

2015 CLIMATE NEGOTIATIONS: SPEEDING UP OR SLOWING DOWN THE ENERGY TRANSITION?

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SUMMARY¹

Climate change is here. 2014 was the warmest year ever recorded in human history, and so far 2015 has been even warmer. It already impacts key sectors of the world economy, as well as international security.

2015 has the potential to be a turning point for our climate future. The EU is in a position to act as a pragmatic actor that enables global climate action while moving towards a clear ideal: sustainable energy for all.

The energy transition has already started with both states and non-state actors committing to reduce their carbon footprint. **The question for world leaders is thus simple: to speed up or to slow down the energy transition?**

Despite its official claims, **the EU has lost its leadership position in climate negotiations.** It cannot impose on the world its own regulatory framework in the form of a “Paris Protocol”. Instead, the EU should focus on three elements to make COP21 a useful step forward for climate change mitigation and adaptation:

1. **Moving towards a global carbon price to foster the energy transition and finance the Green Fund.** Carbon pricing is an efficient way to foster the energy transition. Financing the Green Fund is a key indicator of richer countries’ commitment to climate solidarity, and is also in their enlightened self-interest.
2. **Tackling the issue of coal-based electricity generation** to progressively phase it out. Coal is the biggest CO₂ emitter, the easiest fossil fuel to phase-out, and also a way to reduce air pollution. It is therefore a critical indicator of the willingness to bridge the existing gap between vague political declarations and concrete policy plans.
3. **Fully embedding businesses and civil society into climate change mitigation and adaptation.** The EU should push EU companies to make a “European Business Climate Pledge” to increase their involvement into climate change mitigation and adaptation, as well as the visibility of their actions. Collaboration with subnational public authorities as well as with civil society is a critical element.

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INTRODUCTION

2015 has the potential to be a turning point for our climate future as world leaders convene for two key international events: the adoption of the post-2015 United Nations Development Goals from September 25th to 27th in New York, and the 21st Conference of Parties (COP21) from November 30th to December 11th in Paris. At these major events, the EU is in a position to act as a pragmatic actor that enables global climate action, one of the greatest challenges facing mankind.

Climate change already constitutes a challenge which necessitates immediate action with a long-term vision. A crucial element of this action should be the transition from carbon-intensive energy systems based on coal, oil and gas to more efficient energy systems that rely more on low-carbon energy sources. While this energy transition is already occurring in some segments of the economy, world leaders must act to speed it up.

This paper argues that, instead of chasing rainbows with unrealistic policy goals, the EU should make concrete proposals such as (1) moving towards a global carbon price that shall partially finance the Green fund; (2) progressively phasing out coal-based electricity production; and (3) fully embedding businesses and civil society into climate change mitigation and adaptation.

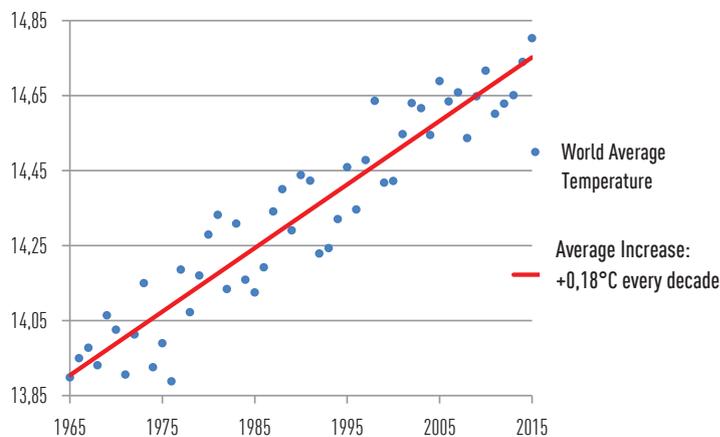
1. Climate change is here and the energy transition has already started

1.2. Climate change is here

Climate change is largely provoked by human greenhouse gas (GHG) emissions and threatens communities and economies all over the world. Climate change is not some far-off problem that will only impact “future generations”; it is a problem for all of us today.

2014 was the warmest year ever recorded in human history, and so far 2015 has been even warmer. Over the last fifty years, global average temperatures have steadily increased (cf. figure 1). Today, our world average temperature is already 1°C higher than that of the second half of the 19th century¹. The international objective is to limit global temperature increase relative to pre-industrial times to below 2°C, which scientists now estimate to be the limit between a ‘dangerous’ and an ‘extremely dangerous’ climate change².

Figure 1 ► Yearly World average temperature, in °C (1965-2015)



Source: Jacques Delors Institute, from NASA data

1. Michael Le Page, “Earth now halfway to UN global warming limit”, *New Scientist*, 29 July 2015.

2. Kevin Anderson, Alice Bows, “Beyond ‘dangerous’ climate change: emission scenarios for a new world”, *Philosophical Transactions of the Royal Society A*, Volume: 369, Issue: 1934, January 2011, pp. 20-44.

Research now suggests that climate change is a key international security risk³, with a strong link found between droughts caused by global-warming and the run-up to the Syrian Civil War⁴. In addition to threatening key sectors of the economy such as agriculture, forestry, insurance⁵, climate change also triggers domestic and international migrations.

Climate change is here, and will not go away as GHGs emitted today will stay in the atmosphere for hundreds of years⁶. Economic and population growth also tend to lead to increasing GHG emissions, meaning the problem could become ever worse in the years to come⁷.

1.2. The Energy transition has already started

The current and future impact of climate change may be terrifying, but there is good news: the energy transition towards low-carbon energy systems is already underway.

Many states have taken steps to decarbonise their energy system, with the EU being a pioneer in this regard, and China likely to take the lead with the generalisation of its carbon pricing system by 2016⁸.

“ WORLD LEADERS HAVE A SIMPLE QUESTION TO ASK THEMSELVES : SPEED UP OR SLOW DOWN THE ENERGY TRANSITION ? ”

Globally, 85 regions and 425 cities representing 600 million inhabitants and 263 investors managing an estimated 35,000 billion US dollars of financial assets have already committed to concrete measures to address climate change⁹. Many citizens, individually or collectively, are changing their behaviour to reduce their carbon footprint.

So let's stop wishing for world leaders in New York and Paris to miraculously 'save the world'. The energy transition has already started. From here, leaders can act in two ways: speed up an already undergoing process, or slow down the necessary energy transition.

2. The EU should adopt a pragmatic negotiation strategy and avoid chasing rainbows

The current EU position is likely to harm the chances to make COP21 a useful step in climate change mitigation. The EU likes to describe itself as a "leader," demanding a 'Paris Protocol': a legally binding international agreement with a whole set of detailed rules, processes, and institutions¹⁰. The EU unrealistically projects its own regulatory system on the rest of the world, hence forgetting that the EU is a unique political design, neither a miniature version of the world nor the vanguard of a global government.

3. David King and all., *Climate change – a risk assessment*, Report for the British Foreign Office, 2015.

4. National Oceanic and Atmospheric Administration, "NOAA study: Human-caused climate change a major factor in more frequent Mediterranean droughts", *US Department of Commerce*, 27 October 2011.

5. Henri de Castrées, *Interview with Tara Patel from Bloomberg*, Paris, 22 May 2015.

6. David Archer & all., "Atmospheric lifetime of fossil fuel carbon dioxide", *Annual Review of Earth and Planetary Sciences*, Volume 37, 2009, pp. 117-134.

7. Yoichi Kaya and Keiichi Yokobori, *Environment, Energy, and Economy: strategies for sustainability*, United Nations University Press, Tokyo, 1997.

8. Marion Afriat, Jeff Swartz, "China: an emissions trading case study", *Case study for CDC-Climat research and IETA*, March 2015.

9. Calculations from the Jacques Delors Institute, from NAZCA data and individual region, city and company websites.

10. European Commission, "Energy Union Package – The Paris Protocol, A blueprint for tackling global climate change beyond 2020", European Commission, 25 February 2015.

This position is **anachronistic, unrealistic, and counterproductive**.

Anachronistic. With its role in the establishment of the Kyoto Protocol and the adoption in 2007 of its 2020 climate and energy package, the EU was indeed leading by example. The world, however, has since changed.

The EU got stuck in an economic and political crisis that, among many things, led to a dysfunctional EU carbon market (i.e. the EU-ETS). True, the EU reduced its GHG emissions, and yes, this is partly due to the development of energy efficiency and renewables. But it is also true that good EU climate performance is partially due to its economic stagnation, a “model” that few are eager to follow. Developing countries rightly argue that part of the reduction of EU GHG emissions is due to the EU outsourcing significant parts of its production to outside countries, a “model” that cannot achieve global GHG reductions.

In the meantime, China has become the world economic leader in production, energy consumption, renewable energy production, and the biggest GHG emitter. In the USA, cheaper domestic gas and cheaper renewable led to the fall of coal consumption (a 21% reduction from 2005 to 2014)¹¹. Russia has also been passing legislation to cut its GHG emissions by 25% by 2020¹², which is even more ambitious than the EU’s objective to cut those emissions by 20% by 2020. In India, GHG emissions have doubled over the past ten years, and the country tends to perceive that “Europe still tends to preach and tell India what to do”¹³.

The EU has lost its leadership position and now wants it back, acting as if addressing climate change were a question of who leads and who follows¹⁴. It is thus losing sight of the real objective, which is to achieve concrete steps to provide sustainable energy for all. Other countries view the EU’s ‘leadership rhetoric’ as condescending and antagonistic. Truth is: we have to be partners to address those challenges.

The current EU position is **unrealistic**. While Europe has historically contributed a large portion of global CO2 emissions (25%), current EU emissions barely represent 11%, and are estimated to further decrease to 8% by 2030 and 6% by 2050¹⁵. This means that EU efforts have to focus more and more on the impact of the current and future big GHG emitters; notably China, the US, and India.

Figure 2 -> 1850-2011 Cumulative CO2 emissions (% World total)

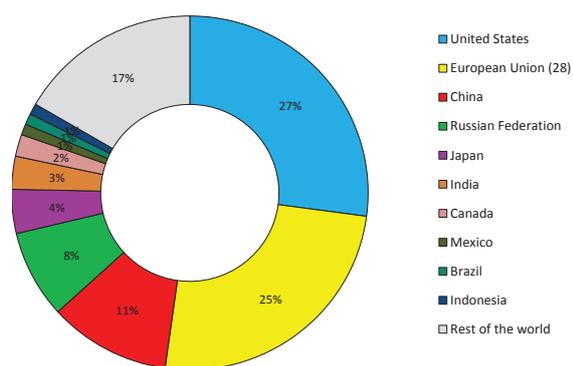
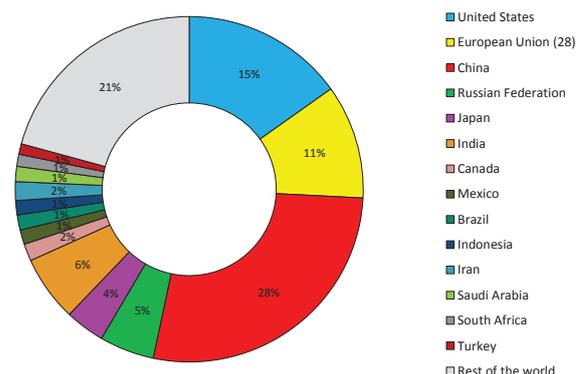


Figure 3 -> 2012 CO2 emissions (% World total)



Sources: JDI own compilation. Data from CAIT Climate Data Explorer, 2015, Washington DC: Wold Resources Institute. Available online: <http://cait.wri.org>

11. Jacques Delors Institute calculations, from BP Statistical Review 2015.

12. Government of the Russian Federation, *Official position of the Russian Government on climate change*, 2 April 2014.

13. Diarmuid Torney, “Bilateral Climate Cooperation: the EU’s relations with China and India”, *Global Environmental Politics*, Volume 15, February 15, pp 105-122, p. 117.

14. On Thursday 20 August, at a press conference, Miguel Aria Canete, EU Commissioner for Climate Action stated : “more and more countries follow Europe’s lead”.

15. Data for historical emissions and current (2012) emissions are taken from the World Resources Institute. Estimated data projections for 2030 and 2050 are drawn from the International Energy Agency scenarios: *International Energy Agency’s Energy Technology Perspectives 2015*.

Despite all evidence that an approach similar to the EU approach towards COP15 in Copenhagen will lead to a similar failure, the EU continues to demand a legally binding international agreement in the form of a 'Paris Protocol'. While negotiating during COP21, the EU should remember two basic lessons from the past ten years:

1. COP15 proved that some key countries simply do not want a legally binding agreement in the form of a Protocol. One key element here is the US. The US Congress is led by the Republicans, and getting US Republicans to ratify a "Paris Protocol" is likely to lead to the same result as for the Kyoto Protocol: a blunt rejection.
2. Getting a legally binding agreement is pointless if the instruments to enforce it are lacking - and they are. When Canada withdrew from the Kyoto Protocol, the EU did not sanction Canada for this clear violation of a legally binding agreement; instead, an EU-Canada Free Trade Area was negotiated. Let's face it, the EU currently cares more about its trade interests than about climate negotiations.

The EU chose a **counter-productive** approach. To enable COP21 to speed up the energy transition, the EU should first stop chasing rainbows of being the driver of a "Paris Protocol". This pretention is currently a counterproductive illusion that diverts our attention away from three concrete elements that the EU can help achieve in New York and Paris.

3. Three proposals to speed up the global energy transition

The EU and its Member States can play a critical role in both New York and Paris to ensure that pragmatic agreements fostering the energy transition are reached.

In order to play an effective positive role in these negotiations, the EU should first stop chasing rainbows, then promote three key elements: (1) establishing a global carbon price that shall partially finance the Green fund; (2) phasing out coal-based electricity production through regulation; and (3) fully embedding businesses and civil society into climate change mitigation and adaptation.

3.1. Moving towards a global carbon price to foster the energy transition and finance the Green fund

Establishing a significant carbon price shall fundamentally change the situation. It is a very simple way to internalise within the price of products, part of their climate change externalities. It is favoured by a large majority of economists, supported by the World Bank, along with 74 countries (including China, Congo, the EU, Russia, South Africa, Mexico, Nigeria, the Philippines, Indonesia, South Korea, and Vietnam), and 1,000 businesses (including Nestlé, Unilever, British Airways, Alstom, Barilla, Veolia, Ernst & Young, KPMG, Kodak, Mango, Nokia, Philips Lighting, Pirelli, Shell, Schneider Electric, Skanska, and Statoil)¹⁶. Carbon pricing has always been a key element to foster the energy transition, and is more than ever a politically achievable objective.

16. World Bank, "We Support Putting a Price on Carbon", 2014.

While carbon pricing can be obtained in many different ways, the key priority is to include it in the COP21 negotiations together with the three following elements.

- First, **set an indicative global carbon price** for the 2020-2040 period. Such a price would not be legally binding, but would send a strong signal to all actors, especially local and regional authorities, businesses, and individuals.
- Second, ask the World Trade Organization (WTO) to clarify the conditions under which such carbon pricing and related border tax adjustments can be made legally sound¹⁷.
- Third, make a political statement that:
 - Encourages public authorities at the supranational, national, and subnational levels to implement a carbon pricing system - be it a carbon tax or a cap & trade system with or without a carbon floor;
 - Pushes businesses to implement an internal carbon price system that includes the CO2 cost in their investment decisions, in order to speed up their energy transition.

While a genuine carbon price would speed up the energy transition, it can also provide revenues to finance the 'Green fund'.

Since developed countries have a historic responsibility for climate change, they also have a responsibility towards those who never significantly emitted GHG, but are already harshly impacted by climate change. COP15 agreed that a 'Green fund' should be created. Richer countries should actively finance it, so as to allow this Fund to finance 100 billion dollars of projects annually, from 2020.

“ FINANCING THE GREEN FUND IS NOT ABOUT CHARITY, IT IS ABOUT ENLIGHTENED SELF-INTEREST.”

Financing the Green fund is not only a moral responsibility. It is also a way to ensure that poor countries will have the means to mitigate and adapt to climate change; to avoid unbearable political instability that will eventually lead to wars and massive migration - much more than what the EU experienced in the summer of 2015. Financing the Green fund is not about charity, it is about enlightened self-interest.

Poor countries should not, however, think that the Green fund money should be used without any control by donors. To ensure that states and non-state actors do finance the Green fund, it is essential to increase the credibility of this Fund by toughening its existing governance¹⁸ so as to guarantee that it finances the most promising projects to mitigate and adapt to climate change. Just like Europe needed a Marshall Plan to lift itself up from the ashes of WWII, poor countries need a 'Green Marshall Plan' to create their development pathways that are adapted to climate change. In much the same way that Europe's Marshall Plan money was transparently managed by a regional organisation, the Organisation for European Economic Cooperation (now OECD), the Green fund money ought to be managed transparently.

17. For an official study on the legal challenges of border trade adjustments, cf., Ludivine Tamiotti & all., *Trade and Climate change*, WTO-UNEP Report, 2009 p.98-103.

18. Green Climate Fund, "Governing instrument for the green climate fund", UNFCCC, 11 December 2011.

3.2. Progressively phasing out coal-based electricity generation through regulation

The current base text for negotiation at COP21 is 83 pages long and does not once mention the largest source of GHG emissions: coal. Coal is mostly used for electricity generation and also happens to be the easiest fossil fuel to phase out, at least for three reasons:

1. There are many other ways to produce electricity: gas, nuclear, wind, solar, hydropower and other renewables.
2. It is politically and economically easier to phase out coal (the biggest CO₂ emitter) from our electricity generation than to phase out oil (the 2nd biggest CO₂ emitter) from our transport systems;
3. It has non-climate benefits; mostly to reduce air pollution and therefore diminish mortality as well as public spending. Such a “co-benefit approach” is easier to be heard by developing countries, such as India and China, while being still true for developed countries like Germany and the USA.

To stay below the 2°C target, even if Carbon Capture & Storage (CCS) suddenly becomes economically sustainable, 82% of the already discovered coal reserves should not be burnt¹⁹. Everyone who studies climate change mitigation therefore quickly comes to a simple conclusion: for the world to pragmatically limit global warming to below 2°C, coal ought to be phased out.

If political will to truly stay below the 2°C target is present, drastic measures to phase out coal should be taken, such as cancelling the construction of the 624 coal power plants currently being built around the world, as well as the 583 coal power plants that have been announced²⁰. Given that coal-based electricity generation is inconsistent with the 2°C target and that the lifetime of a coal power plant is between 40 and 60 years, any construction of a coal power plant literally means that the 2°C target is a mere rhetorical objective.

EU countries are not a model here. Coal remains the third source of energy in the EU, after oil and gas. It plays a major role in the electricity mix of key EU Member States: 39% in the UK, 44% in Germany, 83% in Poland²¹. Moreover, 20 coal power plants have been built in the EU since 2010, and 17 are currently under construction²². The German State-owned public Bank (KfW) is even financially supporting the construction of a new coal power plant in Greece, to be operational by 2019²³.

From a climate point of view, the construction of non-CCS coal-fired power plants should be banned everywhere, today, while all existing non-CCS coal power plants should be phased out by 2040. Such drastic measures are not politically tangible as investments in new coal capacities like power plants and mines have already been launched in almost all countries. The EU can however make three pragmatic proposals to COP21 in order to phase out coal:

1. **Ending public support to coal.** A very simple rule could be applied to all public support (subsidies, loans, tax cuts, etc.): no public money should finance ways to produce electricity that emit more than 550kg CO₂eq/KWh. This level automatically bans public support to non-CCS coal-based and oil-based electricity generation, while still allowing public support for electricity generation based on gas, uranium or renewable energy sources²⁴.

19. Christophe McGlade & Paul Ekins, “The geographical distribution of fossil fuels unused when limiting global warming to 2 °C”, *Nature*, Volume 517, January 2015.

20. Data are taken from the *EndCoal Global Plant Tracker*.

21. Authors’ calculation from 2012 data. Sources : European Commission, *EU Energy in figures - Statistical Pocket Book 2014*.

22. Data are taken from the *EndCoal Global Plant Tracker*.

23. Eric Marx, “New coal-fired power enjoys support among bankers in Germany and Asia”, *ClimateWire*, 13 August 2015.

24. This rule was first introduced by the European Investment Bank with the 2013 creation of the Emission Performance Standard. Cf. [EIB website](#).

2. **Carbon pricing.** With coal being the most CO₂-intensive way to produce electricity, the more significant the carbon price, the less competitive coal becomes. Carbon pricing is therefore an efficient way to make coal-based electricity production less competitive.
3. **Toughened air pollution standards.** While air pollution and climate change are two distinct topics, coal is a key root of both. Hence, a co-benefit approach should be pursued in order to phase out coal both for both climate change and air pollution purposes. Air pollution kills about seven million people every year²⁵ and this is a key reason why China, where coal represents 76 %²⁶ of its electricity generation, is addressing this issue with such rhetorical vigour. In concrete terms, COP21 can ask the World Health Organization to update its Air Quality Guidelines²⁷ and to propose updated technical measures that can be implemented by public authorities at the supranational, national and subnational levels.

3.3. Fully embedding businesses and civil society into climate change mitigation/adaptation

In a globalized market-driven economy, business and consumer choices play a paramount role.

In July 2015, the US Administration convinced 13 major US companies to make a climate pledge²⁸ with concrete measures. While this is largely a public relations campaign for both businesses and the US administration, it is also a way to rhetorically entrap²⁹ businesses and to make their middle-management aware that they should embed those objectives in their business choices.

Just like the US, the EU can push EU companies to make a “**European Business Climate Pledge**”. Most companies are already adapting to the necessity to mitigate climate change, and those who don't will disappear. The fast development of Corporate social responsibility offers a great opportunity to integrate this dimension into a company's entire management structure, from its workforce to its clients and suppliers.

Businesses, local authorities, and civil society have a key role to play in the transition towards low-carbon energy systems. A lot can be achieved through energy efficiency and energy savings, and those elements are largely done at the local/individual level. For instance, more than 6,000 cities³⁰ have signed a text³¹ proposed by the Covenant of Mayors committing to reduce CO₂ emissions in their cities by at least 20% by 2020.

Businesses, foundations, civil society, and individuals can also play a role in financing the Green fund. Donations and crowdfunding can also bring a significant contribution this crucial Fund for poor countries.

25. World Health Organization, “7 million premature deaths annually linked to air pollution”, *World Health Organization Press Release*, Geneva, 25 march 2014.

26. International Energy Agency, *World Energy Outlook 2014*, p. 235.

27. World Health Organization, *WHO Air Quality Guidelines*, World Health Organization, 2006.

28. White House, *Fact Sheet : White House Launches American Business Act on Climate Pledge*, White House, 27 July 2015.

29. The notion of ‘rhetorical entrapment’ was firstly develop by Frank Schimmelfenning to analysis EU member states’ behaviour regarding its Eastern Enlargement. Frank Schimmelfenning, ‘The Community Trap: liberal norms, rhetorical action, and the eastern enlargement of the European Union’ *International Organization*, 55. 1. Winter 2001, pp. 47-80.

30. The map of those cities can be found on the *Covenant of Mayors’ website*.

31. The Covenant of Mayors Declaration can be found on the *Covenant of Mayors’ website*.

CONCLUSION

The EU claims to be a climate leader. This leadership was however lost as the world changed. The EU remains fixated on an unrealistic and counter-productive demand for a “Paris Protocol”. Instead of chasing rainbows, **the EU should act as a pragmatic idealist**, proposing concrete solutions to stay below the 2°C target while getting the support of a wide range of State and non-State actors. Among those concrete solutions, a meaningful carbon price, financing the Green fund, a phasing-out of coal and fully embedding businesses, local authorities, and civil society constitute significant steps in the right direction: the transition towards low-carbon energy systems.

At COP21, the risk is to end up with a 15-page paper made of general proclamations and vague formulas that may only slow down the energy transition. The EU should act to prevent this and use its capacity and diplomatic skills to facilitate the adoption of a pragmatic roadmap for climate mitigation and adaptation that will speed up the energy transition. For that to happen, it has to rely on **concrete solutions that help us achieve a clear ideal: sustainable energy for all.**

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