



EIE/06/221/SI2.442663 - REDUBAR

**REDUBAR**

**Investigations targeted to the creation of legislative instruments and the reduction of administrative barriers for the use of biogas for heating, cooling and power generation**

# Annex to report D05

## Work Package 02:

**Technological and non-technological evaluation of heating and cooling from renewable energy sources.**

## Deliverable: D05

**A rough list of the existing technical barriers by standards and instructions, grouped by several types of influence and relevance.**

## Responsible partner:

**Instytut Nafty I Gazu (INIG)**

**Date: July 2009**

## INTRODUCTION

The deliverable D05 was present as a project result on the dissemination workshops. The feedback- questionnaire was spread out to all the targets groups who took part in workshops in every partner's country from the Project. This questionnaire consists of test-like questions, where the persons could choose the answer, and also open questions to which an answer would have to provide.

INIG had received and collected the feedback questionnaires from partners and participants of national workshops organized in Hungary, Greece, Italy, Czech Republic, Netherlands and Poland. The final result of the feedback-questionnaires is presented as a document which has included data from all 44 collected questionnaires and providing useful information for the target groups.

The answers please find below.

### Personal data:

**1. Country**

Hungary, Greece, Italy, Czech Republic, The Netherlands, Poland

**2. Organization**

Several enterprises, system operators, gas companies, consultants, environmental agencies and independent experts etc.

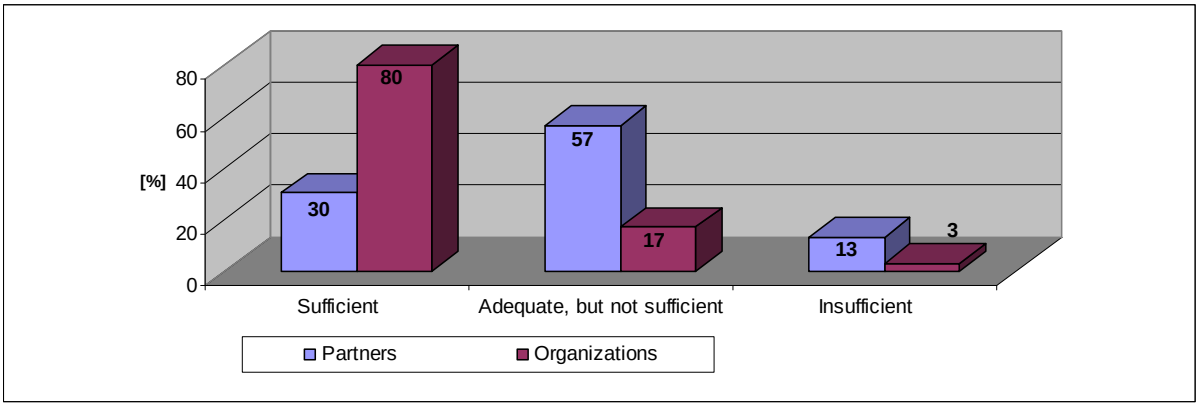
**3. Position**

Professional designers, experts, consultants, (gas pipe) building contractors, managers, gas system operators, supervisors (mainly engineers) etc.

## The answers from feedback-questionnaire for D05:

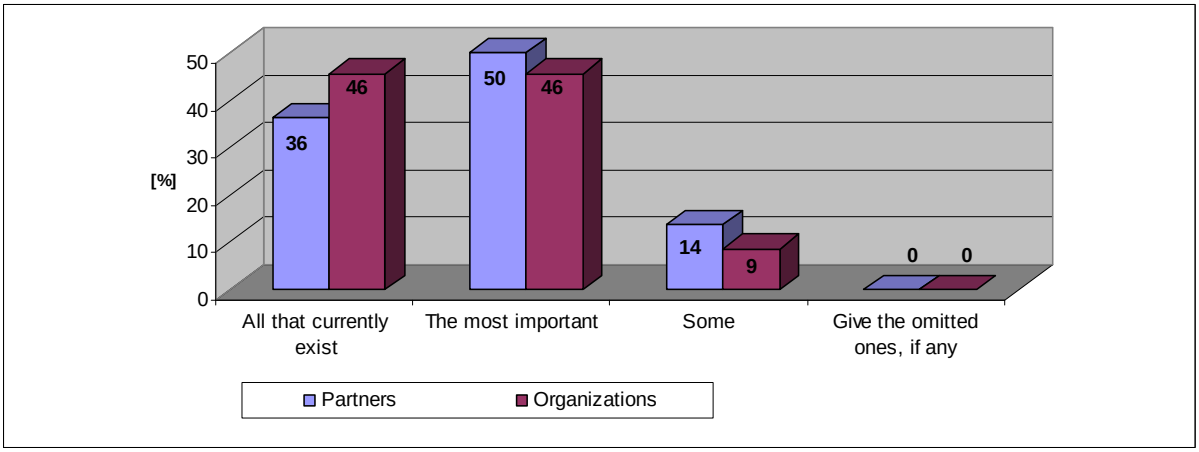
**1.** **Does the deliverable contain sufficient, adequate or insufficient data about biogas market?**

| | Sufficient | Adequate, but not sufficient | Insufficient |
|---|---|---|---|
| | [%] | | |
| **Partners** | 30 | 57 | 13 |
| **Organizations** | 80 | 17 | 3 |



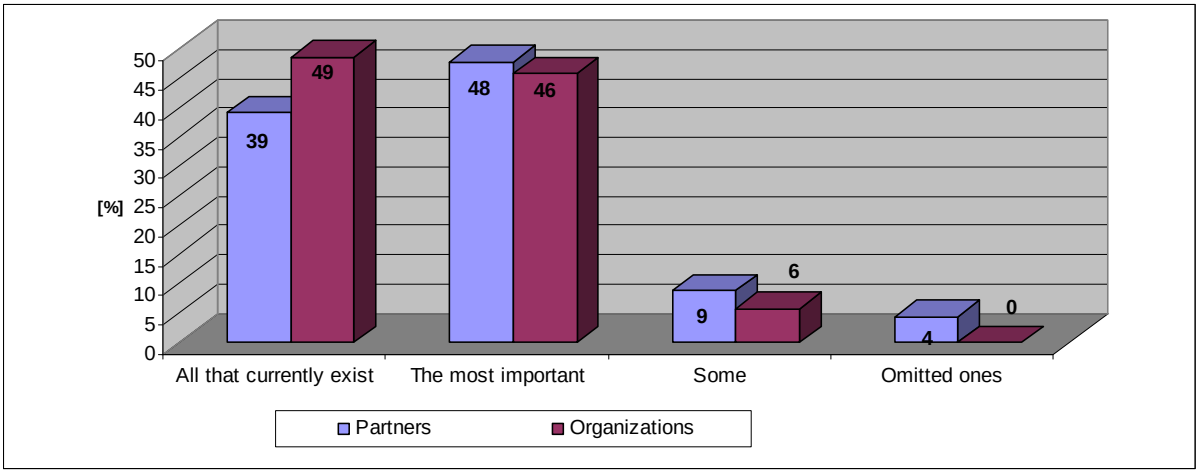

**2.** **Does in your opinion the deliverable contain all technical barriers making utilization of biogas difficult?**

| | All that currently exist | The most important | Some | Omitted ones |
|---|---|---|---|---|
| | [%] | | | |
| **Partners** | 36 | 50 | 14 | 0 |
| **Organizations** | 46 | 46 | 9 | 0 |



**3.** **Does in your opinion the deliverable contain all non-technical barriers (legislative, administrative etc) making utilization of biogas difficult?**

| | All that currently exist | The most important | Some | Give the omitted ones, if any |
|---|---|---|---|---|
| | [%] | | | |
| **Partners** | 39 | 48 | 9 | 4 |
| **Organizations** | 49 | 46 | 6 | 0 |




Omitted once:

There is always a “national factor” which has to be taken into account regarding the possible market; the project should take more into consideration the development and facts occurred during the project; for example for Italy the application of the Nitrate Directive contributed to the slowdown of the biogas market development in Italy.

In Holland exists so called Gaswet (Gas-law) and within this Gas-law there is the article 12 which reflect on some codes (which can be easily adapted or adjusted). There are Technical, Tariff and Information codes.

Technical codes, the technical codes describe the way in which gas-grid managers behave themselves mutually and towards other members, including in the field of in functioning the nets and measuring and exchanging data.

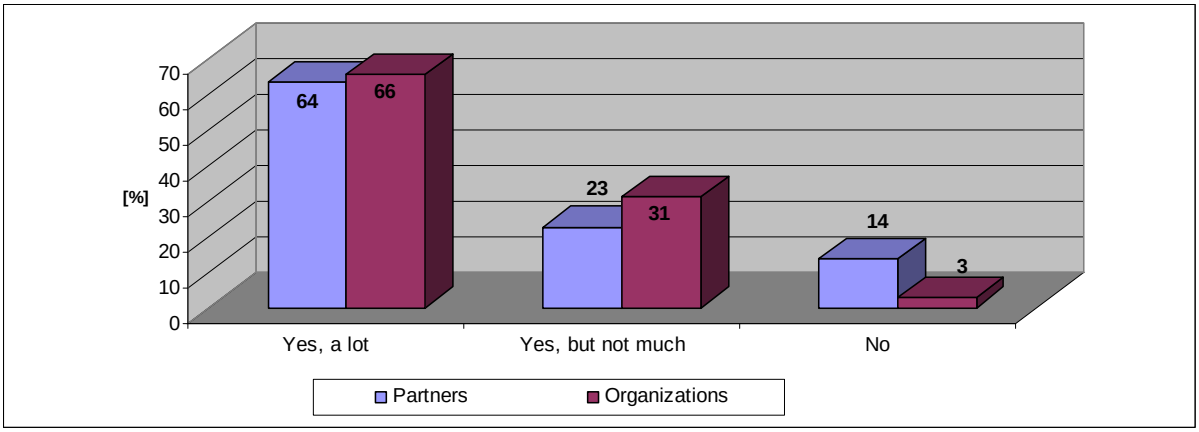
Tariff codes, the tariff code contains by gas-grid managers towards grid-users tariff structure to use. That tariff structure describes the elements and the manner of calculation of the tariff for the transport of gas and with the transport the supporting services. Moreover the tariff code describes the elements and the manner of

calculation of the tariff for which will carry out to the gas-grid manager of the rural gas-grid its legal tasks.

Information codes, the information code defines the roles and responsibilities of market parties concerning fixing and exchanging information between the market parties mutually. The most adjustments in the codes have already been made, so that the injecting biogas into the gas-grid isn't legally restricted. Although there are still non-technological obstacles on part of the quality, injection, prices and so on.

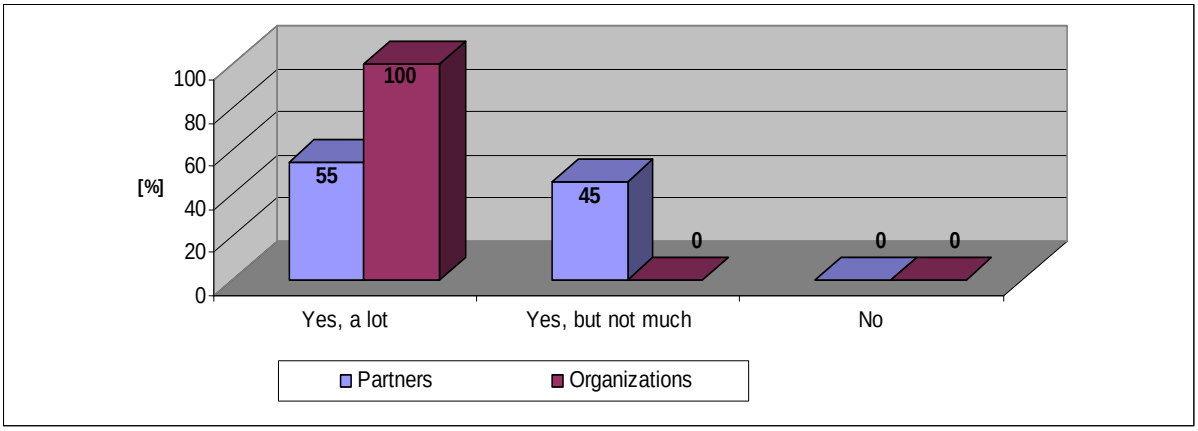
**4.** **Does the deliverable provide information about technological and non-technological barriers allowing to compare situation in other countries?**

| | Yes, a lot | Yes, but not much | No |
|---|---|---|---|
| | [%] | | |
| **Partners** | 64 | 23 | 14 |
| **Organizations** | 66 | 31 | 3 |



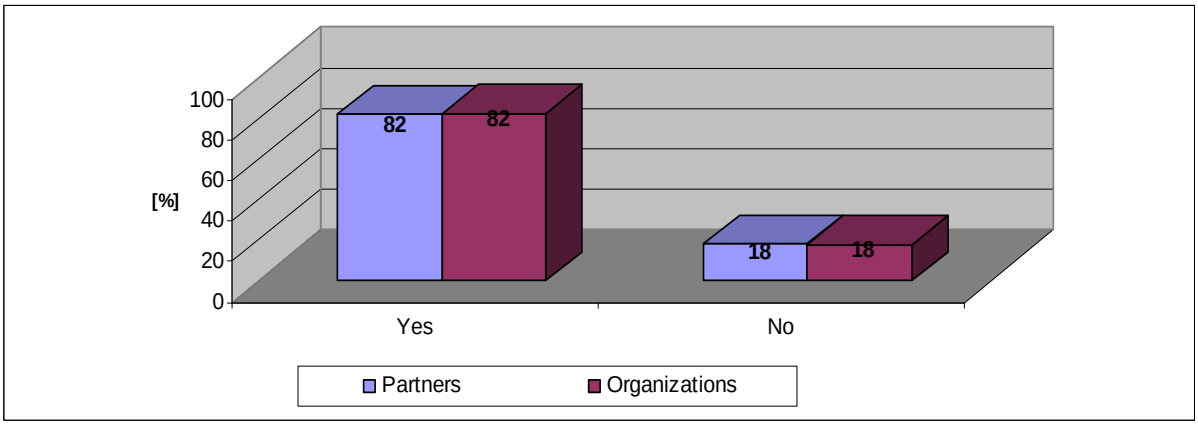

**5.** **Can information contained in deliverable be useful to the target groups?**

| | Yes, a lot | Yes, but not much | No |
|---|---|---|---|
| | [%] | | |
| **Partners** | 55 | 45 | 0 |
| **Organizations** | 100 | 0 | 0 |




## 6. Can it be beneficial in making distribution of biogas to the natural gas grids possible?

| | Yes | No |
|---|---|---|
| | [%] | |
| **Partners** | 82 | 18 |
| **Organizations** | 82 | 18 |




□ Yes, because

- it is a good tool for peak shaving,
- it can reduce the natural gas import dependency,
- it appeases the local energy demand,
- it is support the protection of the environment condition,
- it can abate the natural gas system tariffs,
- all this kind of waste will be used for energy production, as the produced biogas will be upgraded,

- it makes it clear in the way other countries make it possible to distribute biogas in the natural gas-grid; and one can learn from it,
- the injection an alternative for bio-methane utilization (e.g. bio-methane can be used as a fuel),
- the possibility of the injection may generate Research and Development and other further business.

□ No, because

- no creditable experieances,
- the operation is complicated,
- the quantity is too small,
- upgrading is expensive,
- local biogas use preferred,
- The situation is still form a technical and administrative point of view far from a possible application and development of these market

7. **Which of the barriers is the biggest obstacle in using biogas for heating, cooling and power generation in your country?**

□ **Partners:**

- lack of appropriate regulation and (in some measure) the lack of sufficient financial background creating by the government.
- lack of “Green Bonus for bio-methane”.
- the pricing of electricity made out of biogas (non-technical)
- administrative, financial and legislative barriers and obstacles

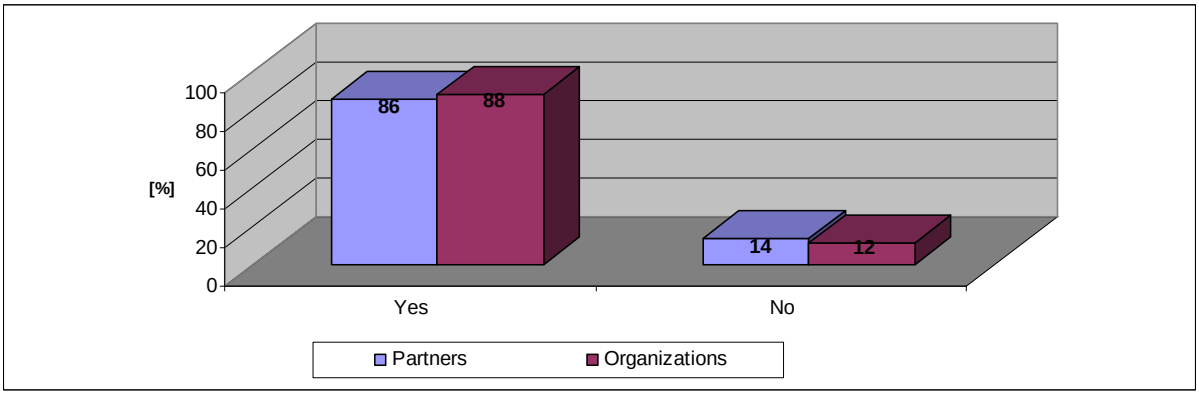
□ **Organizations:**

- short term interests,
- no real financial support, only promises by politicians,
- lack of information,
- lack of marketing,
- lack of subsidy,
- lack of interests,

- lack of regulation for injection,
- bio-methane receiving is not compulsory,
- high investment costs,
- disinterest by decision makers,
- in Greece is local legislation as it makes impossible this kind of investments.

**8.** **Is it possible to come up with any solutions for barriers removal after reading the deliverable?**

| | Yes | No |
|---|---|---|
| | [%] | |
| **Partners** | 86 | 14 |
| **Organizations** | 88 | 12 |




□ Yes,

- the demand against the bio-methane is increasing,
- if the decision markers are committed in future,
- if regulations are worked out,
- only in long-term vision,
- as this deliverable demonstrates biogas usefulness.

□ No, because

- the economic crises is the strongest barrier,
- the experts are not decision markers,

- the drive force and the interests of the decision markers do not come from the REDUBAR project. At the same time it can be used as an instrument to define the direction of the lobby activities of experts (institutions) binding theirself to promote biogas utilization.

**9.** **Does the deliverable give any solutions regarding limiting or eliminating existing barriers and obstacles? If so, which ones?**

□ **Partners:**

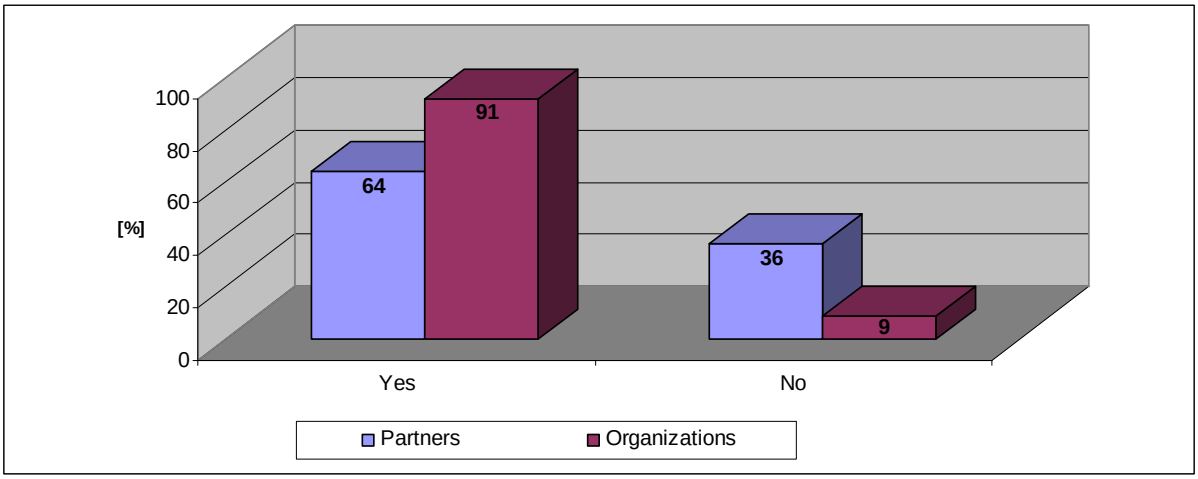
- Hungarians have been given some solutions,
- giving the barrier/obstacle often lead to obvious solutions,
- The REDUBAR deliverables are important for drawing a real picture on biogas and bio-methane chain,
- to define the obstacles and barriers is first step how to beat them.

□ **Organizations:**

- it was stimulating,
- it gave ideas,
- only a lesser degree,
- it showed the importance of the regulation shortage,
- Hungary should follow the practice in EU,
- to expand the „green attitude”,
- the causes of barriers are not the engineers,
- regulation and subsidy are essential.

**10.** **Does the deliverable make it possible to change the existing regulations which contain barriers and obstacles?**

| | **Yes** | **No** |
|---|---|---|
| | [%] | |
| **Partners** | 64 | 36 |
| **Organizations** | 91 | 9 |




**11. Which barrier or obstacle is the most difficult to eliminate in your country? Why?**

□ **Partners:**

**In the Nederland:** Quality of biogas and prices, because the uncertainty of the quality of biogas makes it possible for main stakeholders (like gas-grid owners) to reject plans. If they are an investing party in the production of biogas (because of good pricing) they may overcome this obstacle more easily.

**In Italy:** The legislative and administrative uncertainty; this does not really allow to plan new investments since the economical feed back is to uncertain. Besides, the incentives situation is also very unpredictable, due to the low price fixed by the national authority regarding the green certificates price.

**In Hungary:** the official energy conception (including RES perspective) contains mainly principles and goals without factual measures and concrete actions with financial incentives for increasing RES (except: compulsory taking over the green current).

**In Czech Republic:** It is not only one barrier but we believe that the Czech government has to be persuaded oneself of the future of using the renewable sources as biogas in bulk.

**In Poland:** To high requirements for biogas to injecting into natural gas grid. The legislative and mental barriers, because is long-term problem to solve, especially psychological barriers or obstacles.

□ **Organizations:**

- lack of subsidy because of the Hungarian economic and political crises,
- strong pessimism,
- the prise of takeover,
- lack of capital,
- the short term policy by decision markers,
- legislation.

**12.** **In what way can this deliverable improve the situation on the biogas market?**

□ **Partners:**

- Giving clarity of obstacles may lead to more involvement and at the end of solutions.
- These deliverables should be promoted first among the target groups no 3 (policy decision makers in the participating countries and EU wide) and target group no. 4 and 5 to ensure a strong and effective lobby actions at national level.
- A legislative and regulation interventions are needed in order to give certainty to the incentives legislation, as well as regarding the administrative procedures and authorizations requested for the construction and starting phase of a biogas plants.
- Each of them which contain new and relevant information about the biogas and bio-methane business on national and/or EU level.

□ **Organizations:**

- It gave more information to professional experts.
- It increased the „environmental consciousness".
- It gave real „facts and figures" on biogas and bio-methane.
- It should spread the technical, economical and „environmental" information to politicians and other decision markers.
- It forces the elaborating of the legislation and subsidy systems.
- It is advantage if more and more people speak about biogas.
- Media has to play more positive role.
- Make more clear the benefits of biogas investments.

**13. What should be done for wide spreading information contained in this deliverable?**

□ **Partners:**

- The EU has to be informed about the implementation-status of their directives into National Law.
- A draft can be made out of this Deliverable and (even not conclusive) for some countries it may be cleared that on the implementation part there's still some things to do. This may lead to conclusions and obstacles to governmental stakeholders. This draft may be spread to them.
- A strong and consistent dissemination and communication activates are requested in order to inform and to make these information accessible to the largest group of stakeholders, end users as well as other key actors.
- The website is the main tool for the promotion of these deliverables, to ensure their visibility on a larger scale.
- A multiplier effect can be ensured by the participation of target group no. 4 (professional disseminators and multipliers such as energy agencies).
- The users from diverse branches (agriculture, gas industry, energy industry) will testify the accessibility and the effectiveness of the market offering relevant suggestion on the concrete applications of these deliverables.

Also:

- taking conference presentations,
- publishing articles in professional periodicals,
- organizing workshops,
- taking regularly consultations and semi-private discussions with our partners from both the natural gas industry and biogas industry.

□ **Organizations:**

- Media is the most important device.
- More advertising.
- More presentations.
- More courses about the biogas.
- More R&D.
- More publication in periodicals and newspapers.
- More money = more information.
- This deliverable must distributed to development agencies, municipalities, prefectures, universities and institutes which are involved with this scientific field.