm.org/talking-points/cop21-historic-but-fragile-milestone-climate-change/.

the wrong incentives for developed countries to outsource emissions and do less at home.[46]

The Climate Action Tracker projects that even if the targets were fully implemented, global warming would still be inbetween 2.7-4.0°C (and not 6°C) in 2100 as compared to pre-industrial levels. Lomborg's evaluation of the agreement in the Global Policy Journal suggests that even in case all of the agreement's promises on cutting carbon-dioxide emissions are implemented within the time period 2016-2030, it may reduce global temperature rise by just 0.05°C by the year 2100 and by 0.17°C if promised emission cuts continue unabated throughout the century. MIT Scientist Joan Sterman comes to similar conclusions. The UN projects that if current INDCs are implemented, the treaty will only achieve less than 1% of the emission cuts needed to meet target temperatures. Thus, human kind is still far away from stopping dangerous global climate change, but the most nightmarish scenarios will now probably be avoided. [47]

The deal built a bridge between today's policies and climate-neutrality before the end of the century, by setting the long-term goals of 2°C – with an effort to reach 1.5°C – and acknowledging the need for global emissions to peak as soon as possible (recognising that this will take longer for developing countries) and to undertake rapid reductions thereafter. However, for reaching the long-term target of 2°C, responding emission reduction pathways need to be calculated by ***setting a goal of net zero emissions*** with carbon emissions dropping to net zero between 2060 and 2075, and a decline of total GHG emissions to net zero between 2080 and 2090. If we want to limit global warming to below 1.5°C, we will need to

46 See Bawden, Tom (2015): COP21*: Paris deal far too weak to prevent devastating climate change, academics warn*, The Independent, Friday 8 January 2016, available at http://www.independent.co.uk/environment/climate-change/cop21-paris-deal-far-too-weak-to-prevent-devastating-climate-change-academics-warn-a6803096.html.

47 See Climate Action Tracker, available at http://climateactiontracker.org/ indcs.html; *UNEP Emissions Gap Synthesis Report 2015*, available at http://uneplive.unep.org/media/docs/theme/13/EGR_2015_301115_lores.pdf; Bjorn Lomborg (2015): *Pre-Judging Paris*, Project Syndicate, 17 November 2015, available at: https://www.project-syndicate.org/commentary/paris-climate-change-agreement-too-costly-by-bj-rn-lomborg-2015-11.

reduce carbon dioxide emissions to net zero between 2045 and 2050 with respective GHG emissions will need to decline to net zero between 2060 and 2080.[48]

In this regard, it is unfortunate that setting a goal for reaching zero emissions was eliminated from the Paris Agreement in exchange for the inclusion of the 1.5°C target. Instead, a more vague formulation of balancing greenhouse gas emission and absorption by the second half of the century has been incorporated. Also, the assessment and review mechanism for monitoring the commitments (which was a major priority of the German and the US delegation) is only going to start in 2018 as the exact design of the mechanism still needs to be worked out. With national commitments only being ramped up in 2020, this leaves another five years to accumulate greenhouse gases in the *"atmospheric bathtub",* leaving 99% of the problem for future leaders.

Last but not least, ***global climate finance*** for developing countries is still inadequate, even though nations significantly increased their pledges before the Paris summit. Critics from small and developing countries and non-governmental observers have been disappointed that the goal of at least $100 billion a year in contributions to the Green Climate Fund, provided mainly by rich countries, is mentioned only in the preamble of the Paris Agreement, which is not legally binding. The GCF had originally aimed to get countries to pledge $15 billion in seed funding by the end of 2015, but had to lower its target to USD 10 billion in September 2015. As of February 2016, the Green Climate Fund stood at only USD 10.2 billion in pledges from 42 state governments. Critics maintain that even if the pledged sum was reached it would not be enough to help developing countries build up power systems based on renewable energy sources rather than coal and oil quickly or cheaply enough. They also fear that climate funds are subtracted and re-labeled from other sources (double-counting) and that they will be mostly provided in the form of loans. Regarding

48 See Levin, Kelly; Song, Jiawei and Morgan, Jennifer (2015): *COP21 Q&A: What Is GHG Emissions Neutrality in the Context of the Paris Agreement?*, World Ressource Institute, December 11, 2015, available at http://www.wri.org /blog/2015/12/cop21-qa-what-ghg-emissions-neutrality-context-paris-agreement.

increased climate finance beyond 2020, no commitment has been made in the Paris Agreement.

5. Implementing the Paris Agreement

The immediate next steps after Paris are the signature and ratification of the Paris Agreement which will be opened during Earth Day on 22 April 2016 on the invitation of UN Secretary-General Ban-Ki Moon. It will enter into force once at least 55 Parties representing at least 55% of global emissions have ratified it. The first litmus test will be the upcoming UNFCCC meetings in Bonn in May 2016, when technical experts meet to further work out and interpret the details for implementation.

Regarding the ramping up of INDCs, the devil is – yet again – in the detail as many developing countries have made their INDC conditional on developed countries support. Compliance will depend on the design of the review mechanisms to be developed until 2018 when a facilitative dialogue will present a first opportunity to assess collective efforts in achieving the long-term goal. From then on, nations will have two more years to ramp up their targets until the first five-year review in 2020, hoping for international pressure to mobilize further collective action. Governments now have to live up to and exceed their promises, translating the pledges into binding national commitments in order to rapidly decarbonize economies while ensuring energy access to billions living without it in developing countries. What is needed now is the implementation-friendly specification and ramping up of goals and INDCs and their transformation into nationally determined contributions (NDCs), which may only be legally enacted by 2020. Nations must capitalize on the Paris momentum until then, tapping the potential of non-state, subnational and local actors, and especially in regard to global climate finance, technological transfer and capacity-building in developing countries. Internationally renowned climate economist Lord Nicholas Stern, Chair of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics (LSE), further recommends investments in “climate coherent”

infrastructure that promotes – rather than derails – sustainable development and growth in the mid- to long-term view. [49] Given the fact that the world's urban population will increase from around 3.5 billion today to around 6.5 billion by 2050, planning and building these cities will be crucial, determining whether they will be clean and efficient, or congested, dirty and polluted. According to an analysis by the Global Commission on the Economy and Climate, global investment in infrastructure of about US$ 90 trillion will be needed over the next 15 years, mostly in developing and emerging market countries.[50] If we lock in high-carbon infrastructure into these long-term investments, this may imply a great danger to fighting climate change. In order to encourage investment into new clean infrastructure, global and regional financial institutions need to go green as they play a crucial role in helping to reduce the risks and cost of capital for private investors, taking the risks of early stage development and providing long-term loans in ways that the private sector finds difficult to offer. To bank on the hope that climate actions will turn out to be cheaper, easier, and quicker once nations start to surpass their actual decarbonisation pledges, countries will also need to invest much more in low carbon research and development, making green technologies cheaper and affordable for everyone to switch: *"We are spending too much time on making fossils more expensive instead of focusing on investing in research and development of renewables in order to make them cheaper and affordable for everybody."* [51] The funds pledged for research and development of climate-friendly technologies by Mission Innovation and the Breakthrough Energy Coalition are already a right step in this direction.

49 Stern, Nicholas (2015): The Low-Carbon Road, IMF, *Finance & Development*, Vol. 52, No. 4, December 2015, available at: http://www.imf.org/external/pubs/ft/fandd/2015/12/stern.htm.

50 Global Commission on the Economy and Climate (2014): *Better Growth, Better Climate: The New Climate Economy Report*, Washington, 2014.

51 See Lomborg, Bjorn (2015): *Make it cheaper to go green*, The Boston Globe, 18 November 2015, available at: https://www.bostonglobe.com/opinion/ 2015/11/17/make-cheaper-green/kXP9ELLtd2PGP3KV5IX0uK/story.html.

6. EU Environmental Policy after Paris

Regarding the EU, climate change advocacy for implementing the Paris Agreement and the region-wide INDC are strategic priorities for the Union's diplomatic dialogues, public diplomacy and external policy instruments which are laid down in the ***Council Action plan for EU's climate diplomacy action in 2016*** in the context of low-emission and climate-resilient development. According to the Action Plan, the EU will need to step up its international climate diplomacy to maintain the political momentum after Paris and support other countries in the implementation of the agreement and their climate plans. In this respect, the EU remains committed to scaling up the mobilisation of international climate finance.[52] The Commission will present during the next 12 months the key remaining legislative proposals to implement the 2030 framework. This includes proposals for an Effort-Sharing Decision for sectors not covered by the EU Emission Trading Scheme (ETS) and on Land Use, Land Use Change and Forestry (LULUCF), legislation to set up a reliable and transparent climate and energy governance mechanism for the post-2020 period, as well as policy proposals to adapt the EU's regulatory framework in order to put energy efficiency first and to foster EU's role as a world leader in the field of renewable energy.[53] *"The EU and member states' development cooperation with third countries should fully take into account the existing synergies between climate objectives and the sustainable development goals as adopted by the 2030 Agenda for Sustainable Development"* and *"address the link between climate change, natural resources, prosperity, stability and migration"*[54], drawing the topic into broader social programs.

52 EU Council (2016): *Conclusions on European climate diplomacy after COP21*, Brussels, 15 February 2016.

53 European Commission (2016): *The Road from Paris: assessing the implications of the Paris Agreement and accompanying the proposal for a Council decision on the signing, on behalf of the European Union, of the Paris Agreement adopted under the UNFCCC*, Communication from the European Commission to the European Parliament and Council, Brussels, 2 March 2016.

54 Miguel Arias Cañete EU Commissioner for Climate Action and Energy, in: European Union (2015): *EU and 79 African, Caribbean and Pacific countries join forces for ambitious global climate deal*, EU Press Release, Paris,

Critical observers fear that this would make climate action even less effective as it would have to serve many masters. Further, it may facilitate the relabelling of funds. Last but not least, it may deprive climate action of its objective, science-based, and neutral aura, and subject it to the forces of political polarization as has already started with the securisation of climate politics. The described effects could already be observed during the securitization of climate policy that started in 2007 (see discourse below).

Securitisation of climate policy or climatization of security policy?[55]

In 2007, the Intergovernmental Panel on Climate Change (IPCC) acknowledged climate change as a risk to human security in its 4th Assessment Report. In the same year, UN Security Council had climate refugees on its agenda and voices for granting political asylum for climate refugees became louder. The Report "Climate Change and International Security" of the Council of the European Union (2008) represented climate change not as a trigger but as a "threat multiplier", extending the range of issues from the human security threat in so-called "hot spots" to a preventive security policy that suits the EU's geopolitical interests, especially in regard to energy security and migration. The academic community increasingly perceives climate change as a security threat, vulnerability and challenging risk. The 5th IPCC Assessment Report in 2014 further emphasizes the relationship between global climate change, human security and development, especially in the areas of energy and food security, as well as migration due to

8 December 2015, available at: http://europa.eu/rapid/press-release_IP-15-6273_en.htm.

55 See: Brzoska, Michael; Oels, Angela (2011): Versicherheitlichung "des Klimawandels? Die Konstruktion des Klimawandels als Sicherheitsbedrohung und ihre politischen Folgen. In: Brzoska, Michael et al (Hg.) (2011): Klimawandel und Konflikte. Versicherheitlichung versus präventive Friedenspolitik? AFK-Friedensschriften, Bd. 37, 2011, S. 51-66, Baden-Baden.
See: Council of the European Union (2008): Climate Change and International Security. Paper from the High Representative and the European Commission to the European Council, S113/08, Brussels, 14 March 2008.

permanent environmental damage caused by floods, droughts and land degradation. However, the extended concept of human security catapults the topic into “high politics”. Proponents argue that this would make European Climate Policy more efficient and coherent, while critics fear that the sectoralisation of climate change policy may counteract its intents and effectiveness.

Independent of the empirical foundation how climate change exactly affects human security (whether it is rather a trigger for other threats or an independent security factor), the discursive construction of climate change as part of security and other policy areas is already a problem, according to Neo-Gramscian analysis. As a study by Broszka und Oels shows, the result of the securitization of climate policy is not making the subject a higher political priority, neither mobilising action through increased visibility, nor leading to stricter environmental regulations in the sense of a positive-pluralistic approach. Instead, four policy areas have been “climatized”: development policy, defense policy, immigration policy and civil protection. This can be seen e.g. by the rising share of development assistance from the Pentagon up to nearly 22% in the course of the fight against terrorism or the British armed forces adopting a climate concept in 2009 which not only improves the operational readiness of British troops in regions with climate conflicts, but also strengthens national disaster management.

In the area of development cooperation, “climatizing” the policy area increasingly leads to prioritizing climate over development policy objectives. This leads e.g. to the relabelling of development aid in order to support the pledged national commitments, de facto leading to a double-counting of efforts. In the Juncker Commission a similar effect is apparent regarding energy policy, as the merger of the Directorate General for Climate Action (DG Climate) and DG Energy has, de facto, subordinated the first under the latter, given the financial resources of both DGs. Meant to solve the so-called climate-energy-security nexus and increase policy coherence,

the climatization of different policy fields can have the opposite effect, leading to serious fragmentation and overlaps of regulations, which further increases complexity and risk of contradiction within these structures (as e.g. in the area of agricultural subventions and biodiesel). The EU would do better to focus its efforts on combatting climate change only. Energy security, for instance, is a politically charged and divisive subject in light of the Ukraine crisis that should not be blended with climate policy; as is security and migration policy.

The lack of EU policy coherence can also be illustrated by the following three incidents around the Paris summit: Firstly, the leaking of an internal document outlining the EU's negotiating position during the conference. The document showed the EU's opposition to discussing trade measures and intellectual property rights in the COP21 deal, giving TTIP precedence over environmental regulations. Secondly, the fact that the EU kept a back-door open regarding the planned inclusion of emissions and removals from LULUCF (see also box page 14) into its INDC before 2020 – something that would seriously lower its ambitions as offsetting carbon absorbed by forests could lead to reduced efforts in other parts of the economy. Thirdly, the presentation of the EU's aviation strategy right after COP21, focusing on the growth of ever-expanding air traffic, counteracting the pledged emission reduction ambitions. A similar lack of ambition was also visible at the EU Summit in March 2016, when Heads of States and Governments relegated climate change under "Miscellaneous", with the migration crisis dominating the agenda.

This lack of action is particularly concerning as the assessment by the EU Commission in regard to the Paris Climate Agreement concludes that the union-wide target of reducing emissions by 40% until 2030 may be sufficient for reaching the 2°C goal of the Paris Agreement. It is, however, not consistent with the more ambitious goal of a maximum temperature increase of 1.5°C as compared to pre-industrial levels.[56] The accountancy

56 EU Commission (2016): *The Road from Paris: Assessing the implications of the Paris Agreement and accompanying the proposal for a Council decision on the*

firm PricewaterhouseCoopers (PwC) thinks that to meet the 2030 target, the EU will have to double its decrease in carbon intensity (the amount of carbon emitted for each unit of economic output) from a 2% decrease per year since 2000 to a 4% annual decrease.[57]

During a speech on the follow-up to COP21 at a public session of the Environment Council on 4 March 2016, EU Climate Action and Energy Commissioner Miguel Arias Cañete pointed out that the EU has a moral responsibility to show the same leadership in implementing the Paris Agreement as it did in making the agreement possible. The EU speaking with a unified voice was crucial in the lead-up to Paris and in developing the High Ambition Coalition which shaped the successful outcome. He stressed, that the Paris momentum needs to be maintained in all international fora including the G7 and G20, the negotiations in the International Civil Aviation Organization (ICAO) later this year as well as further talks on the Montreal Protocol, which all provide good opportunities to scale up the level of ambition in the pre-2020 period, and before the next UN climate summit in Marrakesh, Marocco (COP22). To do so, the EU should continue to build on existing initiatives and alliances externally, such as the Global Climate Change Alliance (GCCA+) and go beyond its existing commitments of climate finance as part of the USD 100 billion pledged to the Green Climate Fund by 2020 in order to support developing countries for adaptation and renewable energy sources in countries and the implementation of NAMAs.[58]

signing, on behalf of the European Union, of the Paris Agreement adopted under the UNFCCC, Communication from the Commission to the European Parliament and the Council, Brussels, 2 March 2016.

57 See PwC (2015): *How ambitious is the EU's 40% target?* PwC Blog, 6 March 2015, available at http://pwc.blogs.com/sustainability/2015/03/how-ambitious-is-the-eus-40-target.html.

58 Miguel Arias Cañete (2016): *Speech on the follow-up to COP21*, Public Session of the Environment Council, Brussels, 4 March 2016, available at: http://europa.eu/rapid/press-release_SPEECH-16-586_fr.htm.

Advancing EU Energy Union, green investments and energy efficiency

Internally, the EU needs to consolidate an enabling environment for the transition to a low carbon economy through a wide range of interacting policies and instruments as reflected under the Energy Union Strategy, one of the 10 priorities of the Juncker Commission. The European Commission will prepare an in-depth analysis of the necessary economic and social transformations, developing a deep decarbonisation, sector by sector, looking beyond 2030 and focusing on sustainability until 2050. [59]

In order to increase its ambitions and make its environmental policy more effective, the EU should fast-track the planned reforms to the EU Emissions Trading System (ETS): Although over the last two years the price of carbon increased from around 4 to slightly over 7 EUR per tonne CO_2eq, it still remains well below the EUR 25-30 that were expected when the ETS was introduced. A low carbon price also makes offsetting in developing counties as part of the Clean Development Mechanism (CDM) less attractive. The ETS should be reformed more deeply, encouraging further emissions reductions on the one hand and discouraging energy intensive industries from carbon leakage on the other. This could be, for example, done by increasing emission reduction targets to at least 30% until 2020 and 55% until 2030 (as compared to the 1990 base year) and reducing exceptions for energy-intensive industries.

Another "low hanging fruit" of a green energy transition is improving the EU's energy efficiency policy which is still lagging behind from its 27% non-binding target. This could be done by focusing more on the demand side (e.g. by installing intelligent meters, adjusting consumer tariffs, making supply and consumption more flexible, unlocking storage potential, supporting energy efficiency champions and sustainable consumption patterns to avoid rebound effects etc.), so companies and private consumers will be intrinsically motivated to become more efficient. If measures start early and take investment cycles into account, the European Commission projects that the costs of energy transition will be manageable, as part of

59 Ibid.

the costs are offset by improved health and air quality. The proposals that the Commission is currently preparing for a new governance mechanism to streamline planning and reporting requirements for the post-2020 period may be a good opportunity to move in this direction, as will the revision of the energy efficiency and renewable energy directives and work on the electricity market design scheduled for autumn. Another good way to improve energy efficiency would be making the target legally binding.

To support the long-term transition to a low carbon economy, the EU needs an enabling framework with smart and coherent regulations, in particular by delivering on a dynamic, efficient and integrated expansion of renewable energy within the Energy Union. For accelerating investments in green infrastructure, for example, the EU should improve regulations regarding compensation for infrastructure and (reserve) storage capacities and create financial incentives for the extension of networks and storage facilities, as well as for energy-efficient building and transport modernization. Buildings are responsible for 36% of CO_2 emissions in the EU, while transport accounts for around a quarter of emissions. Another major role in mitigating climate change can and should be played by agriculture as it accounts for another 10% of the EU's total GHG emissions.[60]

Furthermore, investment in green research and development needs to be scaled up even further, as it would focus on innovation and make renewable energies cheaper and thus, more competitive, automatically driving societies to switch. According to a report from the European Systemic Risk Board, waiting too long to transition to a low-carbon economy will greatly increase its costs and risks. There are three ways that a delayed transition could affect systematic risk: the impact on GDP of sudden changes in energy use, the revaluation of carbon-intensive assets, and more frequent natural catastrophes. If all countries transition at the right pace, the adjustment costs will be manageable and the risk of stranded assets will be lower. The Board recommends that policymakers increase disclosure of the carbon intensity of non-financial firms. This would help

60 See Eurostat: *GHG Emission Statistics*, available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Greenhouse_gas_emission_statistics.

quantify financial firms' potential exposure and help estimate the impact of a delayed transition on financial institutions.[61]

7. Conclusion

The diplomatic strategies of the European Union were decisive for the successful conclusion of the Paris Agreement, as the EU successfully harmonized internal differences early on and was thus, able to speak with a unified voice in the run up to the climate summit. Furthermore, the Union put a sufficient amount of funds on the table to convince developing countries to join its negotiation goals. This somehow re-established the EU's role as a "leadiator" in global climate negotiation or, in other words, its ability to act as a leader by backing up its pledges with credible actions, whilst at the same time mediating between and among potential partners.

In this sense, Paris has been an important step, as leaders have shown that there is life after multilateralism. This is particularly important as a second Copenhagen would have not only had severe consequences for the global climate, but would have also further eroded the credibility of the UN System and its capacity for solving problems of common goods through international cooperation, consequently leading to further fragmentation in global governance. However, it is only a symbolic triumph so far as leaders have left the toughest nuts for future leaders to crack, namely the huge disparity between collective ambition and individual obligation which is the core challenge of any collective action problem. Building in dynamic commitments that are reviewed (and, hopefully, ramped up) every five years, leaders have found a way to circumvent the issue for now, starting a global bottom-up experiment for its solution instead. Only time will tell whether the experiment agreed upon in Paris will work - or, in other words, whether nations will really deliver on their pledges, raise their ambitions, and honour their commitments to turn

61 European Systemic Risk Board (2016): *Too late, too sudden: Transition to a low-carbon economy and systemic risk*, Report of the Advisory Scientific Committee, No 6/February 2016, available at https://www.esrb.europa.eu/pub/pdf/asc/Reports_ASC_6_1602.pdf?829a1b407eb1e9d82ef45228a4884536.

the Paris Agreement into credible action. The first litmus test will be the interpretation of technical details in Bonn in May 2016.

In order to support the implementation of the Paris Agreement, the EU needs to fast-track the implementation of the 2030 Energy and Climate Framework and related forthcoming legislative proposals, such as deeper reforms to the ETS and regulations regarding energy efficiency, particularly in the building and transport sector. It should also scale-up investment in green infrastructure, not only within Europe but also in developing countries (using e.g. carbon-offsetting as defined by the CDM). Doing so, would enable the EU to not only advance to its own targets, but also to consolidate its alliance with ACP countries and SIDS. Last but not least, research and development of green technologies will need to be increased even further as part of the Breakthrough Energy Coalition, as this would make them more affordable, intrinsically motivating people to switch.

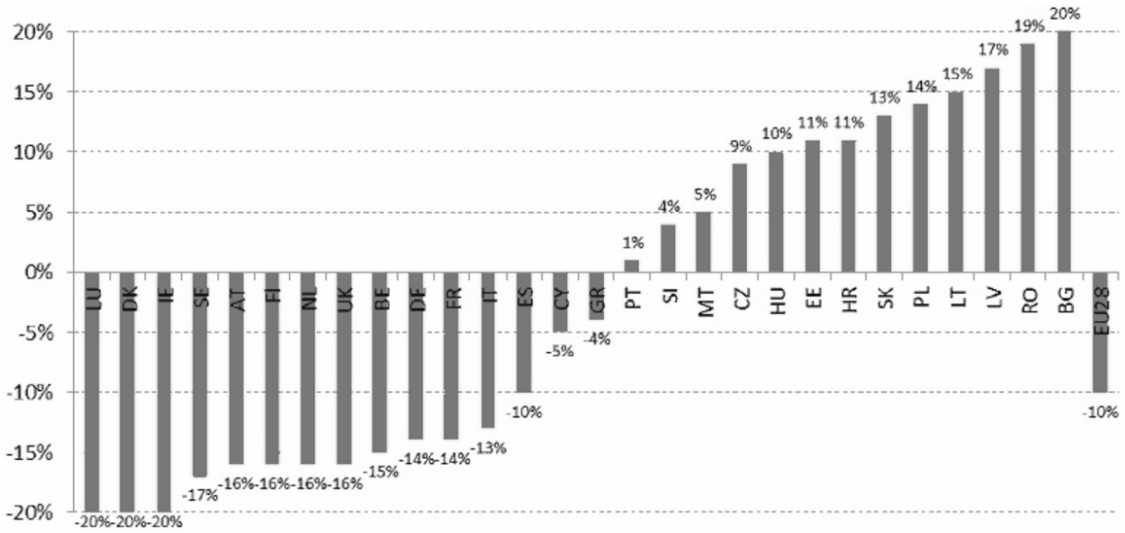
So far, the actions of the EU might only be in line to reach the 2°C, but not the 1.5°C target as set in the Paris Agreement. Nevertheless, the Commission opted against ramping up the EU's 2030 targets in its proposals. A significantly more ambitious compromise between Heads of States and Governments seems rather improbable, regarding opposition from countries such as Poland, Italy, Lithuania and Hungary and the fact that any more ambitious EU Climate Package needs to be passed by unanimous vote. The unwillingness of some EU member states to commit to meaningful actions on the one hand and the lack of strong leadership on behalf of the European institutions on the one hand may continue to threaten the EU's position as a moral leader in the fight against climate change, and thus also tormenting its role as a mediator between developed and developing countries – an issue that has stalled UN Climate Talks for decades. Under these circumstances, discussions around the future of the carbon market and the sharing of efforts between states to reach a ramped up target will be long and complicated, and could take until at least 2018 to finalise. By the end of 2020, all countries must communicate their mid-century, long-term decarbonisation strategies to the UNFCCC. This means that the "atmospheric bathtub" will continue to be filled with GHG

emissions for at least another five years – despite the fact that the failure of climate change mitigation and adaptation has risen to the top again in 2016: The World Economic Forum perceived it as the most important risk for the years to come, ahead of weapons of mass destruction (ranked 2nd) and water crisis (ranked 3rd).[62]

62 World Economic Forum (2016): *The Global Risk Report 2016*, 11th Edition, Cologne/Geneva, 2016, available at: http://reports.weforum.org/global-risks-2016/.

Annex

Table 1: Member State Greenhouse Gas Emission Limits in 2020 compared to 2005 levels



Source: European Commission, available at http://ec.europa.eu/clima/policies/effort/index_en.htm.

Table 2: Member State Positions on the 2030 EU Framework for Climate and Energy Policies

Member state	GG: Binding 40%	GG: At least 40%	EE: Binding 30%	EE: Non-binding (30%)	EE: 25% non-binding	EE: No target	R: Binding 27%	R: Non-binding 27%	R: At least 27% binding	R: 30% binding	R: At least 27% non-binding
Austria	Yes	No	No	Yes	No	No	No	No	Yes	No	No
Belgium	(Yes)	No	No	(Yes)	No	No	No	No	(Yes)	No	No
Bulgaria	Yes	No	No	No	Yes	No	No	Yes	No	No	No
Croatia	Yes	No	No	No	Yes	No	Yes	No	No	No	No
Cyprus	Yes	No	No	No	No	Yes	No	No	No	No	Yes
Czech	Yes	No	No	No	Yes	No	No	Yes	No	No	No
Denmark	No	Yes	Yes	No	No	No	No	No	No	Yes	No
Estonia	Yes	No	No	Yes	No	No	No	No	Yes	No	No
Finland	Yes	No	No	Yes	No	No	No	No	Yes	No	No
France	(Yes)	No	No	(Yes)	No	No	No	No	(Yes)	No	No
Germany	No	Yes	Yes	No	No	No	No	No	No	Yes	No
Greece	Yes	No	No	Yes	No	No	No	No	Yes	No	No
Hungary	Yes	No	No	No	Yes	No	No	Yes	No	No	No
Ireland	Yes	No	No	Yes	No	No	No	No	Yes	No	No
Italy	(Yes)	No	No	(Yes)	No	No	No	No	(Yes)	No	No
Latvia	Yes	No	No	No	Yes	No	No	No	Yes	No	No
Lithuania	Yes	No	No	Yes	No	No	No	No	No	No	Yes
Luxembourg	No	Yes	Yes	No	No	No	No	No	No	Yes	No
Malta	Yes	No	No	Yes	No	No	No	No	No	No	No
Netherlands	(Yes)	No	No	(Yes)	No	No	No	No	No	(Yes)	No
Poland	(Yes)	No	No	No	(Yes)	No	No	(Yes)	No	No	No
Portugal	No	Yes	Yes	No	No	No	No	No	Yes	No	No
Romania	Yes	No	No	No	Yes	No	No	Yes	No	No	No
Slovakia	Yes	No	No	No	Yes	No	No	Yes	No	No	No
Slovenia	Yes	No	No	Yes	No	No	No	No	Yes	No	No
Spain	Yes	No	No	Yes	No	No	No	No	Yes	No	No
Sweden	No	(Yes)	(Yes)	No	No	No	No	No	No	(Yes)	No
UK	No	Yes	No	No	No	Yes	No	Yes	No	No	No

Source: Crisp, James (2014): *Member states' positions on 2030 climate and energy targets revealed*, EurActiv, 17. Oktober 2014 (updated: 23. Oktober 2014, accessed 25 March 2016), available at: http://www.euractiv.com/section/energy/news/member-states-positions-on-2030-climate-and-energy-targets-revealed/.

Abbreviations

ACP	African Caribbean Countries
CBDR	Common but differentiated responsibilities
CBDR-RC	Common but Differentiated Responsibilities and Respective Capabilities
CDM	Clean Development Mechanism
COP	Conference of the Parties (to the UNFCCC)
ETS	Emissions Trading Scheme (ETS)
EU	European Union
GCCA	Global Climate Change Alliance (later GCCA+)
GCF	Green Climate Fund
GHG	Greenhouse Gas
INDC	Intended National Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
LDCs	Least Developed Countries
LULUCF	Land Use, Land-Use Change and Forestry
NAMA	Nationally Appropriate Mitigation Action
NDC	National Determined Contribution
NEEAP	National Energy Efficiency Action Plan
QELRO	Quantified Emission Limitation and Reduction Objective
REC	Regional Economic Community
REDD	Reducing Emissions from Deforestation and Forest Degradation
REDD+	Reducing Emissions from Deforestation and Forest Degradation with sustainable management of forests, conservation of forest carbon stocks and enhancement of forest carbon stocks constituting the "+"
SIDS	Small Island Developing States
UNFCCC	United Nations Framework Convention on Climate Change

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