# Position paper on post-2020 EU climate and energy targets

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## Summary

CAN Europe calls upon the European Union (EU) to recognise that its commitment to making a fair contribution to the effort to avoid dangerous climate change means that it should reduce its domestic greenhouse gas emissions by at least 95% by 2050 below 1990 levels. Only the upper end of the EU's 2050 commitment to reduce emissions by 80% to 95% will allow the EU to make a fair and safe contribution to keeping global average temperature rise below 2°C.

The greenhouse gas emission reduction pathway for the EU will therefore need to move well beyond the 40% domestic emission reductions by 2030 proposed by the European Commission and must instead ensure at least 55% reductions by 2030, as compared to 1990. Such a reduction is not only feasible , but also more in line with reality - it envisages an annual reduction of 2%, in line with the average reductions of the last five years.

For the EU to achieve this emission reduction target, binding national targets for energy savings and renewable energy for 2030 need to be agreed, at the level of at least 40% energy savings and at least 45% renewable energy production.

These EU-wide targets will have to be divided upon all individual Member States on the basis of fair effort-sharing models, with financial support being provided to those countries that have less capacity to invest in low-carbon development.

Finally, a reduction of domestic emissions will not be the only contribution that will be expected from the EU to phase out global greenhouse gas emissions. The EU will need to take on, within the new international climate treaty, an obligation to take a fair share of the effort to reduce global emissions, through domestic emission reductions and provision of financial and other support to poor countries.

## At least 95% by 2050

In 1996 the EU agreed to keep global average temperature rise below 2°C[1]. The IPCC Fourth Assessment Report in 1997 indicated that in order to have a reasonable chance of keeping temperature rise between 2° and 2.4°C, global emissions would need to be halved by 2050; and developed countries as a group would need to reduce their emissions by 80% to 95% by 2050[2]. The European Council recognized the need for an 80% to 95% emission reduction by 2050 in several Council conclusions[3]. Given the low level of certainty that an 80% to 95% reduction

1 European Union Council of Environment Ministers (1996) 1939th Council Meeting. Luxembourg. 25-26 June 1996: *"the Council believes that global average temperature should not exceed 2 degrees above pre-industrial levels"*

2 IPCC (2007) Climate Change 2007: Mitigation of Climate Change. Chapter 13: Policies, instruments, and co-operative arrangements.

3 European Council (2011) Conclusions. 4 February 2011: "*Reaching the EU objective, in the context of necessary reductions according to the IPCC by developed countries as a group, of reducing greenhouse gas emissions by 80-95% by 2050 compared to 1990 as agreed in October 2009 will require a revolution in energy systems, which must start now.*"

would actually allow the world to stay below 2°C, applying the precautionary principle would mean the EU would need to opt for achieving the upper end of this target.

Furthermore, in December 2010 the EU committed to consider, within the UNFCCC framework, achieving an even more ambitious target of limiting temperature rise to 1.5°C, a target which is supported by the majority of the world's governments[4]. Keeping the option open to adopt a global target to stay below 1.5°C temperature rise will also mean the EU needs to aim to achieve the upper end of the 80-95% reduction by 2050.

In addition, UNEP's Bridging the Emissions Gap 2012 report [5] indicates that to have a likely chance of keeping temperature rise below 2°C, the world will need to go beyond halving emissions by 2050. For this to happen, developed countries, including the EU, will need to reduce their 2050 emissions towards the upper end of the 80 to 95% range[5].

**Therefore CAN Europe calls upon the EU to adopt a pathway to reduce domestic emissions by at least 95% by 2050, as compared to 1990.**

## EU's responsibility

On top of ambitious emission reductions at home, the EU will, as agreed in the UN Framework Convention on Climate Change (UNFCCC), have to take an international obligation to take its fair share of the effort to reduce global greenhouse gas emissions. Based on its historic responsibility and its capacity to act, the EU's international target will not only comprise an ambitious domestic emission reduction target but should also include financial and other support to climate action in poor countries. The level of this target should be developed in line with the latest scientific considerations as well as the agreements on effort-sharing within the UNFCCC.

Existing effort-sharing frameworks provide suggestions for the EU's 2030 target, which go well beyond the 55% domestic target, running into 80% or more[6]. CAN Europe urges the EU to adopt both a domestic emission reduction target as well as an international target that will be in line with the EU's fair share of the effort to stay well below 2°C.

## At least 55% domestic greenhouse gas emission reductions by 2030

A logical pathway between actual greenhouse gas emissions (-15% below 1990 levels in 2010) and a target of at least -95% in 2050 envisages an average annual reduction of 2% (as compared to 1990 emissions).

Such a pathway is not only logical but it also reflects reality, as average annual emission reductions of the last five years have seen reductions slightly above 2% for both the EU-27 as well as the EU-28[7]. Moreover, such a trajectory is in line with the European Commission's 2050 Low-Carbon Roadmap that also foresees a 2% annual reduction in the period after 2030[8]. The European Commission foresees fewer reductions prior to 2030. By

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4 UNFCCC (2010) Decision 1/CP.16. The Cancun Agreements: Outcome of the work of the Ad-Hoc Working Group on Long-Term Cooperative Action under the Convention: *"Also recognizes the need to consider, in the context of the first review, as referred to in paragraph 138 below, strengthening the long-term global goal on the basis of the best available scientific knowledge, including in relation to a global average temperature rise of 1.5 °C"*

5 UNEP (2012) Bridging the Emissions Gap Report 2012. A UNEP Synthesis Report.

6 EcoEquity, Stockholm Environment Institute e.a. (2008) The Right to Development in a Climate Constrained World. The Greenhouse Development Rights Framework; Friends of the Earth EWNI (2011) Reckless Gamblers. How politician's inaction is ramping up the risk of dangerous climate change; Ecofys (2013) The Next Step in Europe's Climate Action: Setting Targets for 2030; Stockholm Environment Institute (2009) Europe's Share of the Climate Challenge. Domestic Action and International Obligations to Protect the Planet.

7 *Greenhouse gas emissions in the EU27 fell from 91.79% in 2006 to 81.63% in 2011; and in the EU28 fell from 93.49% in 2006 to 83.15% in 2011.*

8 European Commission (2011) A Roadmap for moving to a competitive Low Carbon Economy in 2050. *The roadmap provides reduction milestones of -40% in 2030, -60% in 2040 and -80% in 2050.*

charting this trajectory, the Commission does the opposite of scientific recommendations to make deep reductions as soon as possible so as not to exhaust the very limited carbon budget and keep costs under control.[9]

Such a pathway is also feasible as several reports and scenarios have highlighted the technical potential to reduce emissions, in particular in the energy sector[10].

**CAN Europe therefore calls upon the EU to adopt a binding target of at least 55% GHG emission reductions by 2030, as compared to 1990 emissions.**

## At least 40% energy savings by 2030

Given that the energy sector accounts for the bulk of Europe's emissions (77% of 1990 emissions and 80% of 2010 emissions), the deep emission reductions needed will only be possible if the EU takes drastic measures to reduce energy consumption. A binding energy savings target will be needed to drive energy efficiency measures. Such a target would provide the needed policy certainty for investors, increase the EU's energy security and reduce fuel import costs, which accounted to over 400bn€ in 2012[11].

The studies referred to above show the large potential for reducing energy consumption in Europe. In order to maximally tap this potential and avoid lock in effects, EU Member States will not only need to fully implement the Energy Efficiency Directive, but also plan for the longer term to achieve further energy savings well beyond the current indicative 20% in 2020.

**CAN Europe calls upon the EU to adopt a binding energy savings target of at least -40% as compared to 2005 consumption levels and reduce total primary energy consumption to around 1.000 Mtoe in 2030.**

## At least 45% renewable energy in 2030

Even when energy consumption is strongly reduced, the full optimal deployment of renewable energy will be needed. Informed by the studies referenced above, CAN Europe calls upon the EU to set a binding target to provide, by 2030, at least 45% of total final energy from renewable energy sources. This not only reflects the current potential of renewable energy technologies but also the potential of emerging technologies that will become operational on a large scale during the next decade.

**CAN Europe therefore calls upon the EU to adopt a binding renewable energy target of at least 45% of final energy demand, producing around 360 Mtoe final energy from renewable sources by 2030[12].**

The renewable energy target should cover all energy sectors but should not be divided into sectoral targets. It should ensure that all forms of bioenergy are subjected to a EU-wide binding sustainability framework and that the use of bioenergy should be limited to sustainable available levels, through the establishment of a volume cap.

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9 IPCC (2013) Climate Change 2013. The Physical Science Basis.

10 Fraunhofer ISI (2012) Concrete Paths of the European Union to the 2°C Scenario; Greenpeace/EREC (2012) Energy R[evolution] scenario for EU-27; Ecofys/WWF (2013) Re-energizing Europe. Putting the EU on track for 100% renewables; Öko-Institut (2011) The Vision Scenario for the European Union. 2011 Update for the EU-27.

11 International Energy Agency (2012), World Energy Outlook

12 Given the substantial larger penetration of renewable energy in the power sector, and an increased conversion efficiency in the heating and cooling sector, we are assuming that the conversion factor from primary to final energy will rise from the current 70% to 80% in 2030. Based on the energy demand referred above this would bring final energy demand to 800 Mtoe in 2030.