



# Methane to Markets

**The Kindersley Centre, Berkshire**

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**defra**

Department for Environment  
Food and Rural Affairs



Agriculture Subcommittee Meeting

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# Statements and reflections on the workshop

## What I have learned from the workshop

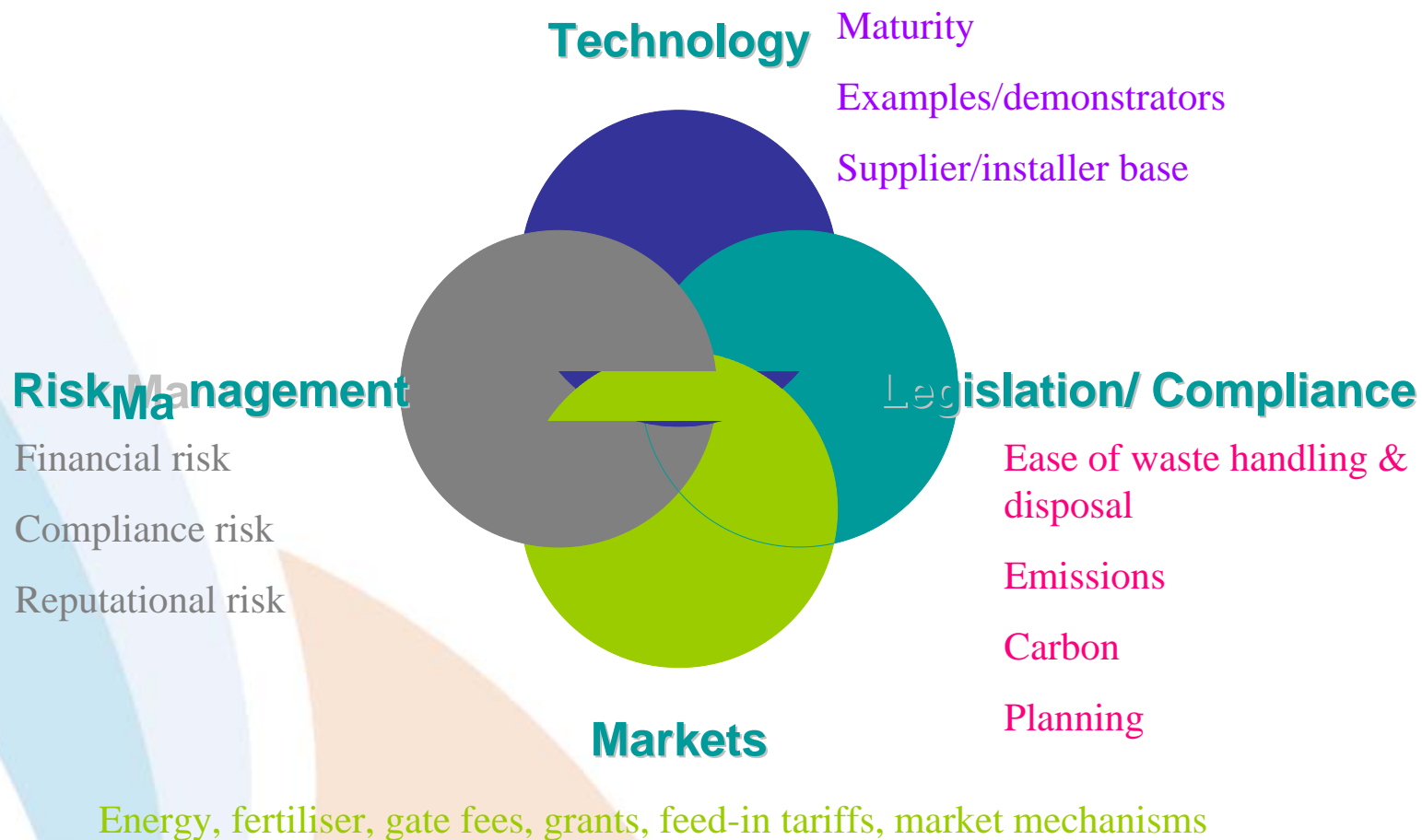
- High tech AD is not free available and is managed by private enterprises mainly European.
- There has been different views regarding reliability of plants.
- There are many facilities operation on relative high solid content 20 % and more at mesophilic and termophilic temperatures.
- There is an important growth in CDM projects involving LA countries.
- There are big concerns regarding biosecurity and health that are being addressed through the increase of operation temperature AD plants.
- There are operating plants in very low temperature climates.
- There are experiences upgrading biogas to a second generation biofuel.
- There are interesting figures that must be analyzed in detail regarding the use of other feedstock's as corn silage, glycerol (linkage with biodiesel production, or other wastes).

# Statements and reflections on the workshop

## What I have learned from the workshop

- Technology regarding primary treatment and transport must be analyzed in order to find specific applications in some large farms with many dairy centers.
- A more deep understanding of soil interaction and atmospheric emissions must be deeply studied (CO<sub>2</sub> NO<sub>x</sub> and other gases)
- There is a great knowledge regarding failures in different countries that must be exposed in order to learn and prevent falling on the same mistakes.
- Denmark, Germany and UK seem potential sources of high tech technology suppliers.
- Partnership model is operating in Germany and the checklist developed on an experience of over 2000 digesters must be analyzed.
- There is a need to open the view of AD incorporation other environmental and social aspects involved.
- Having a certain environmental target it would be advisable to make comparative studies of alternative technologies that can be used to achieve those objectives and compare costs.
- Regarding local energy production on farms and isolated areas shadow prices of commercial energy should be taken into account.

# AD Project Success – Key Drivers



# Drawbacks regarding AD implementation in Argentina

- Very low internal energy prices principally diesel oil which is the principal energy source of the agricultural sector. 0.5 US\$/l
- Scarce diffusion of AD technology. The general perception is its unreliable, low energy output, developing not mature, high cost, uncertain benefits
- There are no private sector companies dedicated to this technology in the country.
- Farmers do not comply with many environmental legislation regulations.
- Regulations are confusing and different depending municipal, state or federal jurisdiction.
- There were not any integrated research and extension plan regarding manure treatment.
- CDM procedures are complicated, long expensive and require that all local laws are respected (laboral, tax, environmental etc.)

# Positive aspects that is moving increasing interest in AD implementation in Argentina

- There is an increasing shortage of diesel in many areas of Argentina. Prices are going up in the marginal market doubling official prices of the companies.
- There is an unbalance between production and consumption of diesel that must be cope importing diesel and exporting gasoline.
- There is an increasing concern about the future of energy supply since oil and gas reserves are presently no more than 15 years and the country energy matrix depends more than 90 % from petrol and gas.
- There is an increasing concern regarding future global market restrictions to products coming from countries that not comply with environmental standards imposed to local farmers of the northern hemisphere.
- Farmers are starting to look and invest in alternative fuels. Biodiesel and alcohol are the most popular.
- There is a new national research and extension program of INTA considering energy production and residue treatment in agriculture and agro industry. A national network is under construction.
- There is an increasing concern in government politics to develop different regions of the country with local alternatives.

## Actions to be taken with methane to markets support

- We comit to organize a national – regional workshop in Argentina to which the principal actors will be invited.
  - Methane to markets partnership will be diffused promoting the presentation of specific projects.
  - All principal actors will be invited (poultry, feedlot and dairy farmers associations).
  - Principal governmental are going to participate in a network partnership action (Ministry of Agriculture, environment, INTA INTI and provincial agencies). The base of this network is INTA national program regarding production of energy and residue treatment.
  - Referent people from developed world are going to be invited to show the state of the art and economics of plants built and operated in cold climate.



# Review and adoption of the draft of the action plan

- Work to develop a simpler template
- Translate main documents into Spanish and place them at local web sites connected to main web page of methane to markets.
- Promote methane to markets through principal ag. Magazines, newspapers, TV and newsletters.
- Promote the subject at the EU frame program 7.