

## **Position Paper** **“Reduction of Methane Emissions in the Gas Industry”**

Global climate change led to an intensive discussion about greenhouse gases. The main greenhouse gas is carbon dioxide (CO<sub>2</sub>) but other emissions also contribute to the greenhouse effect. Burning of fossil fuels to provide energy and heat are recognised as significant sources of greenhouse emissions. Natural gas will have a growing role in energy production but is recognized as the fossil fuel with the lowest specific CO<sub>2</sub> emissions per unit energy provided. Natural gas, due to its principal component methane (CH<sub>4</sub>), is itself a potent greenhouse gas which has a global warming potential 25 times that of carbon dioxide. Losses and leakage of natural gas from the European transmission and distribution systems have long been recognised by MARCOGAZ as an issue.

Methane emissions from the natural gas sector in 2005 were however only about 7% of total methane emissions in Europe. Nevertheless the gas industry recognizes that this is a significant figure and therefore the importance of reducing methane emissions in the gas chain. The natural gas industry has taken its responsibility seriously and reduced methane emissions for years by taking very successful measures in this respect including extensive programmes of gas mains replacement. These measures are a very good investment for environmental reasons and bring other benefits of efficiency and cost effectiveness.

Measuring and estimating the real methane emissions is difficult. On the one hand the emissions are sometimes in a range below accuracy of measurement and on the other hand the sources sometimes are difficult to gather. MARCOGAZ has previously developed a methodology to estimate methane emissions to enable all gas companies to verify their quantities and benchmark against each other.

In a new study MARCOGAZ performed an investigation where the methods for measuring and estimating methane emissions in the gas chain, the main sources for those emissions and measures to reduce those emissions are described. The study consists also a number of case studies on practices and technologies adopted by European gas companies to reduce methane emissions. The report shows the success of the European Gas Industry in addressing methane emissions and provides best practise guidance that other companies may learn from or adopt measures to further decrease the methane emissions (the report can be download on MARCOGAZ web site: [www.marcogaz.org](http://www.marcogaz.org)).

It is clearly the responsibility of individual systems operators to adopt these measures in the most cost effective way, best suited to their particular circumstances, and taking full of account of considerations of safety and security of supply.

Through taking these important measures to reduce methane emissions in the gas chain the European Gas Industry is playing its part in reducing greenhouse gas emissions significantly. The information and guidance provided in the report should help other companies follow the lead given by MARCOGAZ and its member companies. The Gas Industry continually developing a proactive and sustainable approach to managing the essential gas infrastructure whilst reducing greenhouse gas emissions and so giving an important contribution to the solution of climate change.