



# **BONGO**

Biogas and Others in Natural Gas Operations

A GERG project under development

WGC Amsterdam, June 8th 2006 Mirjam van Burgel

### What is biogas (and others..)?

- Gas from biomass
- Produced by anaerobic digestion or gasification



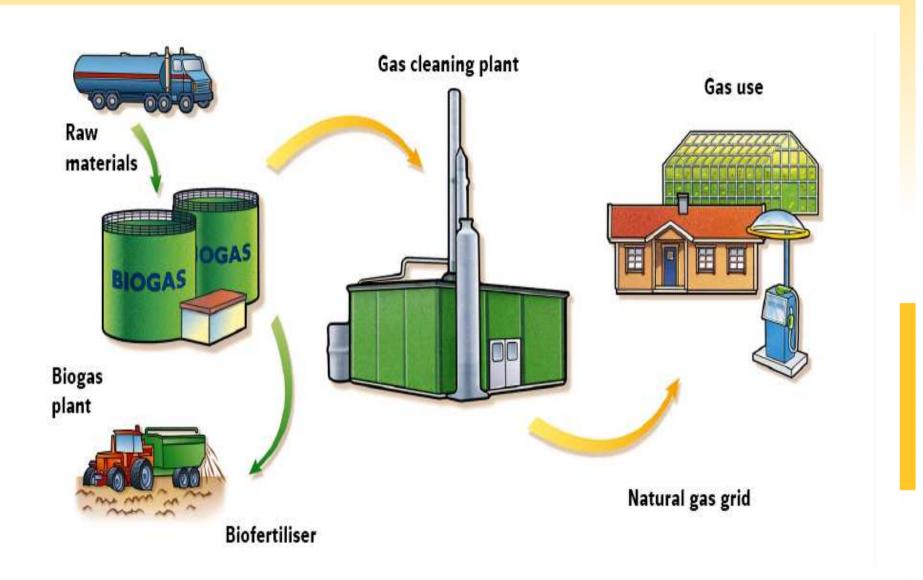
- Reduces emission greenhouse gases
- Increases security of supply
- Renewable energy

### Why inject biogas in the natural gas grid?

- Composition comparable to natural gas
- Renewable alternative to natural gas
- Can be produced locally in significant volumes
- Legal framework EU Directive 2003/55/EC: "...biogas and gas from biomass or other types of gas are granted non-discriminatory access to the gas-system.."

Prepare for injection of biogas in the existing natural gas grid

### BONGO: Biogas and Others in Natural Gas Operations



#### But..

Composition of biogas may differ from those of natural gas in minor components

- In order to be able to use biogas widely, the consequences for use, health, safety and pipeline integrity aspects related with the addition of biogas to natural gas need to be addressed
- Start with quality requirements for natural gas and focus on the consequences of the differences between biogas and natural gas

#### Goal BONGO

# Define the quality requirements under which biogas can be added to the natural gas grid

- BINGO will become the main European project, aiming at preparing the natural gas industry for biogas accommodation
- Ensurance on beforehand of a broad acceptance of results (GERG project, involvement Marcogaz, Eurogas, GIE, biogas producers)

#### Curious? Interested in participation?

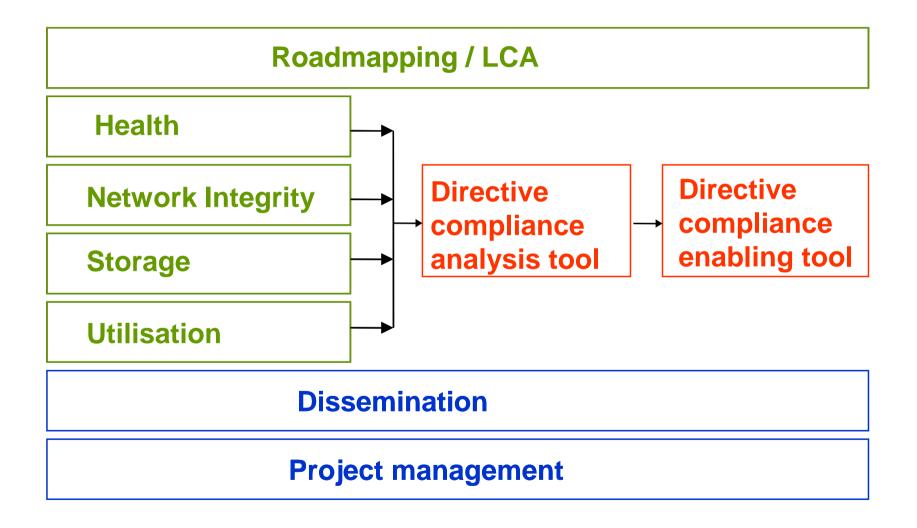
Set-up, planning, partners, financial aspects, and more details about the project..

Come and see our poster!

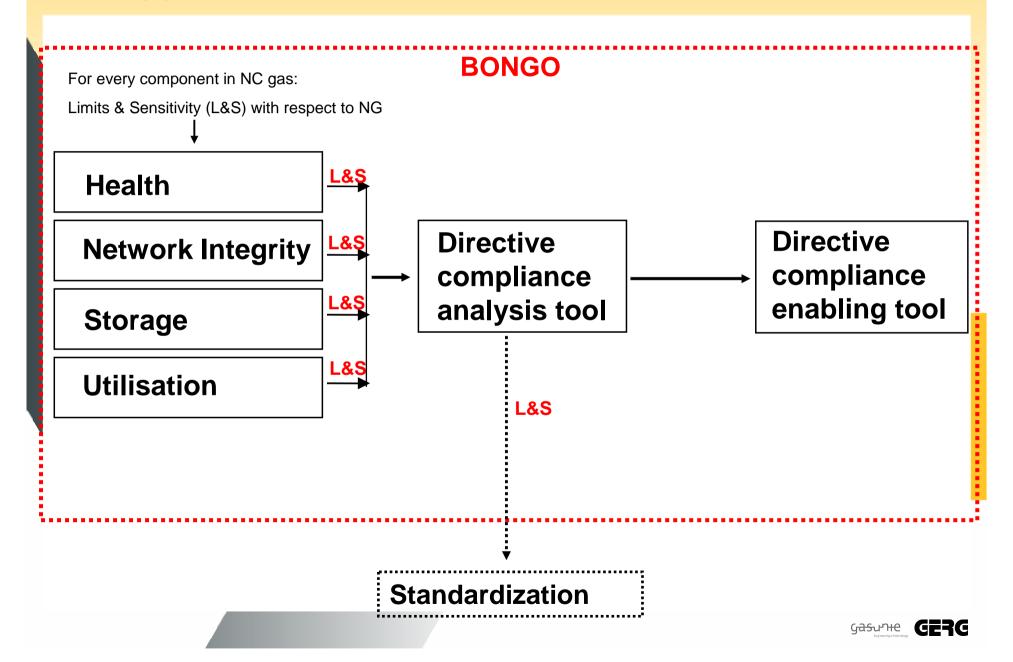


#### Extra sheets

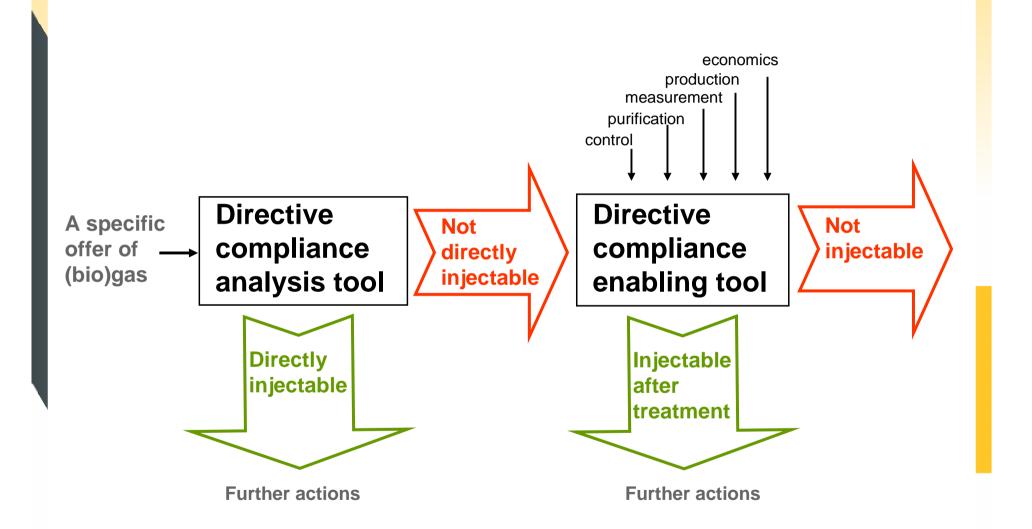
#### Approach BONGO: work packages



# Approach BONGO WP



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# Work Packages and Partners

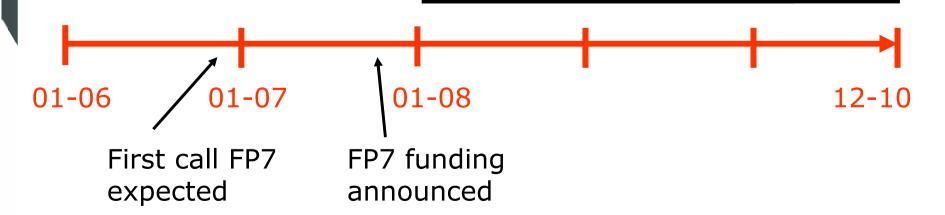
| WP | Topic                | Leader        | Participants                                      |
|----|----------------------|---------------|---|
| 1  | Health               | RIVM? TNO?    | Synergrid, ISQ, University of Warwick, EnergieNed |
| 2  | Road Mapping         | North Energy  | ISQ, NTUA, Advantica                              |
| 3  | Network integrity    | Gasunie?      | DEPA, Synergrid, Gasunie, Advantica/Transco,      |
|    |                      | Transco?      | ISQ, Gas Natural, DGC, NTUA, SVGW, Gaz de         |
|    |                      |               | France, EnergieNed                                |
| 4  | Storage Integrity    | DBI           |   |
|    |                      |               |   |
| 5  | Utilisation          | Gasunie?      | ISQ, Gas Natural, DGC, NTUA, DEPA, Synergrid,     |
|    |                      |               | Advantica, SVGW, University of Warwick, Gaz de    |
|    |                      |               | France, EnergieNed, TAGUSGas (Por), Naturgas      |
|    |                      |               | Fyn (Den)?  |
| 6  | Directive Compliance | DVGW          | NTUA, DEPA, Advantica, University of Warwick,     |
|    | Analysis Tool        |               | SVGW, EnergieNed                                  |
| 7  | Directive Compliance | Un of Warwick | NTUA, DEPA, SVGW                                  |
|    | Enabling Tool        |               |   |
| 8  | Dissemination        | Exergia       | North Energy, NTUA, DEPA, GERG, Marcogaz          |
|    | Project Management   | Gasunie       | WP Leaders  |

#### Planning and financial aspects



EU funding in 7th Framework Programme (FP7)

Expected total project budget: order of 10M€



#### Planning and financial aspects

## **BINGO**

Short term actions

Funding in National Programs

Prepare BONGO proposal

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