



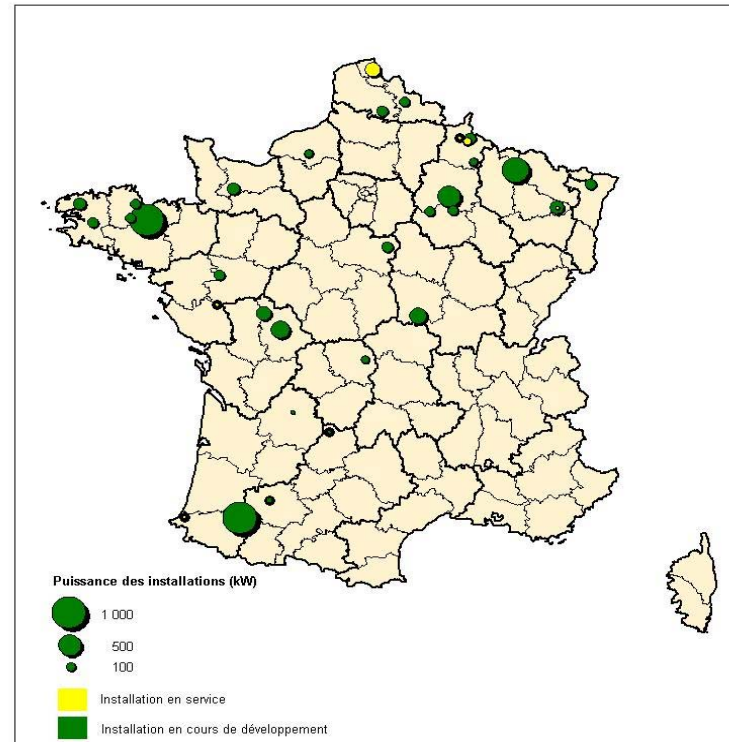
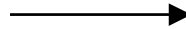
Biogaz development in France

- **Food industry :**
 - 127 digestors
 - +5 per year
- **Municipal Plants :**
 - 5 plants built since 2003 (capacity : 340 kT MSW/y)
 - 2 plants in building today (Montpellier, Marseille)
 - 2012 : around 20 plants
- **Sewage treatment plants : 68**
 - decreasing
 - old plants



On-farm biogas

| | |
|-----------------------|----------------------------|
| Nb of projects | 130 |
| 2008/2009 | 30 |
| Average power | 260 kW_{el} |



Source : ADEME / GEODE / G.Bastide
 Cartographie : ADEME / DOBS / V.Roth



Means and purpose to develop biogas

- **Today :**
 - new price for electricity (2006)
 - help to investment (French state, EU)
 - Different tools : biogas calculator, GHG calculator, rules guide
- **in the future :**
 - simplification for environmental rules
 - Purpose : 1000 plants in agriculture for 2013



Which valorisation for digestate ?

- Spreading plan
- Homologation
- Normalization (NFU44051/NFU44095 = enrichment)

⇒ Very important problem in France

⇒ Which solutions for other countries ?

ADEME



Agence de l'Environnement
et de la Maîtrise de l'Énergie





Les premières installations en France

GAEC Oudet (Champagne Ardennes), 30 kWe



Exploitation Lebbe (Aquitaine)



SCEA des trois chênes (Nord Pas de Calais), 250 kWe

GAEC du Château (Champagne Ardennes), 80 kWe

