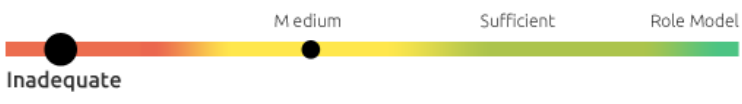
CLIMATE ACTION TRACKER

EU

History: 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011

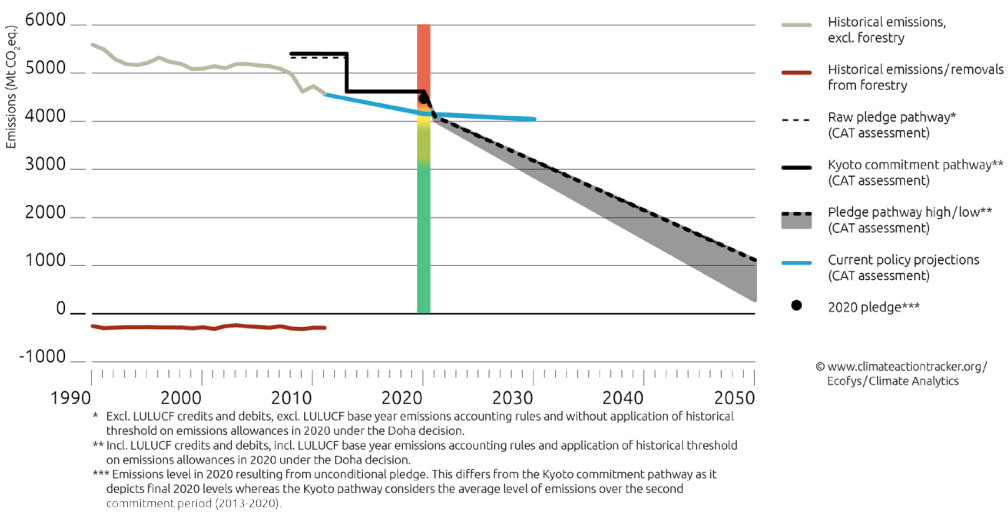
Page last updated: 20th November 2013

Rating



Assessment

The EU has adopted a target of reducing average annual emissions within the second commitment period of the Kyoto Protocol by 20% compared to Kyoto base year emissions. Currently implemented policies put the EU on a good trajectory towards meeting this target. In fact, projections indicate that no additional policies between now and 2020 would be required for the EU to meet their joint target. However, policies fall well short of bringing the EU on a trajectory towards meeting their 2050 objective of reducing emissions by 80-95% compared to 1990 levels.



* Excl. LULUCF credits and debits, excl. LULUCF base year emissions accounting rules and without application of historical threshold on emissions allowances in 2020 under the Doha decision.
** Incl. LULUCF credits and debits, incl. LULUCF base year emissions accounting rules and application of historical threshold on emissions allowances in 2020 under the Doha decision.
*** Emissions level in 2020 resulting from unconditional pledge. This differs from the Kyoto commitment pathway as it depicts final 2020 levels whereas the Kyoto pathway considers the average level of emissions over the second commitment period (2013-2020).

Pledge description

The EU27 target for the second commitment period under the Kyoto Protocol is to reduce emissions by 20% below 1990 levels. In May 2012, the EU27 first submitted a provisional QELRO level of 80 for the second commitment period of the Kyoto Protocol, to be fulfilled jointly by the European Union and its Member States. This QELRO is also inscribed in the amendments agreed in Doha in December 2012. This means that EU27 joint average yearly emissions during the period of 2013-2020 are proposed to be 80% of 1990 levels.

The current target for the European Community (EU15) in the first commitment period under the Kyoto Protocol is set at a reduction of 8%. Through the expansion of the European Union the aggregate effective Kyoto Protocol target (2008-2012) for the EU27 is estimated to be -7.7% relative to 1990 emission levels.

Under the Copenhagen Accord the EU27 proposed to decrease emissions by -20 to -30% relative to 1990 by 2020 and by -80 to -95% below 1990 by 2050. The EU announced its target of -30% of 1990 emissions by 2020 as part of a global agreement post-2012 provided that other developed countries commit themselves to comparable efforts and developing countries contribute according to their capabilities.

EU clarified that its accounting rules for this post-2012 target are more stringent than the current rules under the Kyoto Protocol:

Kyoto Protocol	
Member of KP CP1 (2008-2012)	yes
Member of KP CP2 (2013-2020)	yes
KP CP1 target (below base year)	-8%
KP CP2 target (below base year)	-20%
Convention	
Copenhagen pledge	-20%/-30% by 2020
Reference year for pledge	1990
Conditions (for higher pledge level)	Developed countries commit to comparable efforts and developing countries contribute according to capabilities.
INDC	
Domestic reduction of at least 40% by 2030	
Reference year for INDC	1990
Economy wide GHG coverage	
National goals	
Long-term goal(s)	80-95% by 2050

- A single 1990 base-year is used, not allowing for different base years for F-gases or Economies In Transition as under the Kyoto Protocol.
- It does not recognize surplus AAUs from the first commitment period of the Kyoto Protocol.
- Emissions from international aviation are included in the target and the legislation foresees the need to include international maritime emissions, if no progress is achieved to include these at the international level.
- Emissions and removals from LULUCF are at present not included in the achievement of the reduction target, but may be at a later stage given the legislation foresees already that accounting rules should ensure permanence and environmental integrity.

EU leaders endorsed the objective of reducing Europe's greenhouse gas emissions by 80-95% compared to 1990 levels as part of efforts by developed countries as a group to reduce their emissions by a similar degree (DG Climate 2013).

In addition, the EU supports proposals to remove emissions from natural disturbances and to count removals from harvested wood products. This has not been accounted for here, but could lead to higher credits (or lower debits). However, the inclusion of international aviation into the European emissions trading scheme is the first effort to regulate emissions from this sector globally. The impact of this on EU27's 2020 target was not quantitatively evaluated here.

Current trend description

The future projections of currently implemented policies continue the past downward trend, although with much lower reduction rates per year. Until 2020 emission are projected to decrease around 0.3% per year, after that by 0.1% per year until 2030. Emissions in 2020 are estimated between 4,150 $MtCO_2e$ and 4,165 $MtCO_2e$. In 2030 they are projected to be between 4,034 $MtCO_2e$ and 4,049 $MtCO_2e$.

Emissions in the EU27 have been on a decreasing trend since 1990. In 2011, emissions were 18.3% below 1990 levels. After a steep decline in 2009 due to the recession and a spike upward following the recovery in 2010, they dropped again in 2011.

Current trend projections include all major EU policies implemented, including the EU ETS, the Effort Sharing Directive and a wide range of other EU wide regulations influencing GHG emissions. It also includes the most important national policies. A list of the most important policies covered by the projections is provided in Table 13 below.

The most recent relevant policy development in the EU is the adoption of the Energy Efficiency Directive (EED) in October 2012 (European Union, 2012). The main features of the Directive are:

- Introduction of an indicative energy efficiency target for all Member States with the obligation to report this target to the Commission who will then review the overall adequacy.
- Obligation to renovate 3% of publicly owned and occupied buildings to minimum national energy performance standard and development of a strategy to promote renovation in the overall building stock.
- Obligation for public authorities to procure only high efficiency products, services and buildings subject to cost-effectiveness and other restrictions.
- Obligation of utilities to achieve energy savings of 1.5% per year in their customers' energy use until 2020.
- Mandatory energy audits for non-SME companies and support schemes to promote energy audits in SMEs and private households.
- Obligation to provide individual metering and billing based on actual consumption for electricity, gas, district heating/cooling and hot water for households "in so far as it is technically possible, financially reasonable and proportionate".
- Promotion of efficiency in heating and cooling including the obligation to carry out a comprehensive assessment of the potential for the application of high-efficiency cogeneration (CHP) and efficient district heating and cooling. This includes provide priority or guaranteed access to the grid of electricity from high-efficiency cogeneration.
- Obligation on energy network regulators to identify efficiency options and a time table for their implementation.
- Obligation to promote Energy Service Companies through provision of information, removal of barriers and other measures.

Based on the original impact assessment published in 2011 which analysed a number of different options proposed for the Directive we estimate effects to be between 82 and 97 $MtCO_2e$ by 2020 and assume that the effects then stay constant until 2030.

Date of pledge: May 2012

Assumptions

Pledge

The methodological clarifications related to the Copenhagen pledge mentioned above are important, since they lead to differences in effective emissions for the pledge under the Convention and for the Kyoto target. The most important element is the different starting point for emissions under the Kyoto Protocol and under the Convention. These differences explain why both the 20% decrease from 1990 by 2020 as pledged under the Convention and the Kyoto target to reduce average emissions of 20% below base year over the second commitment period arrive at almost the same emission levels by 2020. This is illustrated in the following figure.

Differences between Kyoto QELRC and Copenhagen pledge for the EU

We calculated EU's LULUCF accounting quantities for the period 2014-2020 for afforestation, reforestation and deforestation using the current Kyoto rules, and for forest management using a net-net approach with a projected reference level for 2014-2020. Some EU countries have included a background level for natural disturbances.

The EU provided historical data on forest management and afforestation, reforestation and deforestation data for many of its member states.

Where members did not submit data it was - wherever available - compiled using the time series data from the national inventories (CRF 2013).

Current trend

The current trend projections are based on the EEA projections published in October 2012 (European Environment Agency, 2012). EEA projections for 2025 and 2030 are based on Member State projections where available. For the 2012 projections this was the case for 12 countries. The others projections were done using the relative trends from the Commissions scenarios based on the PRIMES and GAINS models.

The assumption is that the EU policies covered in the Energy Roadmap scenarios are covered in the respective projection scenarios (with existing / additional measures). The policies included in Table 11 are therefore the policies included in the EU Energy roadmap (European Commission, 2011a). We assume the existing policies scenarios are based on the 'Reference Scenario'. Neither the Energy Roadmap scenarios nor the EEA projections include estimates for the Energy Efficiency Directive as adopted. The effects were estimated based on the 2011 Impact Assessment (European Commission, 2011b).

From the different options quantified within the impact assessment, those that most closely match the finally decided measures within the Directive were identified with their respective impact. This was assessed with relation to expected overlap with other measures/policies included in the underlying policy scenario and with other measures within the package, and towards the expected effectiveness of measures. This assessment is reflected in a correction factor per measure. The adjusted minimum and maximum values are then added up to the overall effect.

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