ARGENTINA/Instituto Nacional de Tecnología Agropecuaria

Jorge Antonio Hilbert



GMI Biogas Subcommittee Meeting 28 October 2019



- The RENOVAR program with the different calls produced a new market and incentives for new projects.
- The PROBIOMASA program of the Ministry of Agriculture has a specific biogas program organizing meetings c& courses all over the country and online. The program has an updated biogas project data base in a GIS format.
- INTA & INTI continue with their projects focusing on design and laboratory support
- A new Project with the EU called Dibicoo is begining this week focused on case studies development,
- New companies in the market are growing most in a mix way with europeans





- Argentina commitments on climate change were increased during Macri administration there is uncertainty on the new administration policy.
- Present policy on renewable incentives is linked to hard currency prices wich may be revised by the new administration.
- Biofuels is coming to an end and there are different criteria on the new law that eventually will replace it. All this is dependent on the change of administration transition agreements.



City problems

Sustained and accelerated growth Problems of solid and liquid waste \geq How to treat them (technological alternatives) \geq Where to do it (logistics and transport) (citizen resistance) \gg Where to deposit them (more confined spaces and neighbors resistence) > At what costs (high demand for investment and maintenance) Increasing pollution of air, soil and water (groundwater rivers and lagoons). Growing health problems and quality of life Deficit and rising energy costs > High levels of emissions to the atmosphere impact on climate change

Farming problems

- Energy deficit and growing import
- Nutritional deficit of soils
- Increase in water cycles
- >Weed resistance
- Adjusted margins
- Reduction of organic matter and physical deterioration of soils
- Cost of fertilizers
- Pollution by effluents of groundwater rivers and lagoons.
- High levels of emissions to the atmosphere of organic waste

Number of new biogas projects Electric power and Price payed

ENERGÍAS RENOVABLES | DOCUMENTOS | CONTACTO EÓLICA | SOLAR | BIOENERGÍAS | HIDROELÉCTRICA

3 de abril 2019

Este año se inauguran 20 plantas de biogás: un listado con las provincias y empresas que participan de los proyectos

El jueves 25 de marzo pasado, la Secretaría de Energía de la Nación informó la entrada en operación comercial de la planta de biogás Complejo Ambiental Ensenada, ubicada sobre la diagonal 74 que conduce a Punta Lara, donde a diario llegan 1.100 toneladas de basura de las localidades de La Plata, Berisso, Magdalena, Brandsen y [...]





Some states have carried over potential studies per county Ex Bs.As.



Mapa 1: Potencial de Biogás discriminado por Partido de la Provincia de BA, utilizando residuos de producciones primarias intensivas. Elaboración propia. Datos: Probiomasa-Programa WISDOM. Mapa 2: Potencia Eléctrica que podría obtenerse con el aprovechamiento del Potencial de Biogás. Elaboración propia.



National biogas survey analyzing technical aspects

- More tan 70 plants were detected in different provinces
- More than 80 % was not useng biogas regularly
- 63 % had no temperatura control and déficit in mixing systems
- Biogas is being used in termal and electrical production (38%)
- More tan 20 technology providers were detected and the number is growing
- No security measures were detected in most of the plants.





LCA studies over commercial plants learnings on the integration of biogas plants in bioethanol biorefineries

- Importance of the synergy in order to reduce emissions and improve the carbón footprint of biofuels
- Reduction of methane emissions of residues

Global approach







Change of paradigms

Sustainable Development Goals



"From productivity to sustainability and quality "

A better understanding of the interrelations between sectors and activities is required.



The Economist

How will Imran govern Pakistan? Germany sulks (not just about football) Productivity: The hand-spinner's

Liberalism's greatest thinkers

Desing the war against cl^a rWGRER use

BIOGAS DONE RIGH BDR A NEW PROPOSAL TOWARDS A SUSTAINABLE DEVELOPMENT OF BIOGAS





- Improve wáter quality
- Erosion reduction
- Productivity improvement
- GHG reduction

Continuous soil coverage

BDR

Organic matter increase

Residue valorization

Economic

stability

- Increase money flow
- Volatility minimization food feed & energy markets
- Fertilization reduction costs

• Energy and coproducts

- Emition credits
- External reduction dependance
- ILUC risk reduction

- Nutrient loss reduction
- Better wáter use
- Yield and soil fertility increase
- Carbon footprint improvement

Title of action

Global Methane "... CHOLLENGE ..."

- Look forwar to national study on the impact of biogas plants
- Highlight benefits and increase awareness on Methane emition impact
- Agrreement on the way to measure and supervise projects
- Anticipated emission reductions from this action
- Joint meetings of national initiatives, posible synergies with new funding projects ad Dibicoo

More examples of GMC submissions can be found on the <u>Global Methane Challenge</u> <u>website</u>. The information provided on these slides will be used to develop new commitments to be posted on the website.