

The Global Energy Challenge: Reviewing the Strategies for Natural Gas

www.igu.org

www.wgc2009.com

IGU Energy Efficiency Indicators



IGU Energy Efficiency Indicators

Conservation and
Efficiency are the
New Sources of Energy



24th World Gas Conference
ARGENTINA | 2009

5-9 October

IGU Energy Efficiency Indicators (IEEI)

Competitiveness through increased efficiency has always been high on the agenda of the International Gas Union (IGU), as clearly stated in its Mission:

IGU will work towards improving the competitiveness of gas in the world energy markets. By promoting the development and application of new technologies and best practices, IGU will help optimise the economics of the entire gas chain, while emphasising sound environmental performance, safety and reliability.

During the 2006-2009 triennium IGU paid special attention to the issues related to energy efficiency, under the concept that “Conservation and efficiency are the new forms of energy”, inviting the international community to join forces through the IGU Efficiency Award and the IGU Social Gas Award.

In the Triennial Work Programme 2006-2009, and inspired by IGU’s Guiding Principles of Sustainable Development, the Argentine Presidency declared that it would encourage the rational and responsible use of gas as a non-renewable energy source, scouting actively for the best practices, and establishing reliable parameters of utilisation.

These intentions gave way to a number of studies and works conducted by the IGU Technical Committees, one of which is this IGU Energy Efficiency Indicators (IEEI), developed by Working Committee 5 (Utilisation).

This model is a first step of a long-term project which aims to provide an online and comprehensive decision-making tool for the gas industry stakeholders (both private and policy-makers) as well as the end users.

The tool aims to assess the energy efficiency of various technologies for the main gas utilisations in the domestic and commercial sectors, indicating the relative advantages when compared to competing fuels and their technologies, in both economic and environmental terms.

The objective of this model is to submit, for now, a simplified demo-version of the tool (limited to heating appliances and for a few countries where data was available at the time), to establish a discussion platform in preparation for the future stages of the project.

The IEEI model has two main features, which are set up in separate pages of the model:

- The “Environmental Impact” interface makes it possible to calculate the impact on national CO₂ emissions following a technology change.
- The “End Users, Costs and Emissions” interface allows a comparison between natural gas and other energy sources (electricity, fuel oil) in terms of CO₂ reduction and energy and costs savings.

We recommend you start with the first “Read Me” page where you will find instructions on how to use this model.

Development of This Model into an Interactive Tool

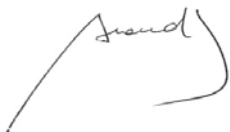
The calculations of this model are based on various inputs, mainly:

- Appliances energy-efficiency database (source IGU)
- Market database - installed appliances and annual sales (source EU/IGU)
- Energy prices (source IEA)
- National electricity production data (source IEA)
- CO₂ nominal emission by fuels (source IPCC)

However, to develop this into a permanently updated, comprehensive and interactive tool that will contribute in a reliable and constructive manner to the decision-makers involved in the gas industry, from policy-makers to end users, the following stages must be conducted:

- First assessment and evaluation
- Extension of:
 - o Appliance database
 - o Different technologies
 - o Other countries
- Organisation and administration:
 - o Updating
 - o Validation
 - o Public and private endorsement
 - o Promotion

Several organisations, both within and outside of the gas and energy business, have already informed their interest to support this initiative. We hope this model will also encourage you to help develop this tool to its full potential.



Roberto Brandt
IGU Coordination Committee
Chairman



Ernesto López Anadón
IGU President



24th World Gas Conference (WGC2009)

Buenos Aires, Argentina

5 - 9 October 2009



Sponsored by

