



## **International Gas Union**



**IGU Programme Committee A:  
Sustainable Development**



**2006-2009 Triennium Work Report**

October 2009

**PROGRAM COMMITTEE A: SUSTAINABLE DEVELOPMENT**

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## Introduction

In 2003, the International Gas Union prepared a document entitled “*Guiding Principles for Sustainable Development*”, containing the guidelines to be accomplished by gas companies, which were established in order to make energy operators compatible with the environmental principles of Corporate Social Responsibility



## Work's preparation

- Four years after this document was published, PGC A was asked to carry out a study into the extent to which the principles set out in the document have been implemented by the different gas companies.
- PGC A prepared a questionnaire that was sent to all the IGU associates. We received twenty four answers that represented twenty one countries around the world. The only continent not represented is Oceania.

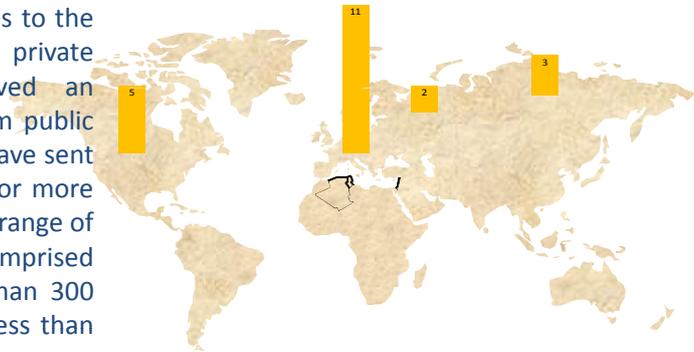


The image shows a screenshot of a questionnaire form titled "IGU Questionnaire". The form includes fields for "Company", "Address", "City", "Country", and "Year of natural gas recovery (last year)". There are also checkboxes for "Is your company a gas company using the 'Guiding Principles for Sustainable Development'?" and "Do you consider a good practice of the guidelines?". A small globe icon is visible on the left side of the form.



## Work's preparation

- Although the major part of responses to the questionnaire came basically from private companies (16), we also received an important number of responses from public companies (8). The companies that have sent us their opinion are present in one or more parts of the gas supply chain and the range of size of these companies is comprised between those that handle more than 300 bcm/year to companies that move less than 30 M Nm<sup>3</sup>/year.
- On the evidence of the statistics presented we can assure to have a sample that represents accurately the World Gas Sector.



## Conclusions of the study

### Leakage control

- 72% of the companies have used the guidelines to develop internal standards or they already have similar requirements.
- 100% of the companies think that methane is a powerful greenhouse effect gas and it's necessary to reduce, as much as possible, their emissions to the atmosphere.
- 55% of the companies declare to lose less than 0,1% of gas moved and only 8% of the companies is losing more than 1% of gas managed.

If we analyze this information more accurately we can see that :

- In the areas of Production, Storage and Transmission any company loses more than 1% of the gas treated.
- There are two types of distribution gas companies: a majority that loses less than 0,1% and a small number of companies (about 10%) that have important losses and need to improve their networks.



## Conclusions of the study

### Installation improvement

- 75% of the companies have special plans to improve installations efficiency. Some examples of this programs include: to recover the boil-off gas from LNG tankers, to promote the installation of compressors with low level of emissions, to replace metallic pipework with plastic pipes, utilization of waste heat in LNG, to valorise the enthalpy of LNG to produce free cool, etc.
- 55% of the companies declare to have projects linking natural gas with renewable energies. The more relevant projects are focussed in biogas production and its introduction into the gas network or to use it in cogeneration and the combination of solar energy and natural gas with the idea to produce electricity and to obtain free heat or cool.



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## Conclusions of the study

### CO<sub>2</sub> emissions

- More than 75% of the companies declare to maintain a proactive attitude in front of their clients trying that they implement the best available technologies in order to reduce CO<sub>2</sub> emissions in the gas combustion process.
- 100% of the companies agree to collaborate with other stakeholders to mitigate the climate change and only one company recognizes not having implemented any special criteria to operate with the maximum level of consideration for the environment.
- Unfortunately the investment in sustainability is low, 95% of the companies are dedicating less than 1% of their budgets to develop new technologies that permit to reduce the environmental impact in the natural gas chain. The average of expenses in this concept is about 1.5 M€/year-company and the maximum level declared has been 7,6 M€.



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## Conclusions of the study

### Social criteria

- 60% of the companies recognize to have systematic criteria to select suppliers taking into account, amongst other factors, their environmental policies.
- More than 70% of the companies provide regular training in sustainability to their employees and only three companies have not incorporated this concept in the training programmes. There are companies that dedicate 38 hours per employee and year in environmental education.
- 95% of the companies have implemented programmes to guarantee the health of their employees. These programmes include: medical controls, health control and occupational safety and health, prevention of job accidents, vaccination campaigns, etc.



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## Conclusions of the study

### Social criteria

- 88% of the companies are publishing an annual environmental report. 68% of the companies edit a special document different from the annual report, dedicated only to sustainable issues or under the form of Corporate Social Responsibility Report.
- 60% of the companies have its environmental management system in accordance with the ISO 14001 or EMAS and another 20% are implementing them.



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## Conclusions of the study

### CDM of Kyoto Protocol

- Only 28% of the companies declare to be using the Clean Development Mechanisms of Kyoto protocol to promote projects in developing countries or participate in Carbon Funds.
- 50% of the gas companies that have answered our questionnaire have special social programmes in developing countries. Some examples of this programmes are: Adoption of the Millennium Development Goals, Food and Nutrition Programmes, creation of Doctor's Offices devoted to children and teenagers, nursery supporting, etc.



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Objetivos de Desarrollo del Milenio



## Conclusions of the study

### Gas Industry situation

Analysing these results PGC A has concluded that the Guideline Principles are, in general, known and well implemented by the companies. Nevertheless, it will be convenient:

- To increase the R&D effort in the gas sector,
- To increase the number of companies that consider Corporate Social Responsibility Criteria,
- Despite the number of companies that collaborate in social programmes with developing countries is important, to try that all the companies located and investing in developing countries apply these policies,
- To use more efficiently the Kyoto Clean Development Mechanism.



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## Conclusions of the study

### Next actions

Viewing the high level of implementation of the Guideline Principles, the growing interest of Authorities on the problems related with Energy & Sustainability, the pressure of the Public Opinion and the compromise of the sector, PGC A has revised the document and has worked in its actualization taking in consideration all the aspects described.

The new version of Guidelines Principles that has been delivered to all of you with the Conference Documentation and that you can consult in the IGU Official web site, has been prepared with the contribution of all members of PGC A. In this revision we have tried to incorporate the new concepts and ideas driving the actual tendencies in sustainability.



Thank you very much

