



Environmental Product Declaration in France

Legal context and technical challenges Illustration for the food sector

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Outline

- **Legal context**
- **Participative process**
- **Database ADEME**
- **Database Agri-BALYSE**
- **Preliminary conclusions**



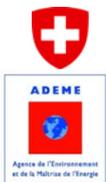
Legal Context (1)

The Law Grenelle 1

3 August 2009

Article 54

- Provide reliable and complete **environmental information** of the entity **“product and packaging”** for consumers
- Propose **environment-friendly products** at reasonable prices
- Support **EPD on EU - level**
- Develop **step-by-step** the design of the EPD as a completion of the price information
- Active **participation of professional stakeholders**



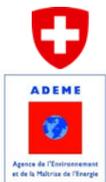
Legal Context (1)

The Law Grenelle 2 (Senate)

November 2009

Article 85

- Starting with **1 January 2011** the EPD of the entity “product and packing” has to cover
 - **Carbon equivalents**
 - **Consumption of natural resources or impacts on natural compartments**
- Further specification of the **implementation by category of products** is required
- Special consideration of the needs of **small and medium enterprises (SME)**



Legal Context (3)

The Law Grenelle 2 (National Council)

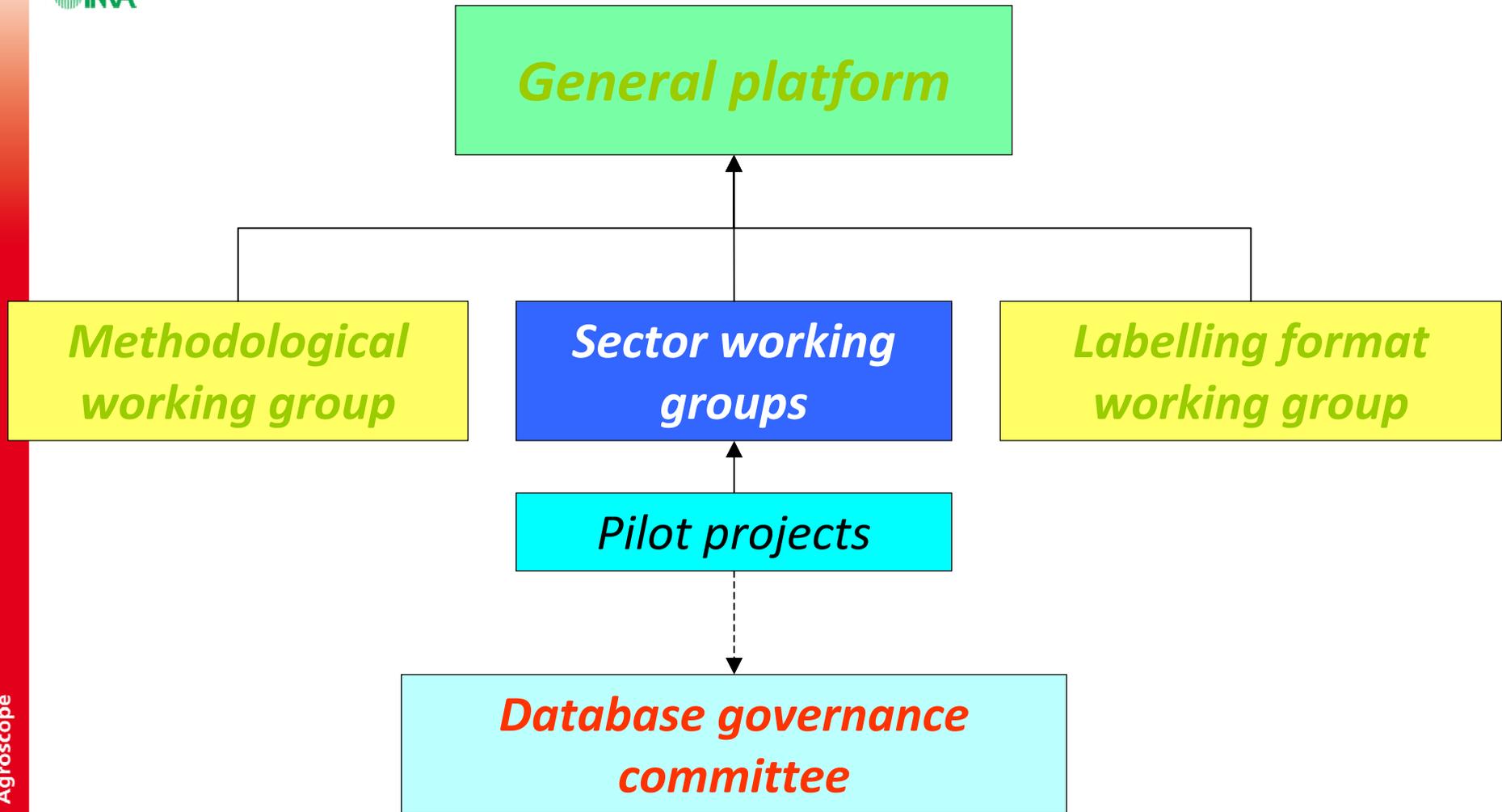
May 2010

Amendment

- A **one year experimentation phase** of the EPD has to start in **July 1, 2011**
- After completion: **Evaluation of the experimentation phase**
- **If succeeded**, generalization of the chosen approach of the EPD by the State Council, based of the experiences of the experimentation phase
- **Amendment accepted** by the mixed commission Senate / National Council

Participative process (1)

ADEME / AFNOR Platform



Participative process (2)

Sector Working Groups (active)

1. **Foodstuffs and animal feed**
2. Electrical and electronic equipment
- 3D. Maintenance products
- 3J. Garden products
- 4H. Hygiene
- 4B. Beauty
5. Clothing, home textiles // Shoes, leather goods
7. Furniture
8. Stationary, publications, leisure, culture, writing materials
- 10S. Sports equipment
- 10J. Toys and games
11. Non-electrical tools and hardware
12. Financial services



Participative process (3)

Governance of work for the bodies in charge

- **Working groups** and **general platform open to all consultation of participating parties**
 - **Working groups** : preparation of proposals validated by the platform
 - **General platform**: decision-making and coordinating body bringing together the participating parties.
- **Public information:**
<http://affichage-environnemental.afnor.org>

Participative process (4)

Key figures

■ General Platform :

- 370 organisations represented by ~500 registered experts

■ Sector working groups :

- ~800 registered experts
- From 49 to 270 registered in the WGs and an average of 120 registered per group

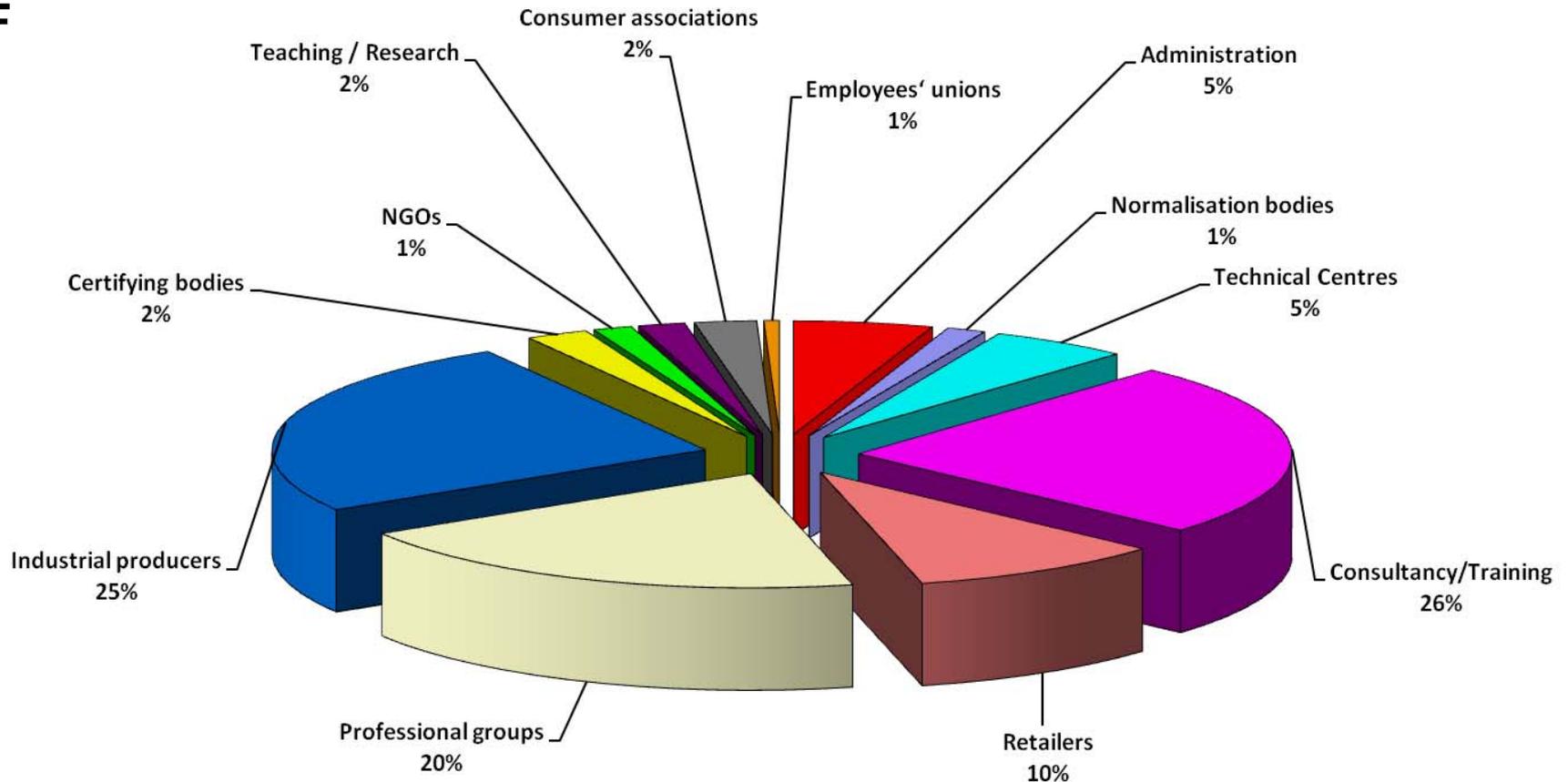
■ A total : Platform + transverse and sector Groups

- **670 organisations represented by +1000 experts**
- *This is without taking into account that certain experts follow and are registered in several groups*

Participative process (5)

Players represented in the general platform

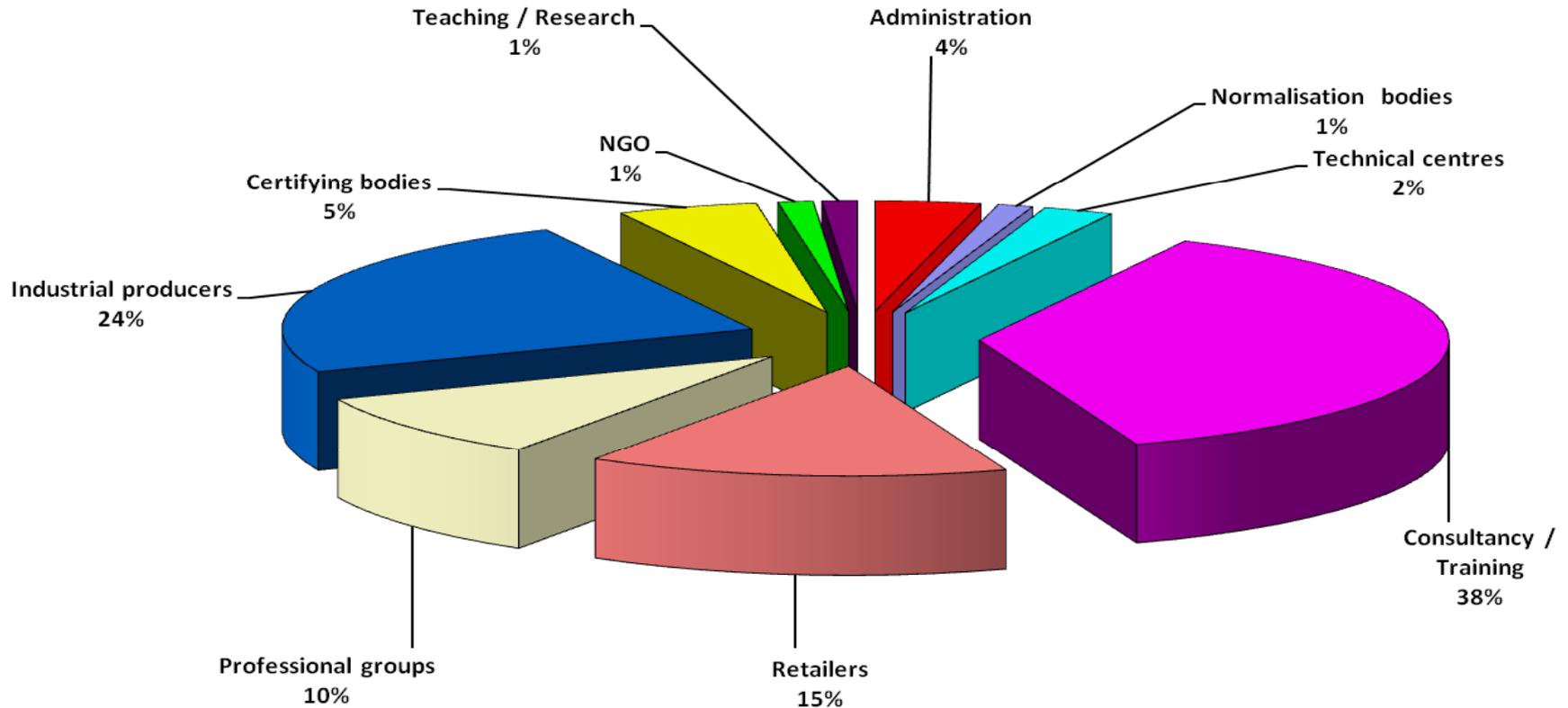
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Participative process (6)

Players represented in the working groups

GT4B



Participative process (7)

Methodology: Document BP X30-323

- **Life Cycle Analysis Approach**
- **Greenhouse gas emissions** (CO₂ equivalents) constitute a transverse indicator
- **Multicriteria approach:** identification of other pertinent indicators which are however limited in number
 - Example GT1:
 - **Biodiversity**
 - **Water pollution (eutrophication and aquatic ecotoxicity)**
 - **Water use**
- **Generic public database**
- **Transverse and sector methodological rules**

Participative process (8)

General methodological rules

■ **Methodological appendix**

- Transverse methodological framework
- Clarification of open points of standards ISO 14040 / 14044
 - End of life
 - Cut-off rules
 - Exclusions
- Revision process in progress

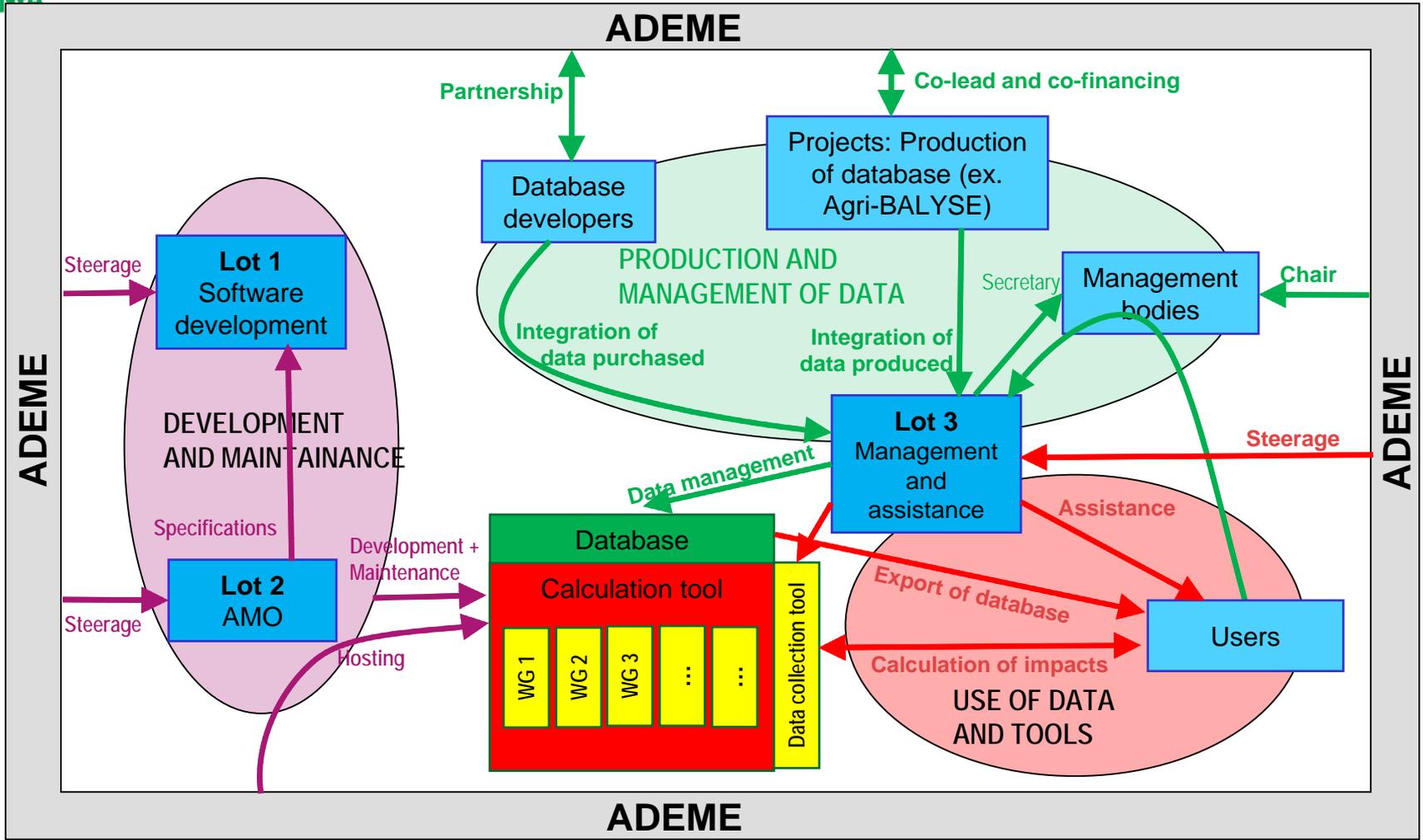
■ **Reading guide for methodological appendix**

- Explanation and illustration of methodological choices
- Available free of charge at www.ademe.fr

■ **Publication procedure**

- **Available on the ADEME website**
- **Evolving document:** Rapid and successive updates and revision possible
- Development in line with approved **standard statute possible** in the future

Database ADEME (1) General framework





Database ADEME (2)

Preliminary studies

| | |
|---|---|
| <p>Under way</p> <p>(end foreseen in June 2010)</p> | <p>Preliminary study for the construction of the database</p> <p>Deliverable : Development plan of the database (structure and content).</p> <p>Commissioned : BIO-RDC</p> <p>⇒ <i>Conformity to ISO 14048 and ILCD format</i></p> <p>⇒ <i>LCI and LCIA data</i></p> <p>⇒ <i>LCIA methods still open; JRC handbook conformity</i></p> <p>⇒ <i>List of the most important products consumed in France</i></p> |
| <p>January 2010 - May 2010</p> | <p>Ability of SME to collect the data required for the environmental declaration</p> <p>Deliverable : Methodology and Outline of a data collection tool for SME</p> <p>Project financed by the French Ministry of Finance (<i>agro-food industry excluded</i>)</p> <p>Commissioned : EY-Quantis</p> |



Database ADEME (3) Implementation

| | |
|---------------|--|
| Summer 2010 | Building of the Governance Council of the database and launching of the work relative to the database management and the end user agreement rules |
| From mid 2010 | Development of the database (void structure vide, to be filled up) and of the calculation tool for the EPD Call for tenders in 3 lots : <ul style="list-style-type: none">- computer development- data management system- user assistance |

Database ADEME (4)

Data generation in general

| | |
|---------------|---|
| From end 2010 | Data generation (agricultural production and sea products excepted) Purchasing of user rights from other databases and data specialists (ecoinvent, PE, PWC, BV, FCBA, CTC, etc.)* |
|---------------|---|

- Most **required data do already exist** in present databases (ecoinvent, DEAM, Gabi, BV, etc.)
- But, even then they already exist, they **must be adapted to the French EPD methodological framework**
- Adaptation et Usage rights to be **negotiated** with the owner of existing databases
 - Call for tenders ?
 - Partnership framework agreement with bilateral contracts ?
- **Data purchasing management by ADEME**
 - Consultation of the Governance Council
 - Together with the owners of the existing databases

Database ADEME (5)

Data generation for agricultural products

2010
- 2012

- **French production:** Data from Agri-BALYSE
- **Imported products:** Other data sources
 - *Must be compatible with the methodological framework of Agri-BALYSE*
- **Product transformation:** To be decided



Database Agri-BALYSE (1): Objectives, target groups and expected benefits

Objectives

1. Environmental Product Declaration

Providing **a public database of LCI of agricultural products** as basis for the environmental product declaration (as part of the ADEME database)

2. Life Cycle Thinking in the Agri-Food sector

Supporting the **environmental optimisation of value chains** by means of LCI database

Target groups

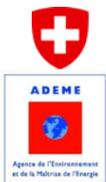
1. All actors of the **food chain incl. consumers**
2. **Farmers, extension services and research**

Expected Benefits

- a. **Environmental optimisation** of production systems
- b. Enabling **environment-based purchasing decisions**

Project Duration

2010-2012



Database Agri-BALYSE (2): Players

■ Commissioner

ADEME ⇒ Environment and Energy Management Agency

■ Agents

ART ⇒ Project co-leading
Plant production systems and **database issues**

INRA ⇒ Project co-leading

Animal production systems

CIRAD ⇒ **Tropical products** (overseas departments/other countries)

ACTA and **10 technical agricultural institutes**

Data collection and **implementation in practice**

■ Project bodies:

Project managing Committee ⇒ all operational responsibilities

Strategic Committee ⇒ all strategic decisions

Consultation Committee ⇒ including all stakeholders

Review Body (quality control) ⇒ APCA/ Chambers of Agriculture

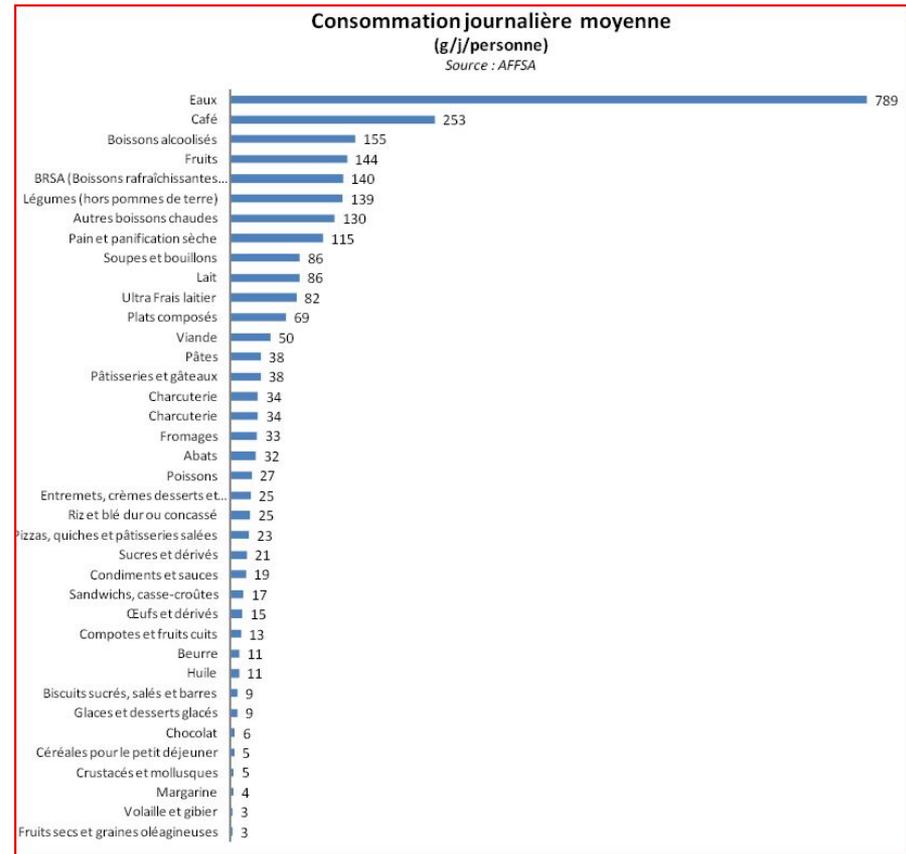
Database Agri-BALYSE (3): Selection of the products: Principles

■ Target

Inventories for approx.
80 consumer products

■ Basis of selection:

- Analysis of **consumption behaviour** in France
 - **Literature review** of existing LCA
- ⇒ Identification of **42 major products**



Database Agri-BALYSE (3): Selection according to strategic relevance

| Plant production - ART | Animal production - INRA | Tropical crops - CIRAD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------------------|------------------------|--------------|--|----------|-----------|--------------|-----------|--|------------|----------|------------|----------|--|-----------|-----------------|-----------|--------------|------------------|----------------|----------------|---------------|----------|------------------|--|-----------|--|----------|--|-------------|----------------|------------|----------------|---------------|-----------------|----------|--|------------|----------|----------|----------|--|----------|----------|--|---|--------------|-----------------------------|--------------------|---------------------|---------------------|-------------------------|
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Database Agri-BALYSE (4): Selection according to LCA portfolio-analysis

| | | Availability of LCI | | |
|--|--|---|----------------------------|---------------------------------|
| | | not available | few | many |
| Importance (with respect to consumption) | | Vegetables (12 products, already chosen: 2) | | |
| | | High | Endive Salad | TOMATE CAROTTE |
| | | Medium | Courgette Onion Leek | Cucumber |
| | | low | Avocado Pepperoni | Cauliflower Cabbage |

Database Agri-BALYSE (5): Detail level

- At least 2 LCI for each product are required

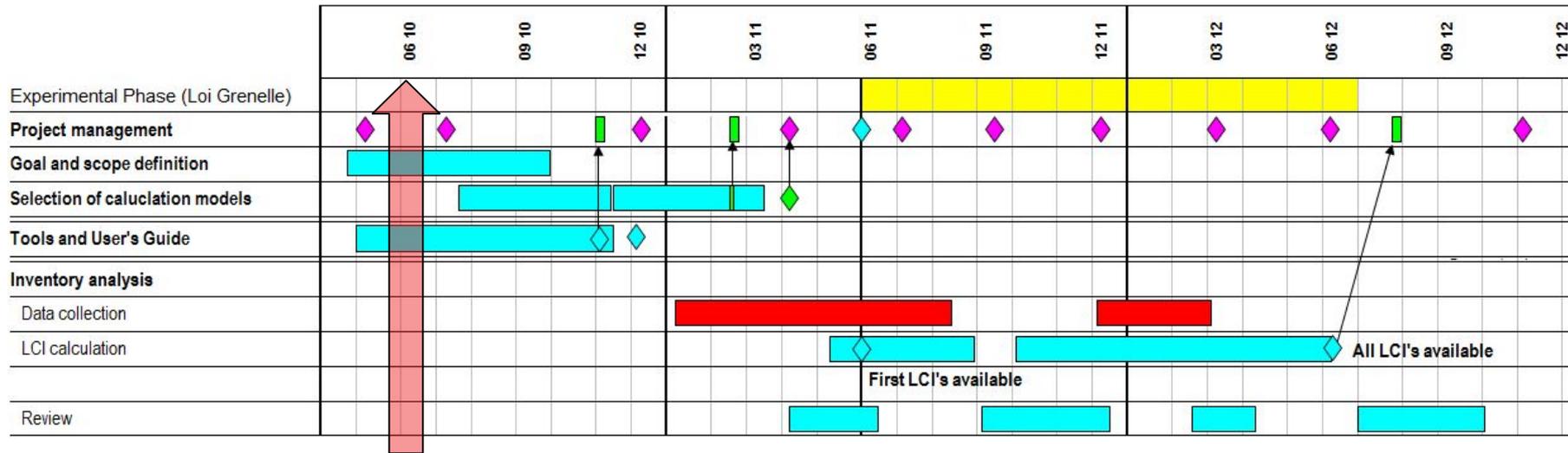
| | | | | | | |
|----------------------|---|-------------------------------|-------------------------------------|--------------------------------------|-------------------------------|-------------------------------------|
| | Plant production - ART | | | Animal production - INRA | | |
| Level 1 | 30 to 40 products + <i>Additional inventories for feeding stuff, mash, machines, buildings adopted to the French reality</i> | | | 30 to 40 products | | |
| Level 2 and 3 | 65 to 80 inventories | | | 65 to 80 inventories | | |
| | 30-40 National average | 20 -25 Regional | 10-15 Organic / Label | 30-40 National average | 20 -25 Regional | 10-15 Organic / Label |

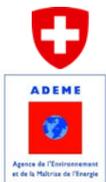
Database Agri-BALYSE (5): Models for field and farm emissions

- For the following direct emissions, simulation models will be used:
 - Nitrate (NO_3)
 - Ammonia (NH_3)
 - Methane (CH_4)
 - N_2O
 - Phosphor
 - Heavy metals (Cadmium, Copper, Zinc, Lead, Nickel, etc.)
- Simulation models have to be adapted to **French situation**
- **Evaluation** of the appropriate models is **ongoing**

Database Agri-BALYSE (6): Project Planning

■ All
 ■ CP
 ■ Art/INRA
 ■ Technical Institutes





Database Agri-BALYSE (7): Current status

▪ Results

First LCI should be available in June 2011

▪ Next steps

1. **Defining the products** and their differentiation
2. **Adopting the data collection tool** at the French particularities as well as at the different products
3. Writing a “**User’s Guide for data collecting**” to ensure comparable inventories

Conclusion

as far it is possible to draw conclusions now...

- LCA research has to **actively support** initiatives like the French one by assuming the **scientific responsibility** for LCI data
 - Clear **joined commitment** of INRA and ART for the agricultural sector in France
- LCA research has to consider the **legal context** and **organisation procedures** as given facts and is not there to influence them
 - **Participative approach** instead of technocracy
- **Combination** of **EPD** and **Life Cycle Thinking** (Agri-BALYSE), i.e. of static approach (observation) and dynamic approach (improvement strategies) is **challenging**
 - **Let us see!**