



LIFE BEEF CARBON



Jean Baptiste DOLLE
FRENCH LIVESTOCK INSTITUTE – IDELE



Giacomo PIRLO
**Fodder and Dairy Production Centre –
FLC-CREA**



<http://ec.europa.eu/life>





Context

- ▶ Farmers not really concerned/aware about GHG
- ▶ No tools adapted for GHG advice on farm
- ▶ Some identified technical solution for mitigation but without dissemination
- ▶ Expected progresses: Limit unproductive animals/ feeding management/ crop and grassland management/ adjustment of fertilization ...
- ▶ No standard solution: need for case-by-case approach

➔ **LIFE BEEF CARBON**



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LIFE BEEF CARBON objectives

Identify and reduce the beef carbon footprint and improve sustainability of the sector

- ▶ **Educate farmers and technicians, develop tools and methods**
- ▶ **Disseminate beef carbon assessment at a large scale**
- ▶ **Identify, test and promote low carbon practices in a network of innovative farms**
- ▶ **Building the carbon action plans of beef production :**
 - ➔ - 15% of the carbon footprint in 10 years, 120 000 tons of CO₂ avoided
- ▶ **Launch a low carbon EU partnership dynamic** involving farmers, agricultural advisors, businesses and thorough production chain



LIFE BEEF CARBON objectives



**4 countries,
2 000 farmers, 57 partners**

➔ *Reducing the beef carbon footprint by 15%*



PARTNERSHIP : 4 countries / 57 partners



IRELAND	
Demonstrative farms	Innovative farms
100	20



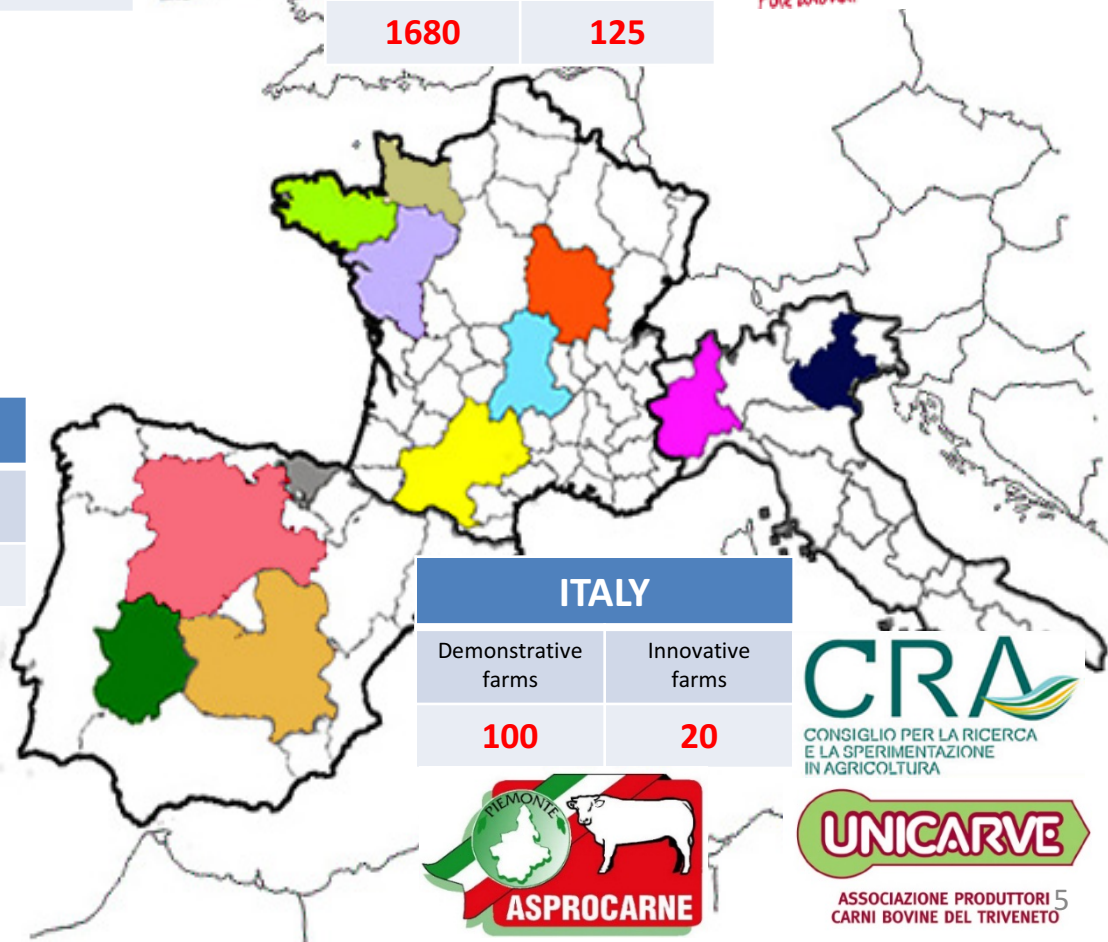
FRANCE	
Demonstrative farms	Innovative farms
1680	125



AINTA

Asesoria Integral Agroalimentaria SL

SPAIN	
Demonstrative farms	Innovative farms
120	7



ITALY	
Demonstrative farms	Innovative farms
100	20



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Action C : Implementation actions

Action C1 : Elaborating and sharing of a common LIFE BEEF CARBON framework

Action C2 : Training technicians and farmers on the beef carbon plan

Action C3 : A Life Beef Carbon demonstrative farm observatory

1,680 demonstrative farms in France

100 demonstrative farms in Ireland

100 demonstrative farms in Italy

120 demonstrative farms in Spain

Action C4 : 172 Innovative farms with a low beef carbon footprint

125 innovative farms in France

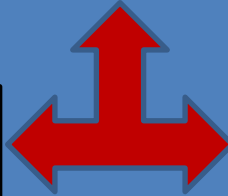
20 innovative farms in Ireland

20 innovative farms in Italy

7 demonstrative farms in Spain

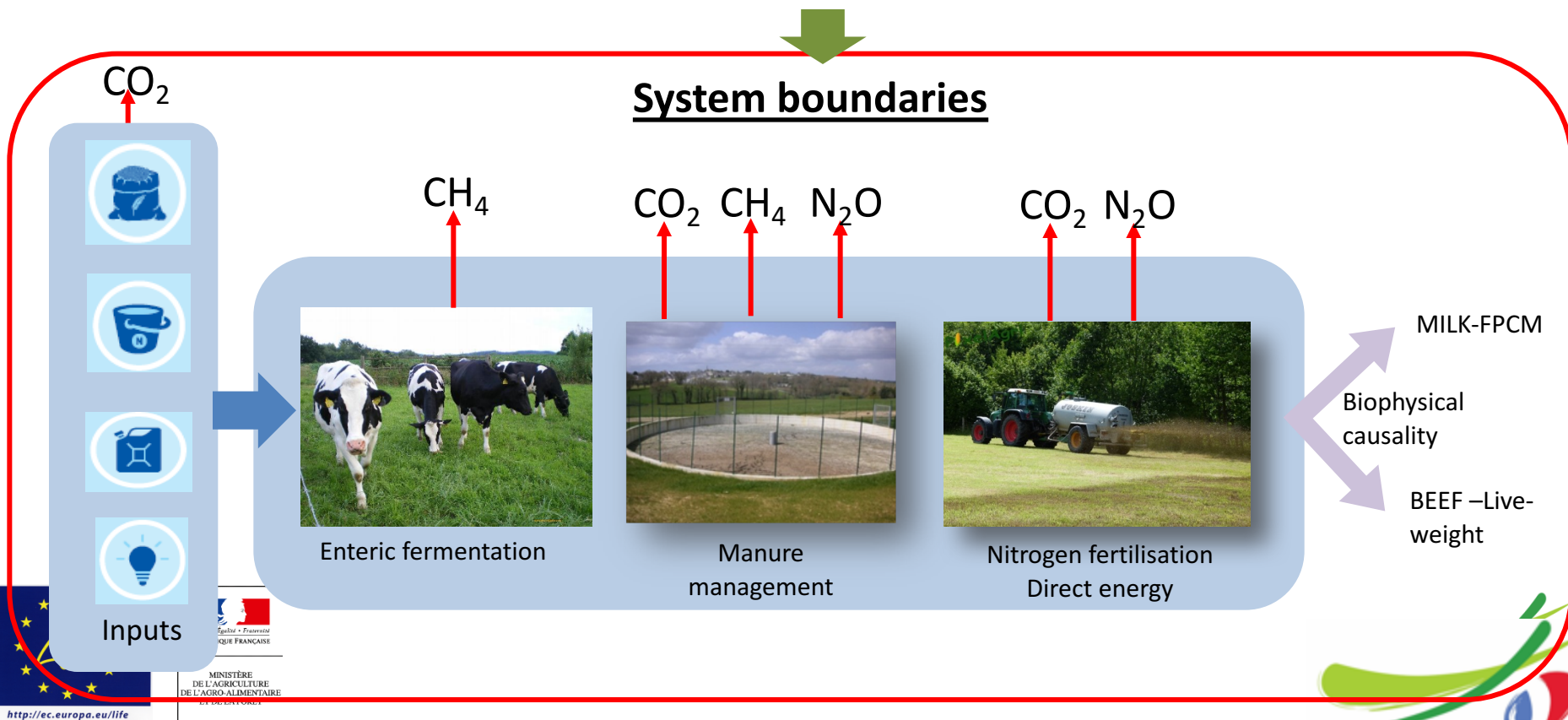
Action C5 : EU beef carbon farmer's network

Action C6 : French, Irish, Italian and Spanish beef carbon action plans



Inventory data – on farm level – annual basis

(herd demographics and production, animal housing and manure management, crop production for on-farm produced feed, feed ration and feed purchased, energy consumption)





A multicriteria assessment

Input datas :

- Animal census on the farm : sales, purchases, production of liveweight...
- Reproduction datas : age between two calvings, age at first calving...
- Time in housing
- Type of housing (integral deep litter, fully slatted floor...)
- Surfaces (crops, permanent pastures, crops residues, cover crops, irrigation...)
- Hedgerows
- Feeds (production, purchases)
- Fertilizers (type, spreading technics, periods...)
- Type of tillage...

Tools used

- France and Italy : CAP'2ER
- Ireland : Carbon Navigator
- Spain : NAIA

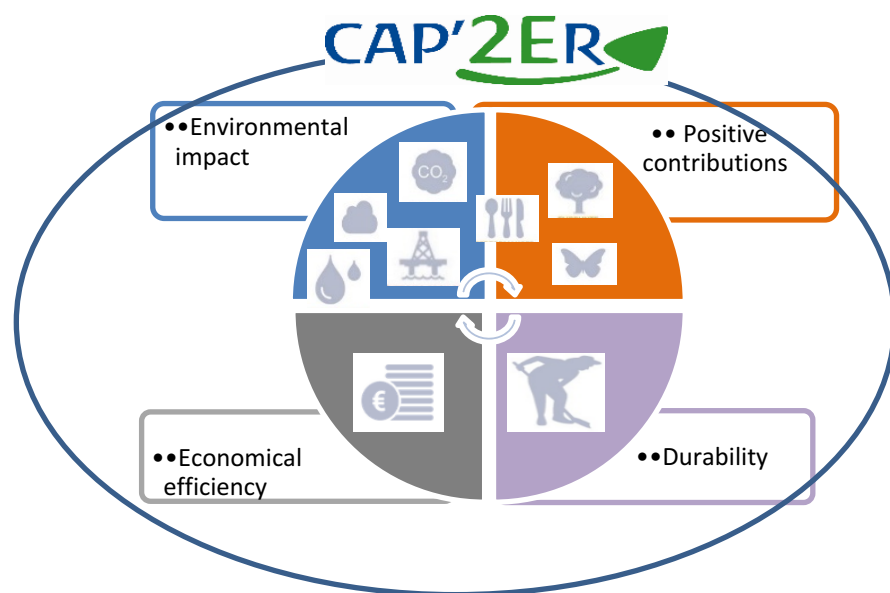


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Comparability and compatibility of the tools

- CAP'2ER, the French tool to assess GHG emissions



Following agreed methodologies

- ▶ IPCC 2006 tiers 2 and 3
- ▶ LEAP (FAO) and IDF
- ▶ Agribalyse (French data base)

Certification in progress



- Consistency with other tools

– CAP'2ER, Carbon navigator, NAIA - A comparison in progress



MON ATELIER VIANDE EN QUELQUES CHIFFRES

Mon troupeau

Effectifs	140 UGB
	80 Vaches allaitantes
Intervalle vêlage-vêlage	365 jours
Taux de renouvellement	15%
Production brute de viande vive	400 kg de viande vive/UGB
Taux de finition	52 %
Concentrés consommés	850 kg / UGB

Mes surfaces

Surface de l'atelier (SAU viande*)	150 ha
SFP de l'atelier (SFP viande**)	75 ha
Prairies permanentes	50 ha
% maïs/SFP viande**	15 %
Chargement apparent	1,61 UGB / ha SFP viande**
Azote minéral	168 kg N / ha SAU viande*
Azote organique	50 kg N / ha SAU viande*
Linéaire de haies	8 000 ml

*SAU viande : surface utilisée par l'atelier viande = SFP viande + cultures autoconsommées par l'atelier viande

**SFP viande : surface fourragère utilisée par l'atelier viande

MES RESULTATS

Contributions positives

JE NOURRIS

433

personnes par an
Source : Perfolim®



JE STOCKE

97

tonnes de carbone par an



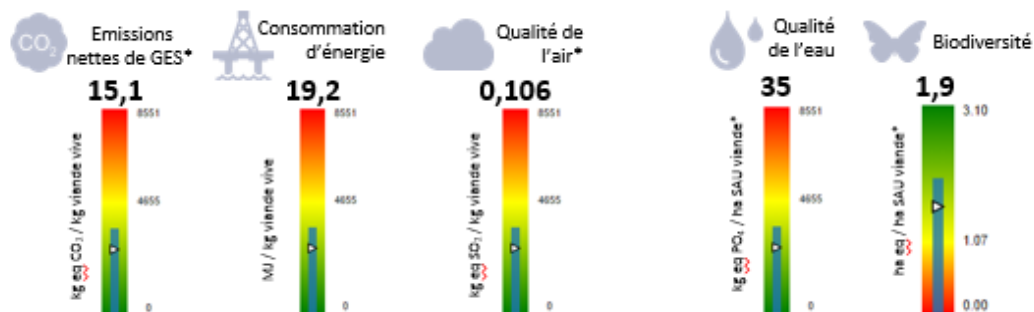
J'ENTRETIENS

316

ha de biodiversité



Bilan environnemental



*GES : Gaz à Effet de Serre

*Nir aux émissions d'ammoniac

*Les références sont issues des résultats des exploitations des Réseaux d'Élevage Inasys.

Légende :

Votre atelier

Référence à système équivalent*

Commentaires :

Reference system : the results will be compared within the same system

Farm ID : technical indicators, production level, surfaces, forrage strategy, fertilizer...

Focus on 3 positive contribution of the farm

5 environmental indicators : carbon footprint, energy consumption, air and water quality per kg of meat produced and biodiversity per hectare.

CAP'2ER®

Notes

POUR ALLER PLUS LOIN : LES EMISSIONS DE GES

Empreinte carbone
nette



émissions

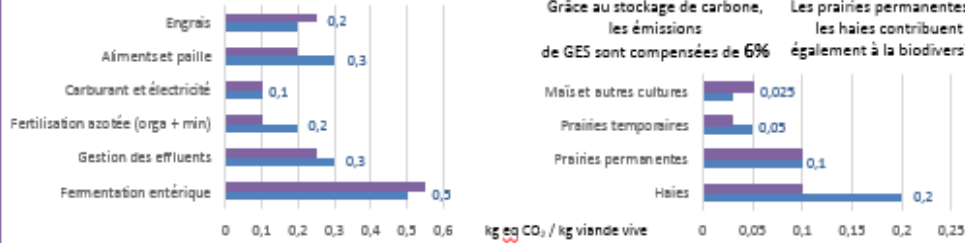


stockage



Carbon footprint neat

Sources d'émissions
de GES



Stockage de
carbone

Grâce au stockage de carbone,
les émissions
de GES sont compensées de 69%

Les prairies permanentes et
les haies contribuent
également à la biodiversité.



Légende : Votre atelier — Référence à système équivalent*

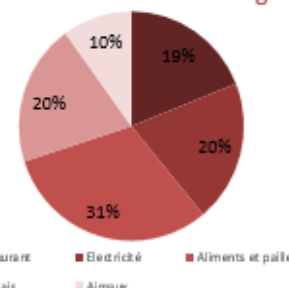


Les références sont issues des résultats des exploitations du réseau Inosys.

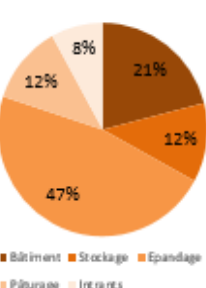
Focus on GHG emissions and carbon
sequestration for each of the main
sources : enteric methane, nitrous
oxide, carbon dioxide
Comparison within the same system

POUR ALLER PLUS LOIN : SOURCES DES AUTRES IMPACTS

Consommation d'énergie



Qualité de l'air



Qualité de l'eau



Commentaires :

- Je dispose d'un droit d'accès, de modification, de suppression des données qui me concernent (conformément à l'article 34 de la loi informatique et libertés). J'autorise « nom organisme » à transmettre des données du diagnostic CAP'2ER à l'Institut de l'élevage pour qu'il puisse réaliser le traitement des données. Je peux interrompre mon adhésion à tout moment par simple courrier recommandé transmis à « nom organisme ».
- J'accepte de participer au projet LIFE CARBON DAIRY.

Modifier

Main sources of the other
environmental impacts :

- Energy consumption
- Air quality
- Water Eutrophication

CAP'2ER®

INSTITUT DE
L'ELEVAGE idele

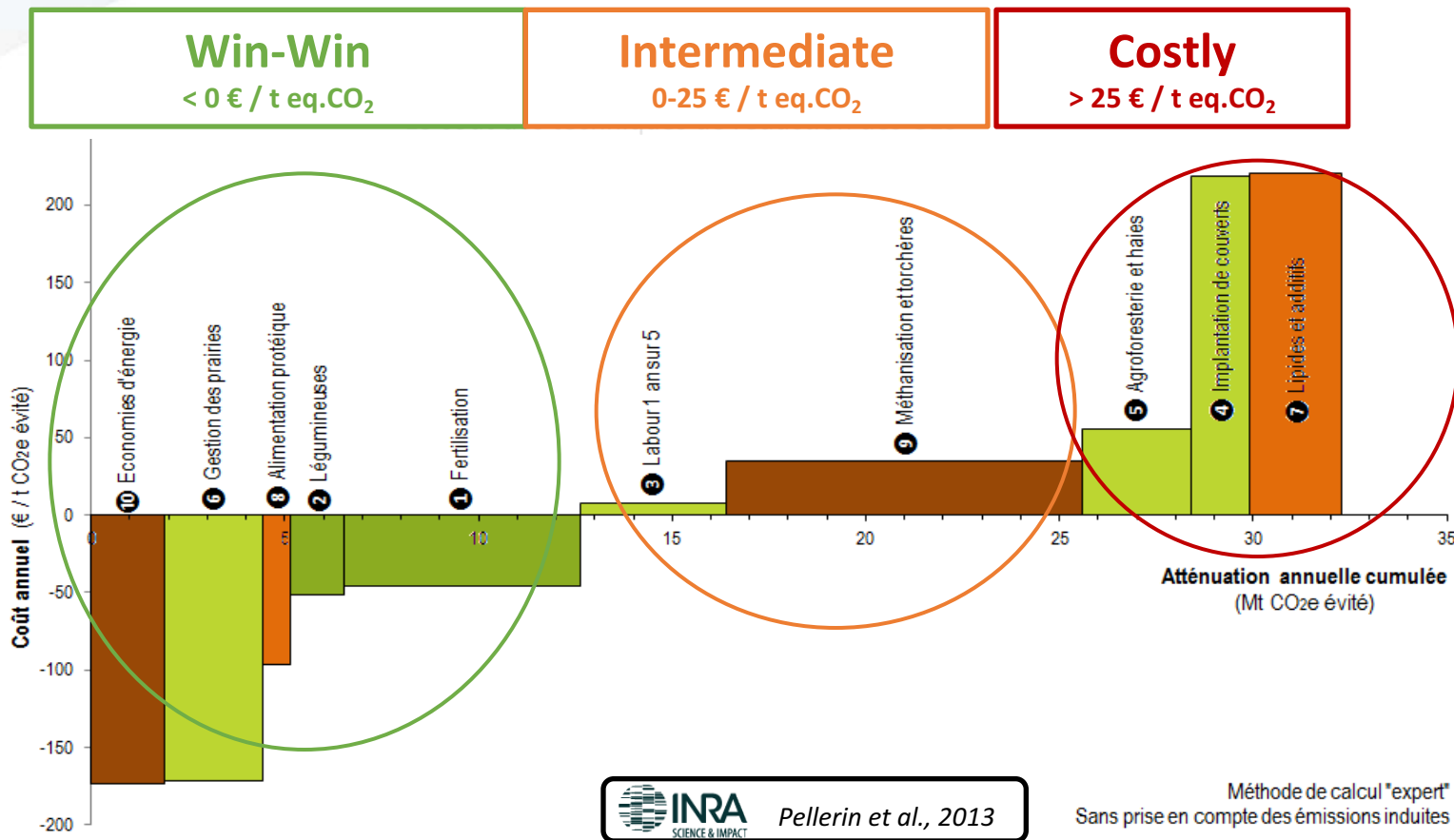
Comments

on – April 2017



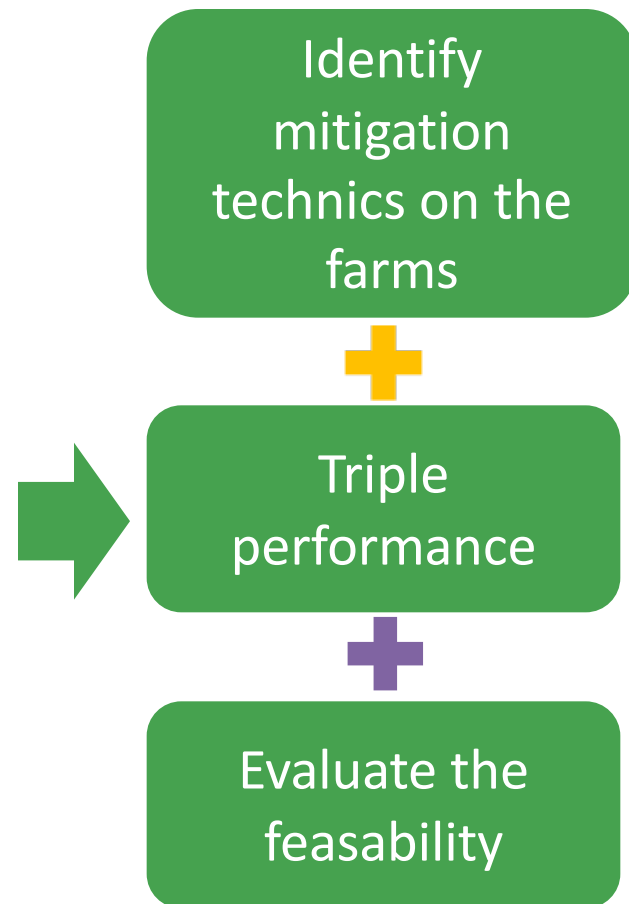
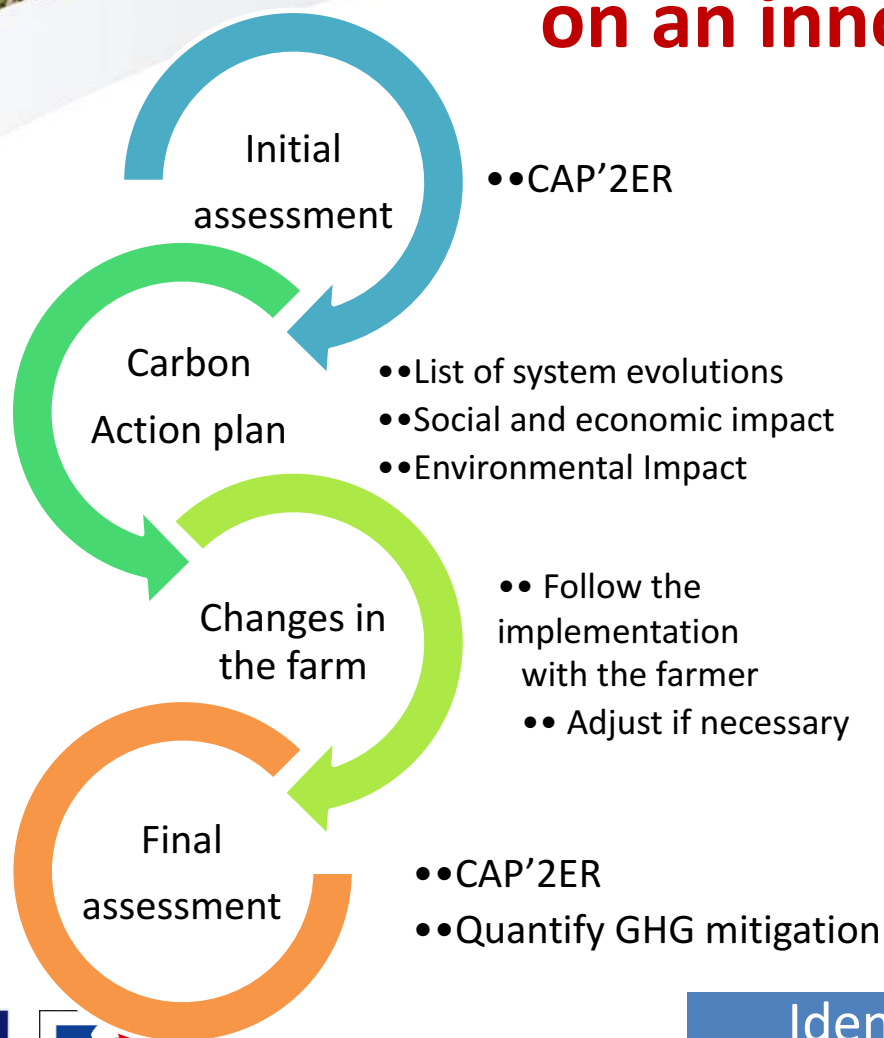
Innovative farms:

Identify on existing farms mitigation practices





CARBON assessement process on an innovative farm



Identify, build and promote low carbon systems



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DE L'AGRO-ALIMENTAIRE
ET DE LA FORÊT





Conclusion

- ▶ A large carbon intensity approach to appreciate the gains from the whole livestock sector or at EU scale
- ▶ An ambitious program based on voluntary participation of farmers (2000) to reduce beef carbon footprint
- ▶ 4 BEEF CARBON ACTION PLANS for France, Italy, Ireland and Spain



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THANKS A LOT

jean-baptiste.dolle@idele.fr
giacomo.pirlo@crea.gov.it



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