Foresight Exchange Workshop

“How to integrate agriculture and environmental stakes in foresights?”

Presentation n°6 (M. de Lattre-Gasquet, ANR)
Agriculture Energy 2030

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1. Anticipation – Appropriation - Action

• Ordering body : Ministry of agriculture
• Anticipation : possible future → 3 scenarios
• Appropriation : 40 experts from farming world, private sector, technical bodies, research institutes, ministries, public agencies, civil society.

Publications

• Action: 4 general objectives and 13 operational objectives
2. A multifunctional view of agriculture

- **A multi-functional view of agriculture**: production, processing, social, economic, cultural and environmental (in France).

- **A systemic issue**:  
  - Control of energy consumption is an economic issue for agricultural holdings which consume energy both directly and indirectly  
  - Energy involves logistics, the organization of agricultural supply chains and the pattern of distribution of farming across regions  
  - Energy and climate are intertwined issues.

- **Agriculture – Energy - Environment**  
  - Look at new practices for preservation and mitigation roles  
  - Look at new locations to reduce transportation  
  - Produce new sources of energy, especially for the farm
3. A system structure
4. Four scenarios: lessons for other countries?

- For each scenario:
  - A narrative
  - Base: 2010 + Image: 2030 + Trajectories
  - Agronomic and energy-related characteristics
  - Break-points
  - Quantification (Climaterre)

- Sc. 1: Regionalisation and sobriety to confront the crisis
- Sc. 2: Twin-track agriculture and energy realism
- Sc. 3: Health agriculture with no major energy constraints
- Sc. 4: Ecological agriculture and energy savings
5. 4 general objectives and 13 operational objectives

- 4 general objectives
  - Reduce consumption of fossil energy to improve farm energy efficiency: fertilizers as a core element of energy balance.
  - Reduce consumption of fossil energy and improve the energy efficiency of regions and agricultural supply chains: local supply of protein for animal feed.
  - Make French agriculture a driving force in the development of sustainable and renewable energy sources: biomethanation as a source of fertilizers inputs on condition that the digestates are correctly evaluated.
  - Foster R&D and the dissemination of innovation related to energy issues in agriculture.
6. Illustration: impact of scenarios on energy and GES