

# Air pollution, greenhouse gas emissions: monitoring mechanism and implementation of the Kyoto Protocol

2003/0029(COD) - 07/10/2011 - Follow-up document

In accordance with the requirements of Article 5 of Decision 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol, the Commission presents a report on the progress towards achieving the Kyoto objectives.

The main findings of the report are as follows:

**On track to reach the Kyoto target, 2008-2012:** in 2009, total EU-27 greenhouse gas (GHG) emissions without emissions and removals from Land Use, Land Use Change and Forestry (LULUCF) were 17.4% lower compared to 1990 levels. Emissions decreased by 7.1% compared to 2008 while during the same period the Gross Domestic Product (GDP) in EU-27 dropped by around 4% as a result of the economic recession.

Additionally, according to the provisional 2010 data, EU-15 and EU-27 GHG emissions changed by 2.3% in 2010 compared to 2009. Based on these estimates, EU-15 emissions are 10.7% below the base-year level. EU-27 2010 emissions are approximately 15.5% below the 1990 level. The change of GDP in 1990-2010 was 39% for EU-15 and 41% for EU-27, and around 1.8% between 2009-2010.

Under the Kyoto Protocol, the EU-15 has agreed to reduce its GHG emissions by 8% by 2008–12 compared to base year levels. Based on the latest available inventory data of 2009, total GHG emissions in the EU-15 have fallen for the sixth consecutive year and were 12.7% below base year emissions without LULUCF. While since 1990, the EU-15 economy in terms of GDP has grown significantly by almost 37%, GHG emissions in EU-15 have declined.

In 2009, EU-15 GHG emissions decreased significantly, by 6.9% compared to 2008 well exceeding the drop of EU-15 GDP of around 4% as a result of the economic recession, which proves that in 2009, the deep economic crisis in the Union did not stall the transformation of the Union's economy towards a low carbon economy. The rate of improvement in GHG intensity remained at the same level as in the years before.

All in all, **projections of total GHG emissions indicate that the EU-15 is well on track to reach its Kyoto target. The estimate shows that the target is likely to be overachieved.**

**EU-12:** aggregate emissions based on existing domestic policies and measures from the 12 Member States which joined the Union after 2004 are projected to slightly increase compared to 2009 and will be about 38.7% below their base year levels in the Kyoto commitment period. Slovenia is the only Member State out of the EU-12 that intends to invest in Kyoto mechanisms. The Czech Republic, Hungary, Latvia, Lithuania, Poland, Romania and Slovenia intend to account for carbon sinks. The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia plan to sell part of their AAUs.

**New measures to reach the Union's ambitious 2020 target:** the climate and energy package adopted in 2009 provides an integrated package of policies to tackle climate change until 2020 and beyond. From 2013 onwards the total Union's effort to reduce greenhouse gas emissions by 20% by 2020 compared to 1990 will be divided between the EU ETS and non-ETS sectors. As noted in the Commission's Annual

Growth Survey 2011, in the field of climate mitigation **the existing and planned measures are not yet sufficient to reach the 2020 headline targets**. Therefore, many Member States need to make additional efforts to meet their obligations under the Effort Sharing Decision. According to recent GHG projections estimates only 11 Member States are expected to meet their commitments with policies already in place, further 7 Member States will deliver on their targets when their additional policies and measures deliver as expected. The remaining 9 Member States need to design additional policies in order to accomplish their targets. Projections show that the cut in Union's GHG emissions (with measures already in place) would be at the level of 15.3% between 1990 and 2020. However, as regards EU-27, the estimates show that the overall non-ETS target would be delivered. This analysis does not yet take into account the use of credits from JI and CDM projects.

In order to pave the way for a smooth compliance with the 2020 target, **it is imperative that Member States not only ensure timely delivery of emissions reductions of existing policies and measures but also accelerate the development and full implementation of their additional policies and measures** as well as consider other options including the use of international credits.

**Situation in candidate countries:** between 1990 and 2009 Croatia's GHG emissions decreased by 8%, and compared to 2008 they decreased by 7%. However, according to the GHG projections included in the 5th National Communication, Croatia is projected to face difficulties with achieving its Kyoto target with the current set of policies and measures.

Iceland's GHG emissions between 1990 and 2009 increased by 35% and in 2009 were 5.4% lower than in 2008. According to the GHG projections included in the 5th National Communication, Iceland is on track to meet its Kyoto target.

In 2009, Turkey's GHG emissions increased by 97.6% and comparing to 2008 increased by 1%. While Turkey is an Annex I Party, it has no GHG target under the current 1st commitment period of the Kyoto Protocol.

An up-to-date inventory of GHG emissions in the former Yugoslav Republic of Macedonia is not available. Between 1990 and 2005 total GHG emissions decreased by around 19%.