

Position Paper on Nuclear Energy's Contribution to a post-2012 Climate Policy

In developing a post-2012 climate framework, it is essential to take into account the valuable contribution that nuclear energy makes to the avoidance of greenhouse gas emissions. Nuclear is therefore an important tool – among many – that can be used to reduce CO₂ emissions. All available options, including nuclear energy, should be supported in the international effort to reduce the threat of global warming.

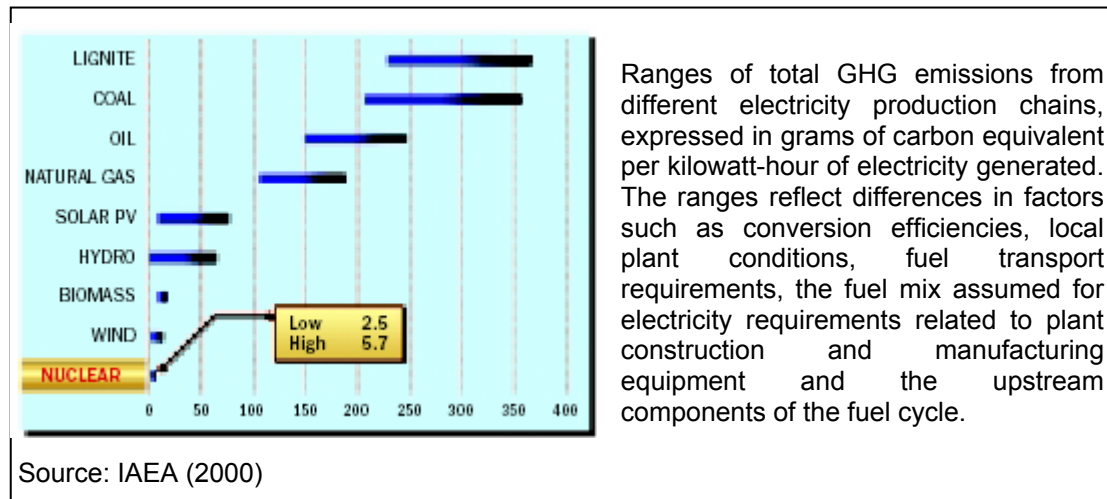
FORATOM, as the voice of the nuclear industry in Europe, makes the following main points in view of the upcoming discussions on a 'post-2012' international climate regime. FORATOM believes:

- * When addressing climate change, we encourage policy-makers to consider zero and low emitting electricity generating technologies, including nuclear energy.
- * The nuclear power sector can play an even greater role in greenhouse gas abatement through the construction of new nuclear plants, plant lifetime extensions and plant upgrades. The Intergovernmental Panel on Climate Change (IPCC) believes that nuclear should continue to play an important role in the overall effort to curb greenhouse gas emissions in the decades to come¹.
- * Nuclear energy should not be penalised in policy mechanisms designed to help address climate change, as it has been in CDM and JI projects and the EU's Linking Directive. All technologies that can help fulfil the purpose of the CDM and JI, as defined in the protocol, should be eligible for use in those mechanisms.
- * The time frame of policy cycles concerning climate change do not coincide with that of the energy sector in which an investment decision is made on a mid- to long-term basis. Current obligations under the Kyoto Protocol and EU Emissions Trading Scheme only look as far ahead as 2012. The absence of certainty regarding future obligations after 2012 creates excessive commercial risk. A long-term view must be maintained.
- * If emissions trading is to be used as a policy measure to address climate change then emissions trading schemes must be structured in a way that provides the long-term certainty that will encourage the use of low carbon technologies, such as nuclear power, as emissions reduction options.
- * All countries have the sovereign right to determine their own development paths and technology needs. They should retain the freedom to choose nuclear as part of their development strategies, without their choices being constrained by an international agreement.

¹IPCC Third Assessment Report - Section 3 'Mitigation' (2001).

Nuclear Energy and Greenhouse Gas Emissions Avoidance

The current use of nuclear energy (accounting for about 16% of the world's electricity generation) avoids the emission of about 2 billion tonnes of CO₂ every year. In the EU as whole, the avoidance levels amount to 704 million tonnes of CO₂ per year, taking into account the current energy mix. By comparison, the EU has a greenhouse gas (GHG) emission reduction target of 405 million tonnes of CO₂ equivalent below 1990 level by 2008-2012. To make savings equivalent to those from the use of nuclear power, all passenger cars in the EU (200 million) would have to be taken off the roads.



Furthermore, nuclear power plants generate electricity with hardly any emission of sulphur dioxide or nitrogen oxides, key agents for acid rain and photochemical air pollution. Thanks to nuclear, emissions of about 4.8 million tonnes of sulphur dioxide and 2.6 million tonnes of nitrogen oxides are avoided each year in the EU.

We need to build upon the current contribution of nuclear energy to meet our environmental objectives. We should maximise the utilisation of our existing nuclear capacity and build new nuclear power plants to meet the significant demand for new capacity that will occur over the next few decades.

Conclusion

Nuclear power makes a major contribution limiting the increase in atmospheric greenhouse gas concentrations in the power generation sector, while enabling access to abundant electricity at a stable and low cost. Any future climate change agreements and policies should establish a framework that encourages the use of nuclear generation as part of the energy mix