IGU Releases Compelling Study on Urban Air Quality:

Switch to Natural Gas Helps Mega-cities Dramatically Improve Air Quality and Reduce Emissions of GHG and Air Pollutants – Enhancing and Saving Human Lives

Paris/Oslo, 3 December 2015 - The International Gas Union (IGU) today released a report highlighting how the enhanced use of natural gas in energy generation, heating and industry can drastically reduce emissions, mercury and particulate matter, thereby providing enhanced quality of life for virtually everyone in urban society.

While the current United Nations Framework Convention on Climate Change (COP21) negotiations in Paris demonstrate the high-level global political focus on the issue of climate change, the IGU’s study emphasizes the immediate importance of air quality beyond the debate around 2 degrees and carbon reduction. As air quality problems in cities from Beijing to New Delhi become increasingly severe, the link between action to address climate change and to curb local air pollution has been attracting increased attention as a means to mobilize political support.

The latest research compiled by the IGU highlights the interconnection that exists between reducing greenhouse gas emissions and reducing emissions of other air pollutants. It presents case studies of efforts in four cities — New York, Istanbul, Toronto, and Beijing — that have tackled or are tackling the issue of improving urban air quality and where gas has featured as the main contributor to their efforts. These cities can provide lessons for other cities seeking to reduce the potentially severe health consequences of urban air pollution.

Scott Foster, Director, Sustainable Energy Division, UNECE, said: “Of course the focus of COP21 is climate change, however we must also be aware of the shorter term quality of life issues that are entirely interconnected. We welcome the conclusions of this report that demonstrates real world proven success in enhancing public health through reducing emissions that will also reduce carbon emissions over the long term perspective.”

“These cases show that switching from coal to gas-fired power is often the fastest and cheapest way for countries to reduce emissions of sulphur oxides (SOx), nitrogen oxides (NOx) and fine particulates that are detrimental to the environment and have a significant impact on human health,” said David Carroll, President of the IGU.

Report highlights:

**Istanbul:**
- In the early 90s, Istanbul’s air was dangerously dirty – SO2 concentration was 11 times higher than WHO guidelines. The switch to gas transformed the city and helped facilitate both economic growth and made Istanbul a far more livable city for its 14 million inhabitants.

**Toronto**
- In 2004, Toronto Public Health estimated that air pollution in the city contributed to 1,700 premature deaths and 6,000 hospitalizations per year.
- The removal of coal fired power generation started in 2005 and was completed in 2014, with gas as the major replacement fuel
- In 2014, premature deaths and hospitalizations were reduced by 23% and 40% respectively

**New York**
- In 2007, the levels of Ozone and PM2.5 exceeded United States Environmental Protection Agency standards. That same year, New York City launched PlaNYC, its first long-term sustainability plan
- By the fall of 2013, as part of a wider basket of legislation aimed at curbing emissions, approximately 30% of heavy fuel-burning buildings (2,700 out of 9,000) in New York City converted to cleaner fuels. Approximately 75% of those that made the switch converted to natural gas or ultra-low sulfur No. 2 oil.
- SOx concentrations decreased by 69% in four years; PM2.5 levels met EPA standards for the first time in 2014.
• These efforts have led to 780 fewer deaths in the city and over 2,000 fewer emergency room visits each year.

China / Beijing

• The level of air pollution is estimated to contribute to approximately 1.2 – 1.61 million deaths per year in China
• In 2013 and 2014 the average PM2.5 level in the Beijing and surrounding area was more than ten times greater than the WHO recommended levels.
• The current goal for the Beijing-Tianjin-Hebei region is to reduce PM2.5 levels 25% by 2017. The specific action plan includes decommissioning the highest emitting vehicles, prohibiting construction of any new heavy polluting industries, and replacing coal with renewables and natural gas

Armed with supporting data and examples of these and other urban areas, the IGU supports policies that reduce GHG emissions and emissions of health-damaging air pollutants such as:

1. Improvement of end-use energy efficiency;
2. Increases in combustion efficiency (reducing or eliminating black carbon and other products of incomplete combustion);
3. Encouragement of fuel switching;
4. Increased use of non-combustion renewable energies

Supporting testimonials from local leaders

Mr. Feng Huisheng, deputy director of the Environmental Protection Bureau of Beijing Municipal government:

"Climate change, environmental protection and air pollution could be traced to similar causes and are interconnected issues. Smog has severely affected daily life and has raised awareness on tackling climate change. Beijing is ahead of cities in China in its action against air pollution. We take natural gas as one of the most cost-effective and practical approaches to achieve the target for its benefit of efficiency and flexibility. Natural gas could also facilitate the wide deployment of renewables by solving the intermittence issue. It is without doubt, an integral part of sustainable energy and economic growth."

Bob Oliver, CEO Pollution Probe (http://www.pollutionprobe.org/about/executive-leadership):

“Ontario was the first major North American region to phase out coal and we are now, justifiably, seen as trail blazers. Carbon mitigation is vital, but just as important is the health and wellbeing of our fellow Ontarians. The decision to promote natural gas as the base load of a wide range of cleaner energy sources has had a profoundly positive effect for anyone living in Ontario. The figures show that related hospitalisations and fatalities have fallen.”

To download the full report, please visit www.igu.org

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About The International Gas Union (IGU)

The International Gas Union (IGU) was founded in 1931 and is a worldwide non-profit organisation aimed at promoting the political, technical and economic progress of the gas industry. The Union has more than 140 members worldwide on all continents, representing approximately 97% of the world
gas market. The members of the IGU are national associations and corporations within the gas industry worldwide. The IGU organises the World Gas Conference (WGC) every three years, with the forthcoming WGC taking place in Washington, D.C., United States, in June 2018. The IGU's working organisation covers all aspects of the gas industry from exploration and production, storage, LNG, distribution and natural gas utilisation in all market segments. www.igu.org