

The experience in applying the PEF methodology on the Comté PDO supply chain

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# The partners for this action







Federation of French Dairy products PDOs

46 cheeses
3 butters
2 cream



French Dairy
Interbranch
Organizzation (Dairy
farmers, processors,
cooperatives and
distributors)

Subcontractor chosen for external expertise:











# The partners for this action



French PDO chosen for the LIFE TTGG project: COMTE which is the most important french PDO cheese (64.500 T in 2020)

Already involved in a sustainable approach (Work on biodiversity, Low Carbon Dairy farm initiative...) regarding the needs of the producers and consumer expectations.

Represented by the CIGC (Comité Interprofessionnel de Gestion du Comté)



**2500** dairy

**150** small village cheesemaking facilities called « fruitières »



D.Meignan/CNIEL











# Overview of Action B7 – EDSS tests on French PDOs





CIGC

LIFE
The
Tough
Get
Going

B7,1: Selection of Comté consortium and collection of primary data

B7,2 : Development of a LCI data performed by ACTALIA with the help of POLIMI

B7,3: Energy and efficiency analysis performed by ACTALIA with the help of POLIMI and ENERSEM

B7,4: Parametrization and normalization of the model results performed POLIMI, ENERSEM and UCSC

B7,5: EDSS use for PEF calculation with test on other PDOs





# Organisation of task B7



#### 1) Data sampling

Farms				Dairy processing plant			Cheese refiners	
	<400,000 L/year	Between 400,000L/year and 800,000 L/year	>800,000L/ year	<400t/year	Between 400t/year and 800t/year	>800t/year	<5000t/year	>5000t/year
	17	10	2	6	10	3	3	2
	29			19			5	



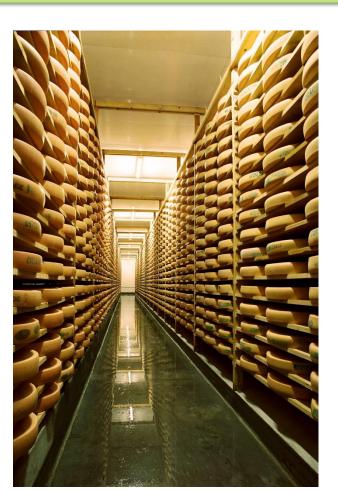








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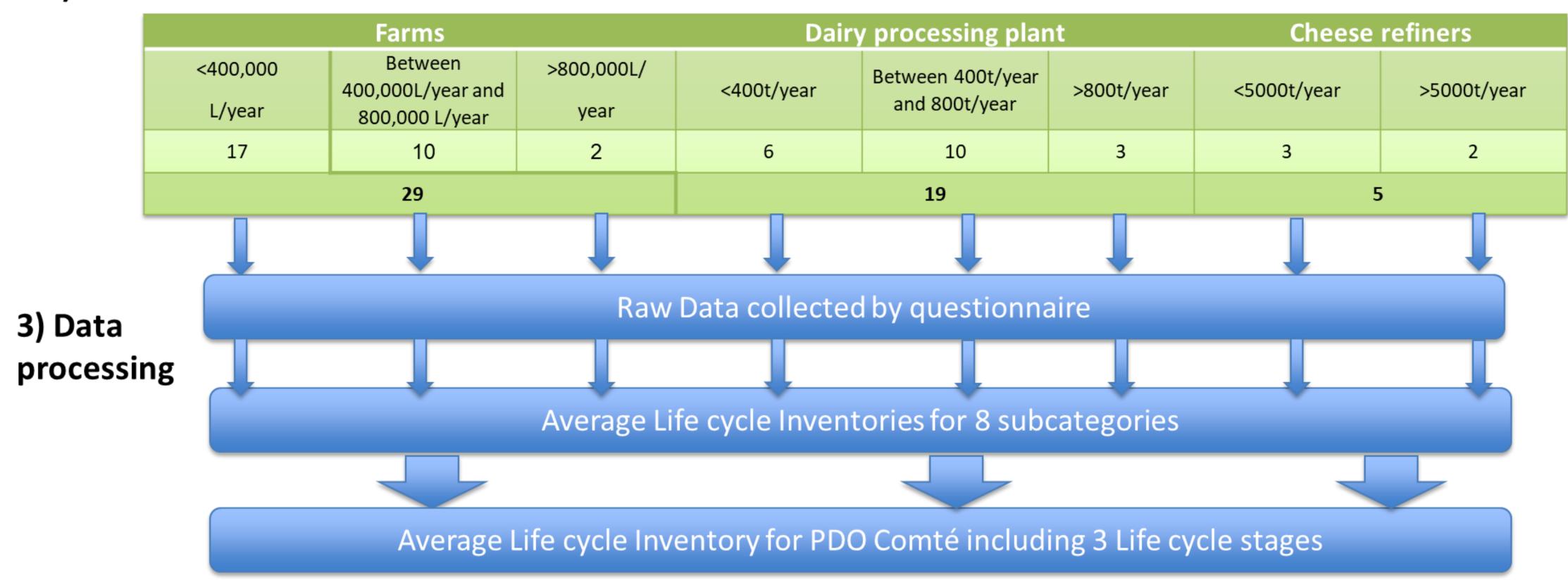




# Organisation of task B7



#### 2) Data collection











# Organisation of task B7



#### 4) Energy audits

**Objective**: Model the energy consumption of key dairy processes

Energy audits on 2 companies with the help of:

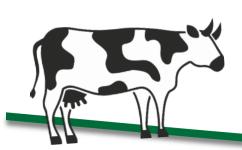




#### Plan de mesurage prévisionnel du site n°1 - Listing des phases du process et estimation du nombre de mesures pour le site n°1 :

Etape process			Equipement sur lesquels seront effectués les mesures	Mesures			
				Intensité	Température	Pression	Débit
Ta1	Réception du lait	Maintien à 4°C du lait cru	1 Groupe froid	Enregistrement	Enregistrement (*2)		Enregistrement
Ta3	Ecrémage	Centrifugation du lait	Centrifugeuse	Enregistrement	, _,		
Ta4	Réception lait	Réchauffage pour travail en cuve	Source chaude + pompe recirculation	Enregistrement (*2)	Enregistrement (*2)		Enregistrement
Ta5	Caillage/travail en cuve	Chauffage volume de lait et maintien en T°	Source chaude + brassage électrique	Enregistrement	Enregistrement (*2)		Enregistrement
Ta6	Pressage en moule	Compression par vérin	1 Compresseur	Enregistrement		Enregistrement	
Та7	Saumurage/salage	Refroidissement éventuel pour saumurage	Pompes	Instantanée			
Ta8	Pré-affinage	Refroidissement des charges thermiques apportées par les fromages	1 groupe froid håloir + ventilation + robot	Instantanée (1/ventilation + 1/robot + 1/håloir + 2 en enregistrement)	Enregistrement (*4)		Enregistrement (*2)
тот	AL			Environ 12/15 mesures	Environ 10 mesures	1 mesure/compresseur	Environ 5 mesures









## Next step



April 2022: Event in the Comté area to present the French results to LIFE TTGG partners, Comté producers and other PDO's organisation



CIGC













## Thank you for your attention



