

# SUSTAINABLE PRODUCTION

## Session 2



THE 2019  
**EU AGRICULTURAL  
OUTLOOK CONFERENCE**

**Sustainability**  
from Farm  
to Fork







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# Philippe Chotteau

## Environmental Evaluation, Idele





# Low carbon farming, towards a certification

*Institut de l'Élevage – French Livestock Institute*

*10<sup>th</sup> December 2019*

*Brussels*



# French initiative to reduce carbon intensity in cattle farms



Target : Reducing by 15 to 20 % the milk and beef carbon footprint

## LOW CARBON DAIRY FARM (since 2013)



## BEFF CARBON (since 2016)



# Assessing and improving environmental practices on farms

**CAP'ZER®** AN ENVIRONMENTAL FOOTPRINT CALCULATOR AND DECISION MAKING FOR RUMINANTS LIVESTOCK SYSTEMS

Assess your environmental performances and farm's sustainability, to improve farming systems and practices

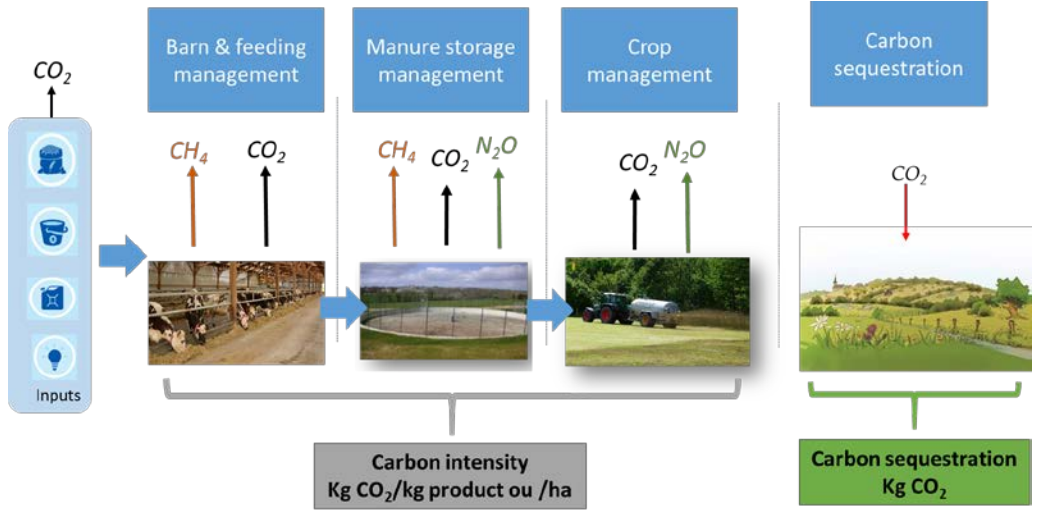
**A MULTICRITERIA ANALYSIS TO EVALUATE SUSTAINABILITY**

CAP'ZER® allows to assess :

- Positive contributions of the farm
  - Carbon sequestration (kg carbon / year)
  - Conservation of biodiversity (ha eq of biodiversity)
  - Food performance (Number of food people/year)
- Environmental impacts
  - Greenhouse gases emissions (kg CH<sub>4</sub>, kg N<sub>2</sub>O, kg CO<sub>2</sub> → kg CO<sub>2</sub> eq)
  - Air quality (acidification) (kg NH<sub>3</sub> emitted → kg SO<sub>2</sub> eq)
  - Water quality (eutrophication) (kg N and kg P leaching → kg PO<sub>4</sub> eq)
  - Energy consumption (Direct and indirect energy → kWh)
- Economical performances and work
  - Economical performances (Production costs)
  - Work conditions (Quantity of work, painfulness...)

CAP'ZER® is for :

- Livestock systems
  - Dairy cattle
  - Beef cattle
  - Sheep cattle
- Public
  - Farmers
  - Livestock advisers



**Methodology:**  
In accordance with main guidelines

Certified by Ecocert **ECOCERT**

# A methodology for capturing more than 40 mitigations practices

## GHG emissions

## Carbon sequestration



### Inputs

Pasture management,  
Concentrates and fertilizers,  
Legumes, Crops rotation



### Fuel and electricity

No-till cultivation,  
Power and equipment,  
Working organization



### Crops management & fertilization

Legume fodder crops,  
Optimization of fertilizers uses



### Herd management

Increasing productivity  
Reducing number of unproductive  
animals



### Feed

Feed efficiency,  
Forage quality and yield



### Manure management

Time spent in shed vs pasture,  
Biogas production



### Catch crops

Introduce more  
intermediate crops,  
more row intercropping  
and more  
grass strips

### Avoid bare soil

Never leave  
soil bare  
and work it less,  
for example by  
using no-till methods

### Agroforestry

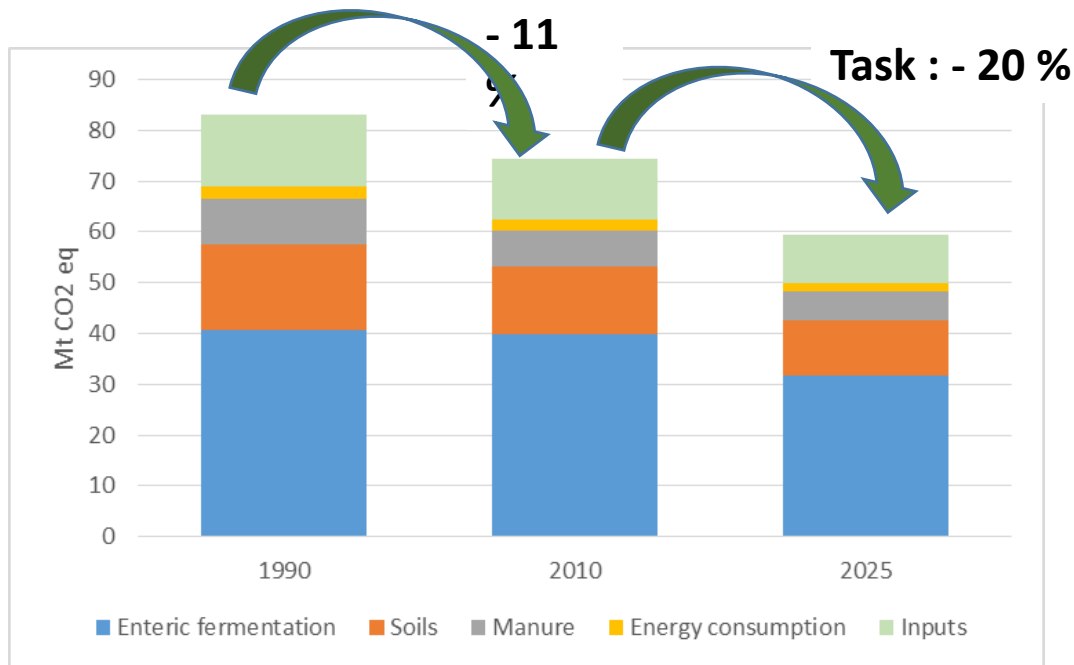
Add to the  
hedges at field  
boundaries  
and develop  
agroforestry

### Grassland management

Optimize  
pasture management  
- with longer  
grazing periods,  
for example

# Progress already reached and task for tomorrow

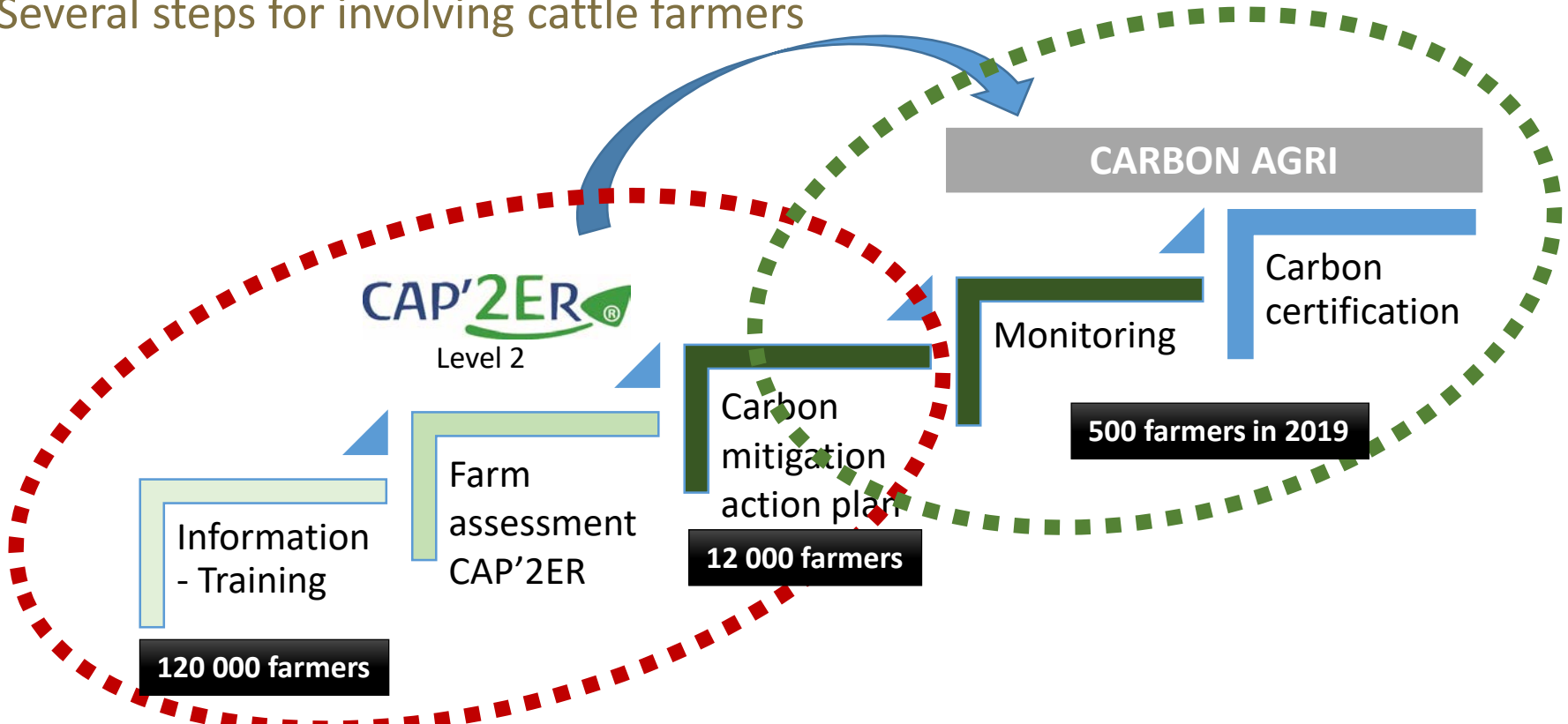
- GHG emissions from the bovine herd in France





# From carbon audit to carbon certification

- Several steps for involving cattle farmers

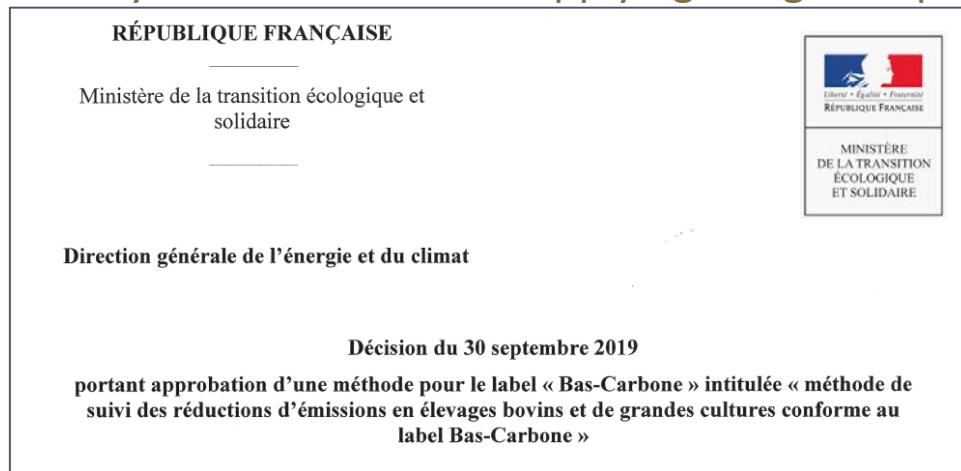




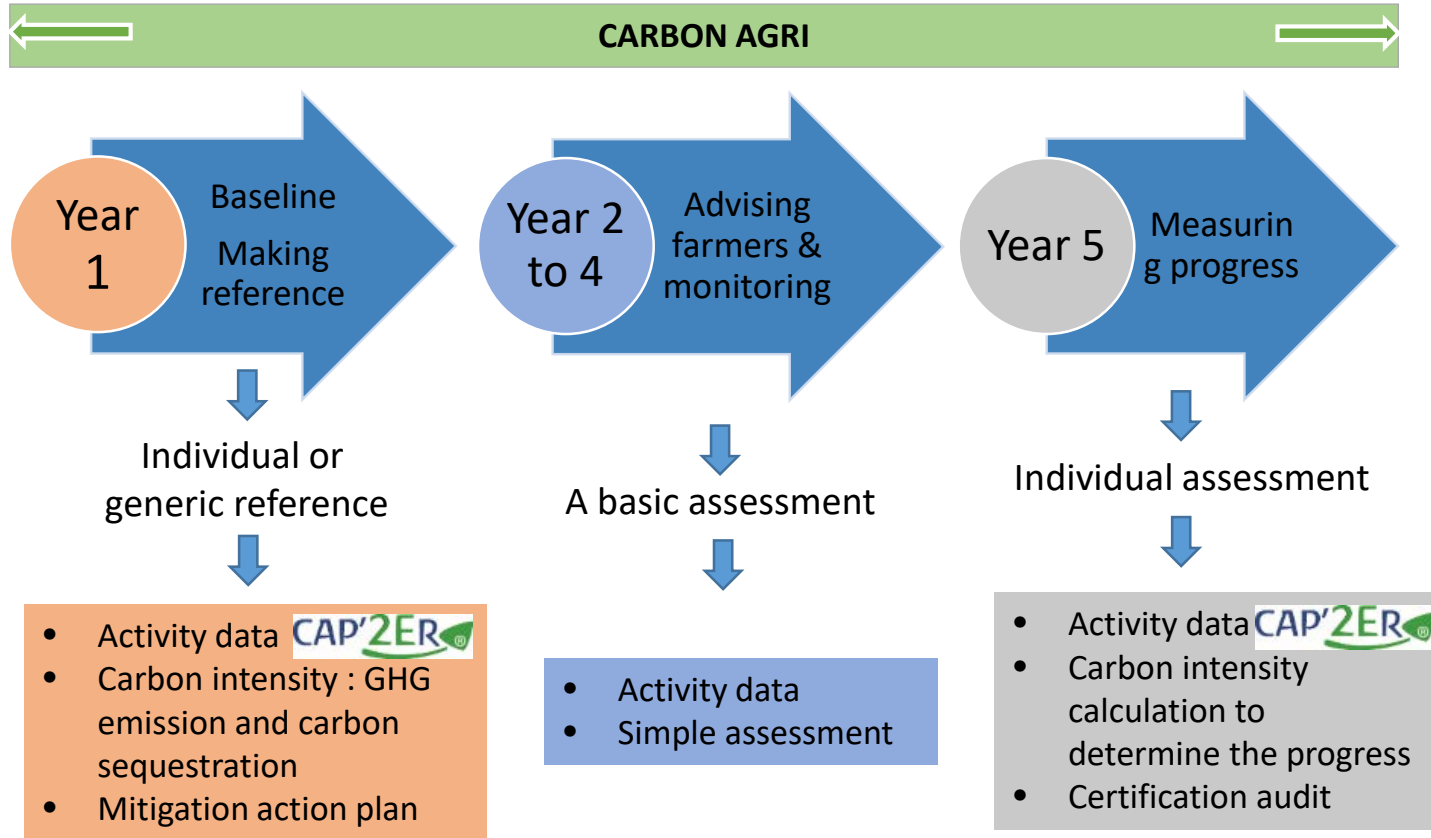
# CARBON AGRI: a methodology to certify carbon reduction



- Approved by the French Ministry of Ecological Transition
- Concerns cattle and crop productions
- Provides
  - highlightings & certifications of the agriculture's contribution in tackling climate change
  - payment for farmers, an opportunity to lever barriers in applying mitigation practices

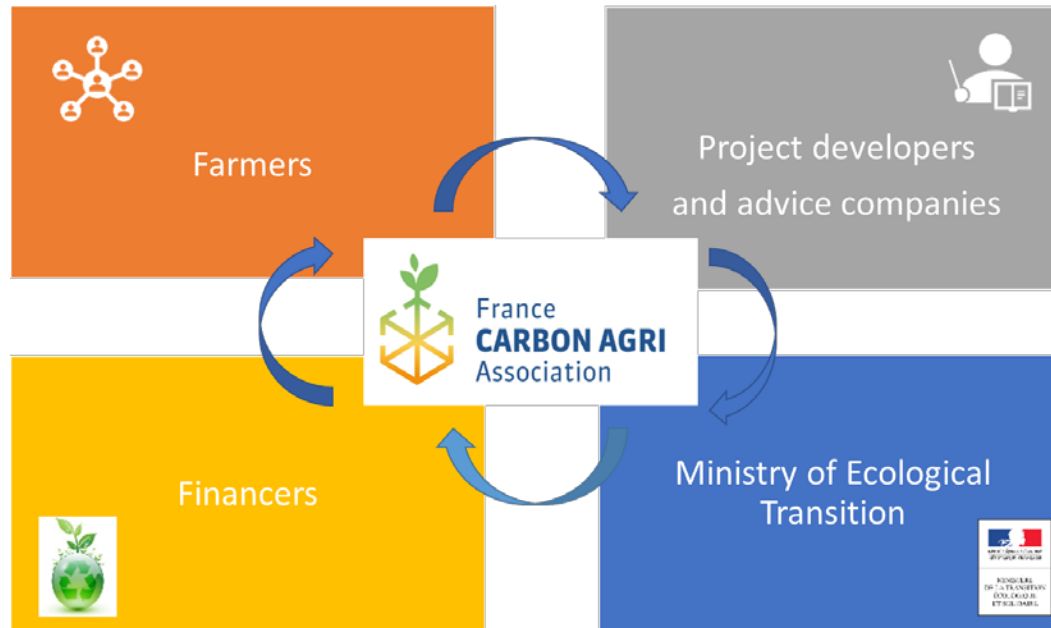


# Monitoring the progress



# Projects implementation

- France CARBON AGRI association, a way to reduce engineering costs and to merge farmers, projects developers, advisers and financiers expectations





# Thanks for your attention

*French Livestock Institute - IDELE*

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