

PRESENTATION

STATE OF ART REPORT ITALY

Partner N. 13

GIF - GRUPPO IMPRESA FINANCE S.R.L.

AGENDA

Current situation in Italy

Relevant legislations and regulations

Updating

Obstacles and barriers

Conclusions

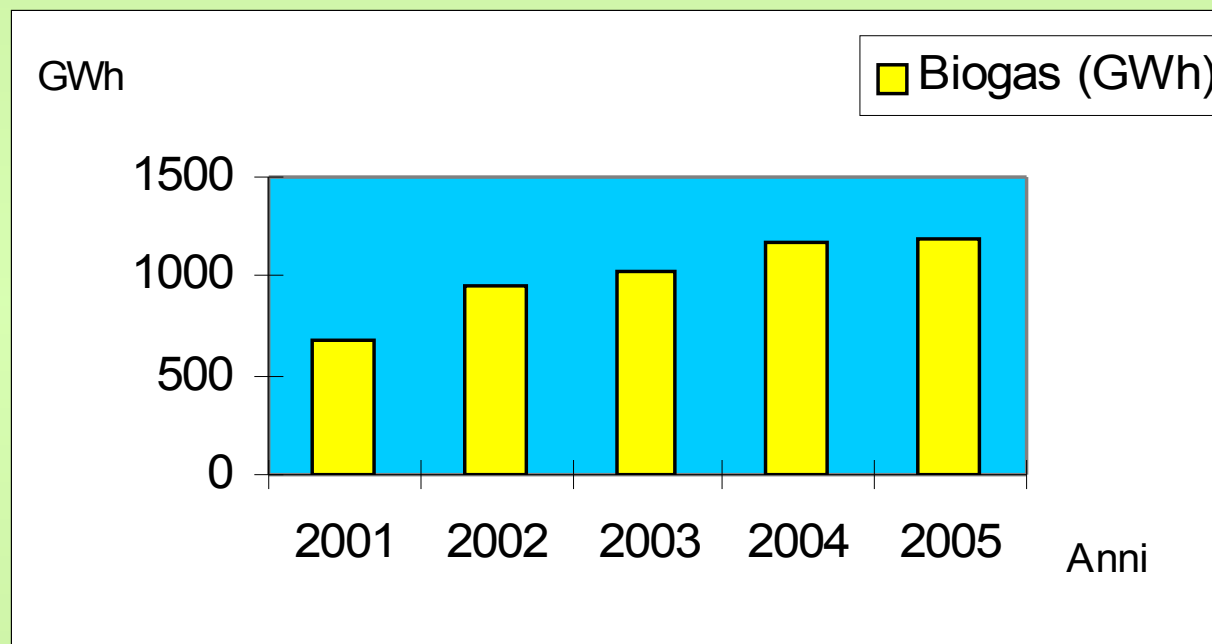


GWh	2002	2003	2004	2005
<i>Idro</i>	35519,4	36674,3	42744,4	36066,7
<i>Wind</i>	1404,2	1458,4	1846,5	2343,4
<i>Solar</i>	18,5	22,6	27,3	31
<i>Geotermic</i>	4662,3	5340,5	5437,3	5324,5
<i>Biomass and wastes</i>	2479,6	3550	4604,3	4984,6
<i>Biogas</i>	943	1032	1170,2	1198
wastes	822	910,5	1038,4	1052,3
sludges	2,8	2,7	1,2	3,2
Animal sewage	16,3	13,2	18,5	25,7
<i>Cultivation- food industrial wastes</i>	101,9	106,5	112,1	116,8

Gross Production from biogas plants in Italy 2001 – 2005

Year	2001	2002	2003	2004	2005
GWh					
Biogas	684,3	943,0	1032,9	1170,2	1198,0
wastes	664,6	822,0	910,5	1038,4	1052,3
sludges	4,6	2,8	2,7	1,2	3,2
Animal sewage	9,8	16,3	13,2	18,5	25,7
<i>Cultivation-food industrial wastes</i>	5,3	101,9	106,5	112,1	116,8

Biogas production - years



Wooden Biomass

Wood district heating for **40 MWt**, especially in the Trentino Alto Adige and Piemonte regions. They represent the **42%** of the Italian forestry heritage.

Advantages for Italy

to stabilize the ground from a hydro- geological point of view and a monitor on the forestry fires.

The energetic content is here of 0.8 Mtep pro year

Wood biomass an innovative approach !!

CNER (Consorzio Nazionale energie rinnovabili agricole) has been recently developed new partnerships with Poland, Hungary, Austria, Spain and Slovenia to provide the necessary know how to transform wooden biomass in energy and for its utilisation in cogeneration plants (Short Rotation Forestry System)



Development of so called “green short energy supply chain”



**Biogas plants active
and biogas planned
at 30/06/2006**

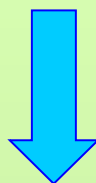
Relevant legislative interventions

The *Finance Act 2007*

- promotes via a mandatory obligation to mix biofuels
- foresees the de taxation of vegetal oils used as lubricants, and regenerative raw materials and as energetic products;
- it foresees also incentives and supporting schemes for microgeneration plants;
- foresees new green certificates for the production of green energy from agricultural biomasses;
- guarantees by the application of a specific multiplier coefficient a major incentives for the green certificates for production obtained in the framework of chain-productions contracts;
- besides it is foreseen a longer duration for the certificates of the biomass plants with a special priority for chain productions.

And other....

- Ddl 691 (Order of the executive) for the revision of the energetic system;
- D.lgs 164/00 “Decreto Letta ” liberalisation of the natural gas sector”
- Lombardy Regional Law 7 February 2000 n 7 art. 4 “*Support for the enhancement of programmes aimed at produce energy from renewable sources*”
- **CIP 6/92** regulates mechanisms and procedures regarding the implementation of new plants exploiting RES



The 1992 (CIP 6/1992) legislation does not foresee specific references regarding biogas generally, as well as biogas assimilation to natural gas for its injection in the natural gas grids.

1999 white Paper on RES

to increase of the contribution of RES regarding the production of national electricity in the period 2008 – 2012 form **16,7 Mtep** compared to the **10,2 Mtep** of 1997

D.lgs. 387/03 principal provisions:

- new definition of RES in line with the definition given by the European Commission;
- introduction of specific regulations especially for the some plants as biomass, solar etc;
- rationalisation and simplification of the existing systems, procedures and financial schemes;

UPDATING OF THE SITUATION

- ✓ The number of biogas plants is constantly increasing
- ✓ Italy and some regions are facing the problem of the overload of nitrogen in the so called “vulnerable zones”, especially in the Pianura Padana, North of Italy

Therefore , actually the development is focusing on two types of plants:

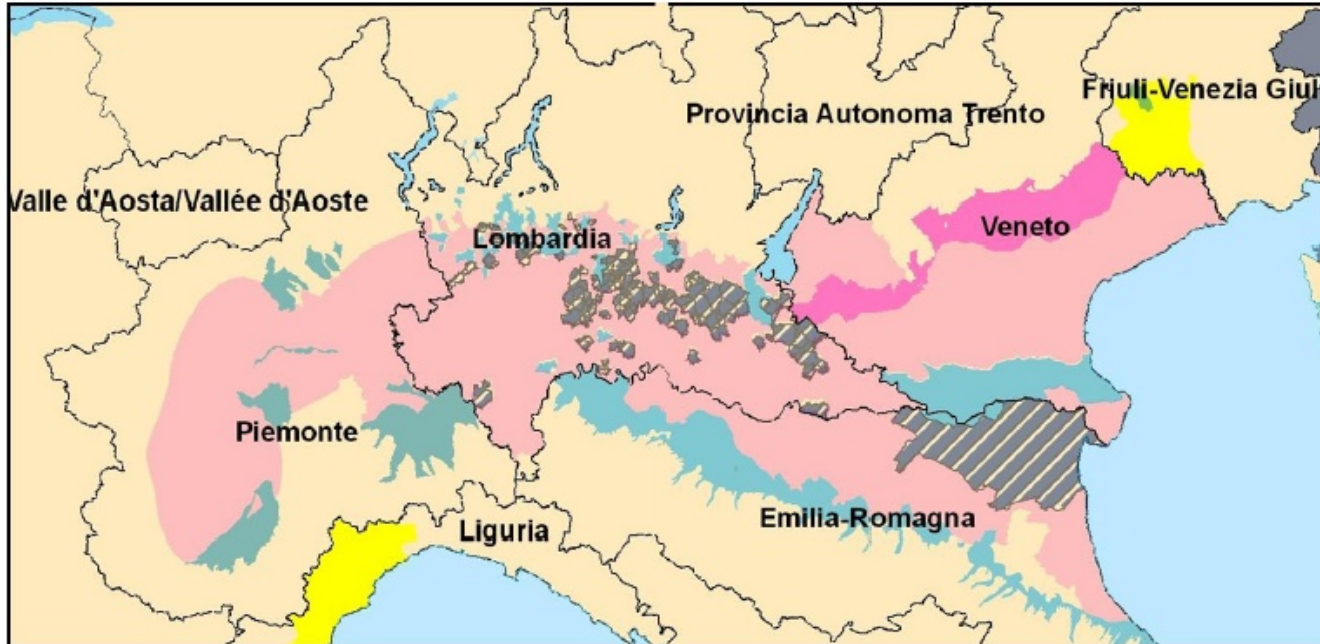
- 1) *biogas plants with integrated systems for the pulling down of nitrates*
- 2) *biogas plants that could directly pull down nitrates*

Background:

New limits for the spreading or discharge of livestock effluents and the excessive use of fertilizers have been established.

The EC pursued in the past years legal actions against Italy for non compliance of the Nitrates directive , since Italy has not adopted implementing legislation and has not designated vulnerable zones.

Italy also failed to establish action programmes and to monitor properly water quality to assess nitrate levels



Vulnerable zones

Year of official publication

- Designated zone before 2000
- Designated zone 2000-2003
- New designated zones (since 2004)
- Draft zone in progress
- Valid drafted zone
- Proposed NVZs (zones designated after 31/10/2004 and before 31/12/2005)
- ADAS estimates of areas requiring further studies
- ADAS estimates of areas requiring designation

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NITRATE VULNERABLE ZONES

biomass converted to the substitute natural gas (SNG) in the thermochemical (gasification) process

Currently these processes are very rare in Italy, the debate is still more focus on the utilization of natural gas and a major increasing in the utilisation of other RES.

No economical and or tax incentive is foreseen for the injection of biogas in the natural gas grids, since incentives are more oriented on energy production from other sources of RES.

A general and endemic lack of electricity production in Italy and a production more and more oriented to the utilisation of natural gas for heating is another reason for this gap

From a technical point of view, the purification processes asked by the SNG are also complex procedures, which requires very specific technical skills and competences that are very difficult to find in the Italian rural areas, which are also the most developed sectors regarding biogas.

Besides, there is a lack of standards concerning gas quality requirements, measurement procedures and regulations concerning the injection of biogas into the natural gas grid.



Suggestions for positive factors for the agro energetic supply-chains
In Italy the overall contribution to RES has diminished from 16% in 1997 to 15.3% today, and is one of the European countries most far away from reaching the objective of 25% foreseen by the European Union.

- Legislative certainty and regulation's stability;
- availability of capital;
- availability and reliability of raw materials supplying;
- utilisation of the most developed technologies;
- market allocation of products and by-products;
- to promote and develop agro-energetic district
- new mental attitudes



Thank you for your attention

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