

COP21 : AN OPPORTUNITY TO SPEED UP THE GLOBAL ENERGY TRANSITION

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Climate change is the **defining challenge of the 21st century**, bearing both immense threats for mankind and the **opportunity to foster the transformation of our energy systems** in a way that is respectful of our environment, human health and human dignity.

The energy transition has already started. What matters now for COP21 is to send strong signals to speed-up this transition. After COP21, **the European Union ought to build its Energy Union** in a way that effectively delivers on its greenhouse gas emission targets (-40% by 2030), and foster the global energy transition.

1. Climate change and the energy transition have already started

Science is clear, climate change has already started. Temperatures are already rising: **2014 was the warmest year ever recorded in human history** and **2015 has been even warmer so far**.

Climate change impacts are already acute. They increase **international security risks**, e.g. **droughts** played a catalyst role in the run-up to the Syrian civil war. They also have **deep economic consequences**, e.g. **costs of the 2012 hurricane Sandy were 30% higher** in New York because of climate change.

It is time to face reality. Climate action is no longer an altruistic act that should be made 'for our children'. **Climate action is now about enlightened self-interest, addressing threats and creating jobs.**

Decisive action therefore ought to be taken now, and with a long term vision. The long-term vision is to change our societies in such a way that human activities will emit net-zero greenhouse gas emissions. To do this, we must **fundamentally re-think and re-build our energy and agricultural/forest sectors** as **they respectively account for 75% and 25% of human greenhouse gas emissions**.

Luckily, in the energy sector, **the energy transition has already started**. This is a transition from an old world towards a new one. The old world is the one of high-carbon energy systems relying on huge amount

of coal, oil and gas. The new world is the one of low-carbon energy systems that use energy efficiently and rely more on renewable energy sources.

This energy transition brings considerable economic benefits. The low-carbon economy already provides **millions of quality jobs for people** all over the world. Thousands of financial investors and businesses are adapting their business models for the energy transition; not because they suddenly became benevolent, but because there is money to be made. This is happening all over the world, from Europe to Brazil, from the **US** to **India**.

More importantly, millions of individuals have already taken actions, retrofitting their houses, choosing cleaner modes of transportation etc. Even the **Catholic** and **Muslim** religious authorities encourage their 2,6 billion believers to live a more climate-friendly life.

Those bottom-up initiatives now need to be encouraged by top-down signals coming from the UN, the G20 and COP21.

2. COP21 needs to send strong signals to speed up the energy transition

The energy transition will not be done by politicians. It will be done by people, communities and businesses. The real question world leaders will answer during COP21 is therefore simple: **speed-up or slow-down the energy transition?**

Three key decisions can provide a clear signal:

- **A progressive and socially acceptable phase-out of fossil fuel subsidies.** A major issue of COP21 will be to find 100 billion USD every year for the **Green Climate Fund**, to help poor countries mitigate and adapt to climate change. Some of this money can be found if fossil fuel subsidies are phased out as they cost **550 billion USD of public money** and trigger **economic losses of 5.000 billion USD** (i.e. an amount greater than the GDP of Brazil and India combined).

- **Carbon price.** Pricing carbon will speed-up the emergence of the low-carbon economy. While the form of the carbon price system (e.g. market vs. taxation) will remain a national prerogative, there can be an **international non-binding declaration on carbon pricing**. This is more feasible than ever as it is **supported by 74 countries**, including China; and more than 1.000 businesses including **Engie**, H&M or Unilever. As carbon pricing is out of COP21 discussions, it must be part of an international declaration during or soon after COP21.
- **An explicit zero-emissions objective.** The long-term objective is a world where human activities emit net-zero emissions. This objective has to be set in stone, to make everyone understand that there is no coming back to the old world of inefficient high-carbon energy systems.

For those signals to deliver their full potential, the COP21 agreement needs to be as politically binding as possible, contain an effective monitoring process as well as a review clause to increase ambitions every five years.

- Setting a **genuine carbon price in the EU itself**. The EU's dysfunctional carbon market (EU-ETS) should be fixed and *de facto* taxation measures, such as a **floor-price**, should be considered. Member States should also harmonize their **energy taxation schemes** to make the energy transition more cost-efficient. Finally, **the EU should start to care about embedded carbon**: i.e. the emissions of goods produced outside of the EU and consumed within it.
- **Research & Innovation.** EU greenhouse gas emissions currently account for only 11% of global emissions, and they are estimated to **represent only 6% of the world total by 2050**. The most significant climate impact the EU can have therefore rests outside of EU borders. Developing cutting-edge technologies will **boost Europe's competitiveness and creates jobs while allowing everyone to engage further into the energy transition**. New technologies will be more easily deployed if **social innovation is also well-supported**.

3. After COP21: building an Energy Union that fosters the global energy transition

As the oldest industrialised continent, Europe has a historical and moral responsibility for climate change. Following-up on a **2010 proposal by the Jacques Delors Institute**, the European Union is now building its Energy Union. This is the opportunity to make the EU a more proactive actor of the global energy transition by focusing on three core elements:

- **Greening all EU and Member States' public support**, invested both within and outside. As a general rule, any publically supported project should mitigate its climate change impacts while being adapted to a +2°C world. In the case of the electricity sector, the EU should, just like the **European Investment Bank**, ensure that no public support whatsoever be given to high-carbon ways to generate electricity.

One should have reasonable expectations regarding COP21. **World leaders are not omnipotent and most of them largely misunderstand what is at stake here**. Many see COP21 as they would see any other international gathering: a competition to separate the leaders from the followers of today's world. They thus seem to forget that we all live on a single planet and that, one way or the other, we will all lose if COP21 ends up being a failure.

The real solutions are already there. They came and will continue to come from the ground, from individuals, researchers, NGOs, local authorities and businesses. At and after COP21, **world leaders need to send clear signals that they want the energy transition to happen; and the sooner the better**.

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