

I. The global climate agenda: the European way to Paris COP21

Davide Triacca

Scientific Coordinator Centre for a Sustainable Future

Within the complexity of climate negotiations, which is intrinsically linked to the requirement that the governments of the world respond to the threat of climate change in unison, there are some certainties worth reemphasising. The first – and most well-known – of these is the commitment to capping the maximum increase of the world's average temperature at two degrees centigrade (in comparison with pre-industrial levels, or at just 1.4 degrees centigrade in comparison with current temperatures) in order to prevent *dangerous human interferences with the climate system of the planet*. An increase in excess of these parameters would jeopardise fundamental elements that the developed West takes “for granted”, such as the production of food or the normal shape of our coastlines. Over the last 150 years, human activities have produced considerably more greenhouse-gas emissions (with carbon dioxide accounting for the lion's share of these) than were generated in the rest of our planet's history. This is another certainty. As a consequence, the current atmospheric concentrations of these gases are 30% higher than they have been at any time over the last 800,000 years. Between 1992 (the year of the Rio Summit) and now, global emissions have increased by over 60%, a worrying figure when we consider that the summit's objective was to organise an effective global response to the greenhouse effect.

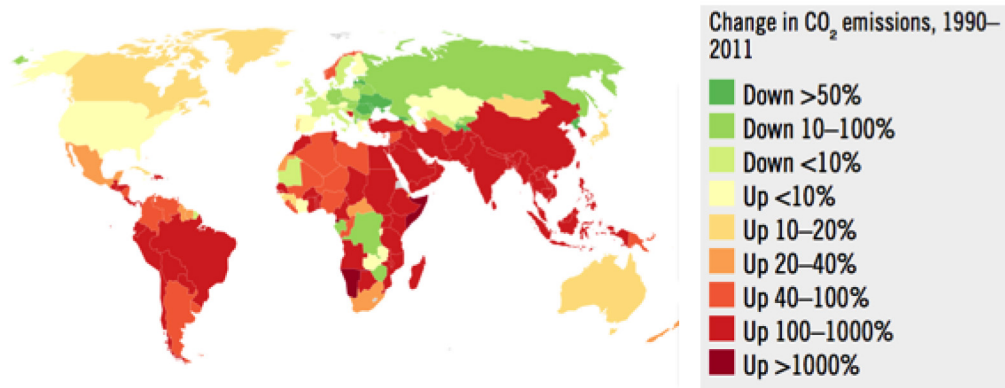
In order to keep global warming under the critical threshold of two degrees centigrade, the IPCC (the foremost international group of experts on climate change, founded in 1988 and awarded the Nobel Peace Prize in 2007) calculates that the atmosphere can “bear” a maximum of 790 Gigatonnes of CO₂, 515 of which (65%) have already been emitted. Therefore, man can emit a further 275 gigatonnes before the shared objective of 2°C is rendered irrelevant. And at the current emissions rate of nearly 10 Gigatonnes per year, this leaves us with a truly limited timescale for action.

Yet although taking action is a necessity and our duty, the manner in which we do so is by no means a given.

Copenhagen 2009 showed how international mobilisation and media attention are necessary but insufficient elements to ensuring successful negotiations.

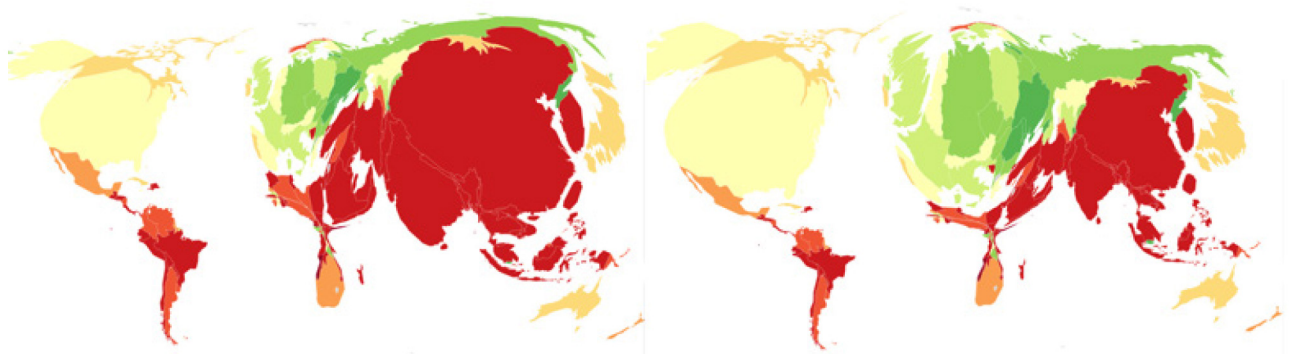
From this perspective, Paris has an added element of both hope and concrete risk: the decision to abandon the logic of forced, artificial parity between all 192 signatories to the Rio Convention.

OECD countries, the United States and the European Union, small islands in the Pacific, China, India, Russia, Sub-Saharan African countries and developing nations in Latin America have historically contributed to the greenhouse effect to profoundly differing extents. Also different is the impact climate change is having on these countries; it is something of a paradox that the countries that suffer most from the effects of climate change are the same countries that have contributed to it the least. They are also the most vulnerable countries.



The above info-graphic depicts the world and uses darkening tones of red to indicate the countries whose CO₂ emissions have increased between 1990 and 2011, while tones of green are used to denote countries whose emissions have decreased. Yet this info-graphic alone risks giving a distorted view of the responsibility each individual country has for climate change. The two info-graphics that follow alter the borders of countries on the basis of their current contribution (on the left) and cumulative contribution between 1850 and 2011 (on the right) to global CO₂ emissions: the borders expand when the country’s contribution to carbon dioxide emissions is disproportionate and contract when the contribution is marginal.

By comparing the two info-graphics, it becomes evident that China and India, for example, now represent the first -and third- largest contributors of greenhouse-gas emissions; yet they have an historical responsibility which is significantly lower than that of the United States and Europe and comparable to that of Russia¹. Moreover, the marginality of Africa and Latin America in terms of historic greenhouse-gas emissions is laid bare.



These considerations are the basis for the difference in approach to the negotiations after the failure of Copenhagen and the subsequent recent introduction of INDCs (Intended Nationally Determined Contributions), which publically record the commitments individual countries intend to sign up to in Paris to fight climate change.

The INDCs presented up until now account for, according to the calculation method used and source, 59.5% (WRI²), 70% (Christina Figueres, Executive Secretary UNFCCC³) and the least realistic estimate of 85% (internal sources at the British government⁴) of global greenhouse-gas emissions.

As is evident from these estimations, without common structures and elements (the reference year used to quantify the proposed emissions reductions varies, if it is specified at all; the sectors of the economy involved vary; the measurement methods vary; data is almost never realistically verifiable) INDCs cannot easily be compared and are difficult to measure against the general 2°C objective. In view of this, the technical bodies of the United Nations will meet on 1 November for the arduous task of homogenising the commitments of the individual countries ahead of the now-imminent summit in December.

Moreover, the INDCs include commitments that are often too generic and non-legally-binding, unless this is addressed in what would be an important achievement by the Paris COP. These commitments will then have to be applied, monitored and verified using measures still to be defined and made public. On this issue it is worth remembering that merely defining the functioning mechanisms necessary for the implementation of the Kyoto Protocol took four years (between 1997 and 2001), followed by another four years to bring it into force (in 2005) and another three years to launch the first commitment period (2008-2012). With the current rate of emissions, we do not have the same amount of time.

Not even the most optimistic analyses of the current INDCs consider them sufficient to hitting the global 2°C target. Christina Figueres herself stated that even if the current INDCs are fully translated into concrete actions (something which is by no means for certain, as we have already established), they would only limit global warming to an average increase of 3°C. This scenario, largely confirmed by the estimates of a 2.5°C increase published by the British government, is an insufficient figure and would constitute a forerunner to the “*dangerous human interferences with the climate system*” that must be avoided at all costs.

On the other hand, if the INDCs really are translated into concrete action, the process would at least demonstrate the ability for the 63 countries to work together to avoid the catastrophic temperature increase of 5°C by 2100, which a *business as usual* strategy would inevitably lead to.

1 WRI data produced by *The Guardian*

2 <http://cait.wri.org/indc/>

3 <http://uk.reuters.com/article/2015/09/15/us-climatechange-summit-pledges-idUKKCN0RF23C20150915>

4 www.theguardian.com/environment/2015/sep/16/paris-climate-summit-pledges-wont-avoid-dangerous-warming-say-uk-and-un

The Paris summit falls in the year that the USA's National Oceanic and Atmospheric Administration (NOAA) identified, with 97%⁵ probability, as the hottest year on record, eclipsing 2014. But the Paris summit also falls in the year that has probably seen the greatest level of political debate between those in favour and those against a fight against climate change. Pope Francis' speech to the US Congress; the important agreement between China and the United States, which should be confirmed during Xi Jinping's upcoming visit to New York and Washington; the strong disaccord between the Obama administration and the Republican parliamentary majority; the sceptical line of the Australian government (though reversed with the recent change of leadership); the caution of big countries such as India and Brazil; the reconsiderations of the Japanese and Canadians: these tensions are all reflected in the European Union's haste to declare that Paris will be only one step in the journey and not the realisation of an objective.

At least one other element –finance– played a pivotal role in the difficult nature of the pre-negotiations held in Bonn up until 4 September and has contributed to the definition of an even more gruelling forecast of the outcomes of Paris COP21.

This topic was widely discussed in Bonn, with opinions often split between blocks of countries. On the one hand, the developed countries underline the need to expand the number of donor countries (of which they are certainly part) and emphasise the role of the private sector, as if this could lead to a reduction of their economic duties. On the other hand, the developing countries reiterate the need for quantitative commitments that honour the promise of mobilising 100 billion dollars for the climate every year by 2020. In truth, only a little over 10 billion dollars has been mobilised in total thus far, but this is not even an official figure and on 9 October in Lima a joint meeting between the World Bank and the International Monetary Fund will be held to try to clear up matters.

If the overall financial endowment is uncertain, the tools to invest it in the necessary areas are the subject of even greater debate. Probably, the operative tools already in place for the management of financial resources in the fight against climate change (Global Environment Facility and Green Climate Fund) will remain in place, but there have been hypotheses as to the creation of new, more effective tools. Yet the creation of new financial tools would nonetheless require a very complex formal process. Also uncertain is the future of the Adaptation Fund, a legacy of Kyoto: some nations that never ratified the Kyoto Protocol are now concerned in a new agreement and, even in this case, there are complex legal options under consideration.

The pre-negotiations, which will resume in Bonn on 19 October, must tackle another important aspect linked to finance: the amount of money (for the most part virtual, at this moment in time) to divide between mitigation and adaptation. This aspect too is now subject to easily imaginable discords between blocks of countries.

One source of hope is provided by cities, which on 22 September will meet in Los Angeles to announce their contribution to the reduction of greenhouse-gas emissions; among the cities involved are Seattle, which is aiming for carbon neutrality by 2050, and ten cities in China, including Beijing, which will commit to ensuring emissions reach a definitive peak in 2020⁶.

5 <http://www.ncdc.noaa.gov/sotc/summary-info/global/201508>

There has also been mobilisation from many global private companies who, aware of the importance and irreversibility of the green growth process that the fight against climate change has triggered, are putting their names to appeals and petitions. The most recent move is the support of companies of the calibre of Ebay, Nestlè, Levi-Strauss, Unilever, L'Oreal, SunEdison and others for Obama's Clean Power Act and for the prospect of an effective, binding global agreement.

On the other hand, the European Union, which is seeing the gradual marginalisation of its role as the leader of the global climate agenda (European greenhouse-gas emissions have reduced from 19% of the global total in 1990 to 11% in 2013, with this predicted to fall again to 4-5% in 2030), has not yet been able to harness this positive momentum to bring about significant change in its energy and economic system. Indeed, direct or indirect support for fossil fuels costs European citizens and industries (who pay two and three times more than their US counterparts for electricity and gas respectively), hundreds of Euros every year⁷. At the same time, the objective announced by President Juncker to link the European nations via common energy infrastructure and harmonised systems –the Energy Union– capable of generating know-how and competitiveness, private investment, emissions reductions, a significant decrease in the price of energy and an increase in energy security and independence, has so far seen the extremely modest investment of just €6bn and an objective established of 10% transnational electrical interconnection by 2020 (not a huge way off the current interconnection level).

If, in topics of strategic importance to energy planning, Europe is a victim of the positions of countries like Poland, whose energy and economic system is based on carbon (to the point that they are pushing for Europe's unitary position at the Paris negotiations to acknowledge emissions reductions obtained outside the confines of the Union, a procedure that has in any case demonstrated several flaws in recent years, rather than focus on achieving these domestically via technological and technical innovation), the question of what courage and what harmony of intentions the Union will be able to draw on to tackle growing climactic iniquity and the next wave of climactic migrants that the worsening of the greenhouse effect will inevitably provoke springs to mind.

Paris is thus a crossroads for the world. And it is a crossroads also for the authority and credibility of a Europe that, under the stewardship of the Hollande government, will find itself having to face up to either the success, the umpteenth deferment or the failure of COP21.

6 http://www.nytimes.com/2015/09/16/us/us-and-chinese-climate-change-negotiators-to-meet-in-los-angeles.html?_r=0

7 <http://www.imf.org/external/pubs/ft/survey/so/2015/new070215a.htm>
and <http://www.oecd.org/site/tadffss/>