

Workshop for the Promotion of BIOSURF Project in Romania

Bucharest 21 February 2017

Stefano Proietti, ISINNOVA







Who we are

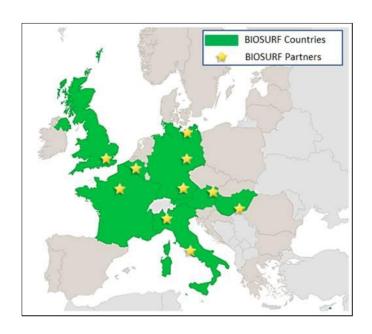
- Research and consultant Institute founded in 1971
- Consolidated experience in energy efficiency, sustainable mobility, territorial systems, environmental sustainability
- 20 members staff with multidisciplinary background in engineering, statistics, economics, politics and informatics
- Long story of collaboration at national (Ministries, Regions, Provinces and Municipalities) and international level (European Commission, World Bank, European Bank of Investments, foreigner Ministries, Regions e Municipalities, etc.)
- Specialised skills in coordination of projects, analysis of and support to policies, impact assessment, evaluation of policies and technologies energy efficiency, monitoring of participation processes to policies.





Project Summary

- BIOSURF: BIOmethane as SUstainable and Renewable Fuel (HORIZON 2020);
- 36 months (since January 2015);
- 11 partners in 7 countries: ISIS, CIB (IT), EBA (BE), REA (UK), GBA, FNR, DBFZ (DE), HBA (HU), AKB, AGCS (AT), ATEE (FR);
- **1.873.000** € of EC funding (100%);
- Activities:
 - National/domestic biomethane registries
 - > Cooperation among the national biomethane registries
 - > European mass balancing system for biomethane
 - > Free market biomethane trade
 - > Sustainable raw material supply
 - ➤ Methodology for entitlement to CO2 certificates
 - Regional specificities (IT, AT, FR);
 - Networking and cooperation;
 - > Transferability of results beyond the project countries
 - > Dissemination & Communication.







Why Biomethane?

- Diverse, abundant and self-supplying feedstock: sewage sludge, municipal bio-waste, residues and crops from the agro-food sector
- Unique combination of low-carbon, low-emissions, low-noise transport
- Biogas production to improve environmental efficiency of waste treatment processes
- High productivity per hectare of biogas from crops, decreasing competition for arable land
- Upgraded biogas similar to natural gas:
 - CNG infrastructures and vehicles can be used
 - Natural gas can be complementary in security of supply
 - Upgraded biogas can be injected in and transported by the natural gas grids





Supplies are unlimited ...

ORGANIC RESIDUES

Sewage sludge Energy crops Slaughterhouse waste Manure Organic household waste











Fonte: Progetto CIVITAS TRENDSETTER – <u>www.civitas.eu</u>

Disegno: FGM-AMOR





Supplies are unlimited ...



Fonte: Progetto CIVITAS TRENDSETTER – <u>www.civitas.eu</u>

Disegno: FGM-AMOR





The BIOSURF Approach

BIOSURF works at the same time at two levels:

- At European/national level:
 - ▶ biogas/biomethane associations addressing the founding aspects of the project in Germany, France, Austria, UK, Italy and Hungary;
 - > exploitation and transferability of project results through the organisation of five workshops in non-partner countries (in Sweden, The Netherlands, Belgium, Romania and Czech Republic).
- At Regional level with selection of some regions as the most promising to engage for the production and use of biomethane: Lombardy, Trentino-Alto Adige (Italy), Lower Austria (Austria) and Rhone-Alpes (France). Assessing the concepts elaborated at national level (e.g., registries, GoO, sustainability, GHG emissions, standards), BIOSURF intends to connect regional areas as a kind of "embryonic" European common biomethane market.





Cross-Border Trade of Biomethane

- Addressing regulatory and administrative obstacles;
- Elaboration of practical solutions in the view of preparing a common European biomethane market;
- Specific aspects:
 - > Guidelines to build up National/domestic biomethane registries (Set-up of new ones, at least for HU and IT);
 - > Cooperation among the national biomethane registries: support to ERGaR (European Renewable Gas Registry)
 - > European mass-balancing system for biomethane (proposal to EC on cross-border biomethane administration based on a voluntary scheme for mass-balancing biomethane);
 - > Tradable Biomethane Certificates (analysis and market survey for determining the feasibility threshold for tradable biomethane certificates);
 - > Biomethane standards.





Sustainable Raw Material Supply

Guidelines on sustainable raw material supply for a European biomethane market by:

- Assessing the current and future sustainable raw material supply for biomethane production;
- Creating an improved understanding among decision-makers in policy and industry regarding sustainability requirements in the raw material supply chain for biomethane production;
- Identifying and compiling consistent sustainability criteria and indicator (C&I) for biomethane value chains.





GHG Emission Reduction Certification

Guidelines on calculating entitlement to CO₂ certificates based on:

- Methane emission reduction due to processing agri by-products;
- Methane emission reduction due to processing organic waste;
- GHG emission saving due to replacement of chemical fertilisers;
- GHG emissions caused by biomethane production (Life Cycle Analysis).





Regional Specificities for Biomethane Market

- To develop an "embryonic" biomethane market by connecting regionals areas in three neighboring countries (Austria, France and Italy) in which assessing the concept elaborated at national level (e.g., registries, sustainability, GHG emissions, standards).
 - ✓ A biomethane **register** for Italy or (at least) a regional one for Northern Italy;
 - ✓ **Bilateral or trilateral agreements** among the biomethane registries from Italy, France and Austria, including mutual acceptance of Biomethane Guarantees of Origin issued in the country of production;
 - ✓ A regional arrangement with the competent natural gas pipeline companies on the procedure of confirming the physical movements (injection, take-out);
 - ✓ At least **one willing customer** who is interested to buy imported biomethane and at least **one willing biomethane producer** in any of the three countries who is interested to produce biomethane for export;
 - ✓ The readiness of the countries' governments to import biomethane from foreign countries.





Inter-Association Cooperation

 Opportunity for the biogas/biomethane associations to regularly meet up in adhoc inter-association workshops that will be held alternately in each BIOSURF country according to the consortium meeting rotation (each six-months);

 Crucial discussion venue where people from different backgrounds but with similar agendas will meet face to face;

• Aim to provide, mainly to stakeholders of the hosting association, **updates** on the entire project and on the **activities** of the other associations within the project.





Transferability of Results beyond the Project's Countries

- Proper exploitation and transferability of project results through the organisation of five workshops in non-partner countries (in Sweden, The Netherlands, Belgium, Romania and Czech Republic).
- These workshops will represent, through the involvement of the main national and local stakeholders, the kick-off step and a **visible milestone** in the development of concepts (registries, guarantee of origin, tradable certificates, sustainability, GHG emissions reduction, etc.) elaborated within the project, with the aim to produce a **replication effect** outside it.





Results so far...

- Comprehensive guidelines for establishing national biomethane registries;
- Technical-administrative **proposal** to EC for declaring natural gas network as a single, closed mass-balancing system with respect to biomethane cross-border transactions;
- Technical-economic analysis and market survey for determining the feasibility threshold for tradable biomethane certificates
- Report on data availability of selected raw material categories;
- Report on current and future sustainable biomass supply for biomethane production;
- Benchmark and gap analysis of C&I;
- Selected country analysis of sustainable biomethane
- Recommendations for the adaptation of the RED GHG calculation methodology;
- Inventory of rules and conditions for the natural gas/biomethane market in 3 regions (IT, AT, FR)
- Inventory and analysis of biomethane related EU and national political acts, regulations and support schemes;
- Communication products (leaflet, newsletter, postcards, roll-up, website).





Thank you for attention!

Contact Details

Stefano Proietti sproietti@isinnova.org

Loriana Paolucci <u>Ipaolucci@isinnova.org</u>

www.biosurf.eu

