

PER CAPITA GREENHOUSE GAS EMISSIONS IN EU-25 COUNTRIES

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Abstract

The European Union is committed to global efforts to reduce the greenhouse gas emissions from human activities. In the first step countries accepted to reduce greenhouse gas emissions by around 5 % compared to 1990 levels, but in the longer-term, global emissions of greenhouse gases will need to be reduced by approximately 70 % and it forces the countries to update national emission inventories each year.

An analysis of per capita GHG emission has been made with 25 member state of EU responsible for about 41 % of total greenhouse gas emissions. Many of the EU countries have greenhouse gas emissions greater than 6 t CO₂-eq/cap. In 2004, the most important sources of greenhouse gas emissions in the EU-25 include energy industries (electricity sector and refineries) (28 %), transport (21 %), industry (without energy sector) (20 %), households and SMEs (17 %), agriculture (10 %) and other sector (4 %). The 15 member states that made up the EU until 1 May 2004 are committed to reducing their combined emissions of greenhouse gases by 8 % from 1990 levels by the end of the Kyoto Protocol's first commitment period (2008–2012). The 10 new Member States are not covered by the EU target but have their own reduction target of 6 % or 8 % under the protocol, except for Cyprus and Malta, which have no targets.

Directive 2003/87/EC established a scheme for GHG emission allowance trading within the community in order to promote reductions of GHG emissions. EU scheme allows companies to use credits from Kyoto's project-based mechanisms, joint implementation (JI) and the clean development mechanism (CDM), to comply with their obligations under the scheme. This means the system not only provides a cost-effective means for EU-based industries to cut their emissions but also creates additional incentives for businesses to invest in emission-reduction projects in developing countries. The transfer of advanced, environmentally sound technologies to other member states and developing nations, gives tangible support to their efforts to achieve sustainable development, but per capita GHG emission data indicate the importance of grouping to share reduction between global regions and countries.

Key words: *greenhouse, gas emissions, EU-countries.*