Co-funded by the Intelligent
Energy Europe Programme
of the European Union

SUCELLOG PROJECT

TRIGGERING THE CREATION
OF BIOMASS LOGISTICS CENTRES
BY THE AGRO-INDUSTRY

RESULTS & LESSONS LEARNED

sucellog

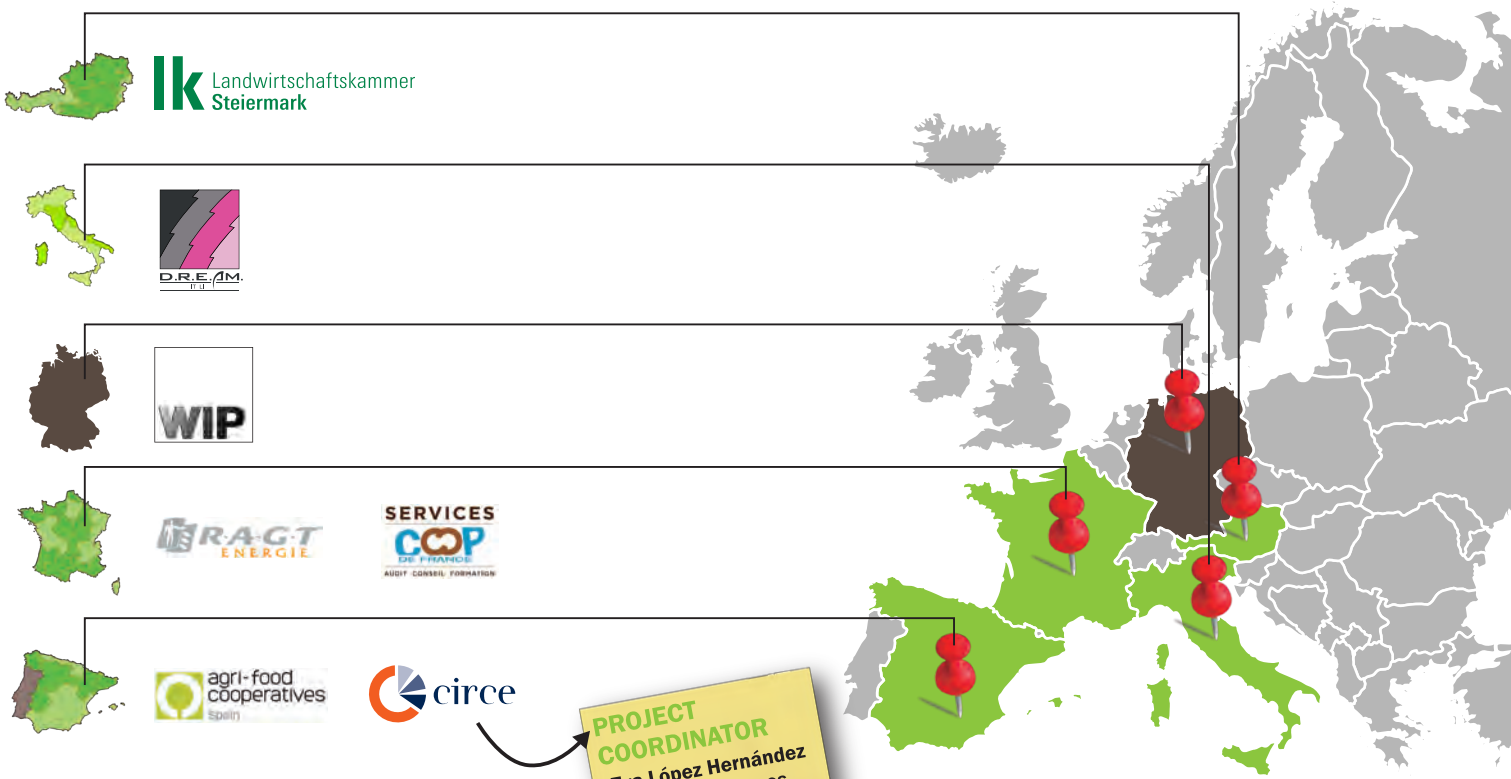
www.sucellog.eu

Project features, partners & regions

Total Budget
1.826.044 €

EU Funding
1.369.532 €

Length
April 2014 - March 2017



Let's make agro-industries **key actors** in the supply of solid biomass for Europe!

WHY?

Equipment & facilities **compatible** with solid biomass production

Work under **seasonal** regime

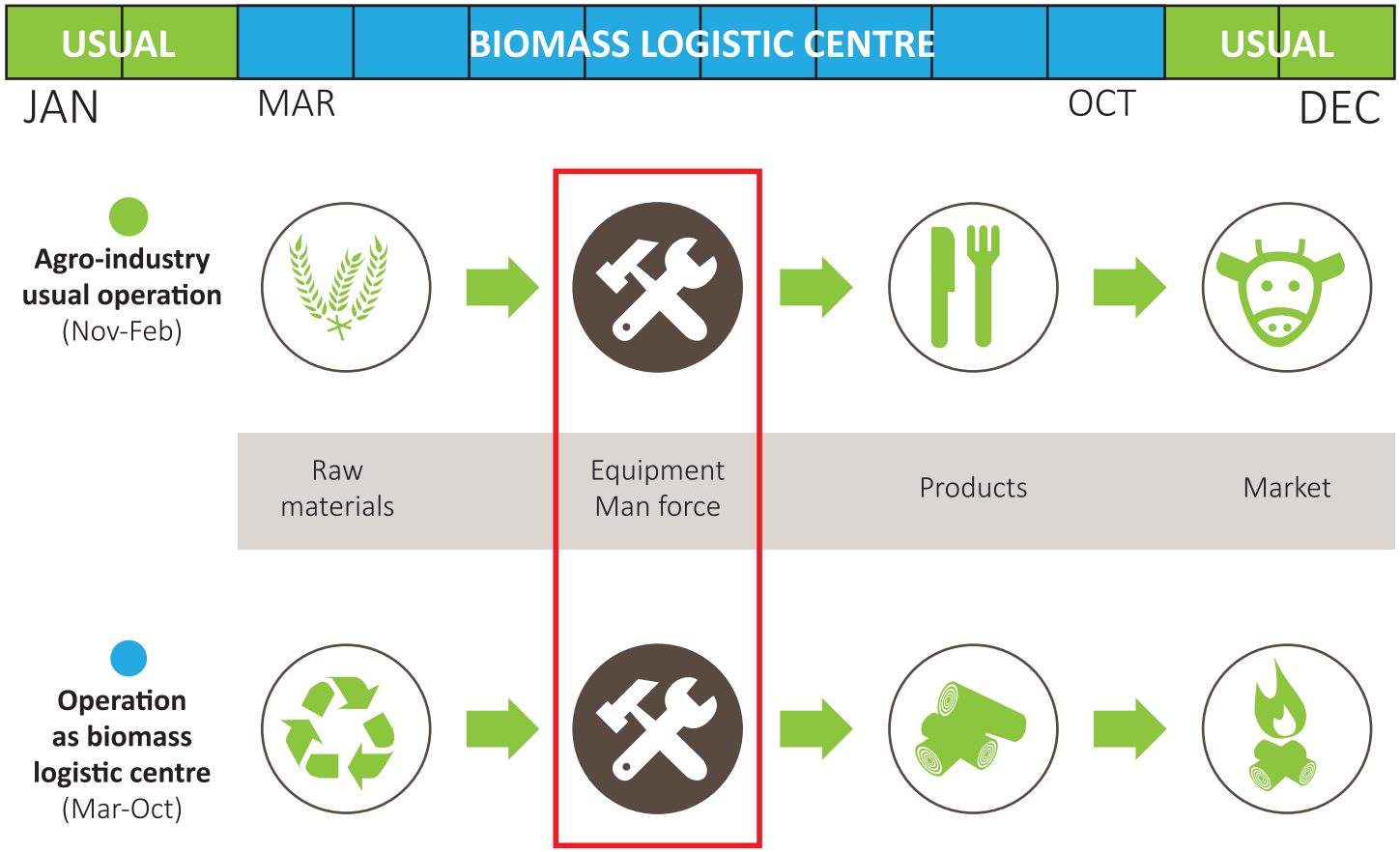
They are **key** actors in the territory

They produce **residues** or surrounded by residues

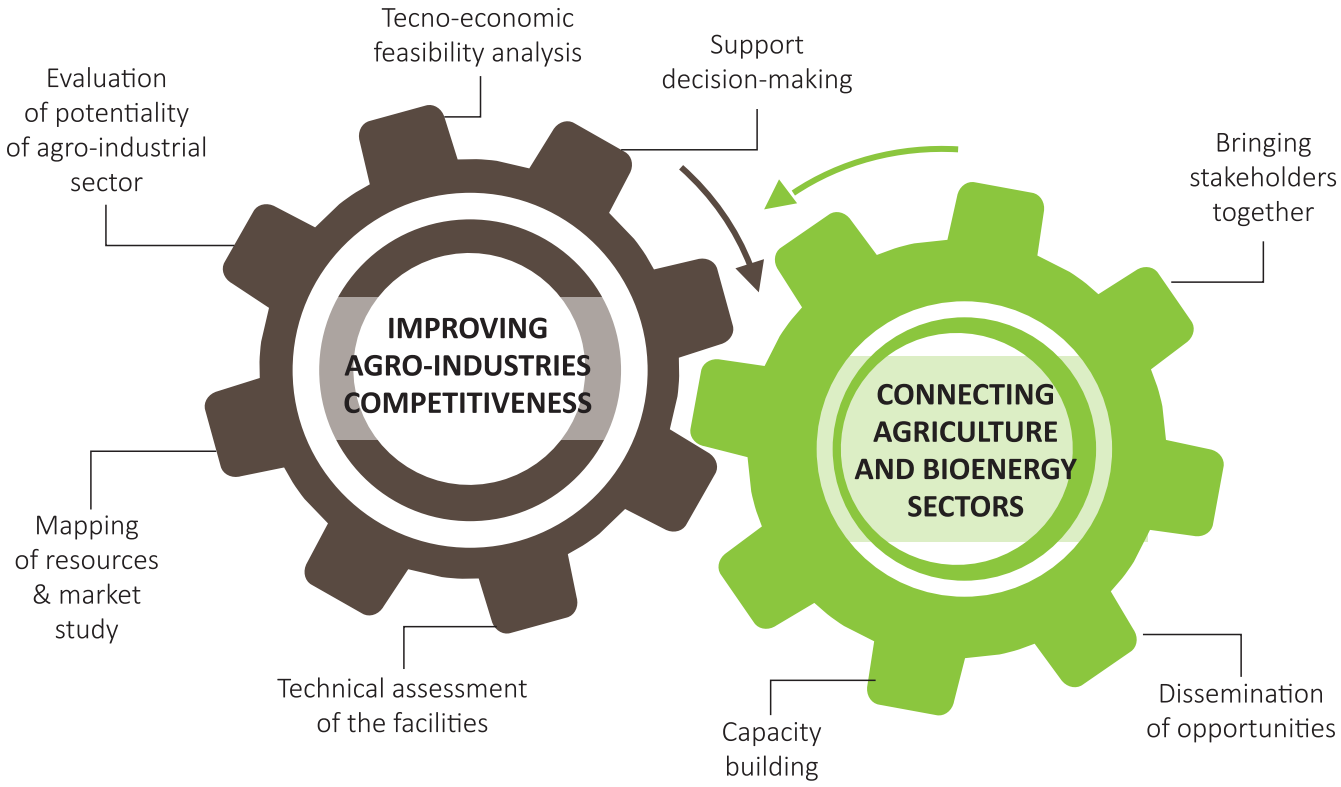
Experience with organic feedstocks and aware about **quality** assurance

SUCELLOG concept proposes the use of agro-industrial equipment, facilities and man-force in their idle periods to **develop a new business line as solid biomass logistic centres based on agricultural residues with no competing uses.**

SUCELLOG concept



SUCELLOG gears & actions



SUCELLOG impact in Europe

63 Agro-industries supported

AGRO-INDUSTRIES GIVING STEPS TOWARDS
becoming a biomass logistic centre in a short-term

BIOMASS LOGISTIC CENTRES
integrated in an agro-industry created

SPAIN

Awakening the interest on the valorisation of own agricultural residues in Spanish cooperatives

2.9 1.2

17 3.9

FRANCE

Triggering national awareness about the use of agricultural residues for solid biomass production

Expected ktoe of biomass mobilised/year

AUSTRIA

Successful implementation of the SUCELLOG concept based on corn cobs

1.7

0.5

ITALY

Promoting enterprise network and local supply chains for valorisation of agro-prunings

3

3

Expected M€ investment in short-term

SUCELLOG SUPPORT

SPAIN	Troil Vegas Altas Cooperative for oil mills by-products transformation	Use of 3000 t/yr of olive prunings to cover near future drying heat demand starting a new logistic chain and avoiding on-field burning
	Cooperativa Agraria San Miguel de Tauste Forage dehydration industry	Production of biomass using their lucerne pelletising line from straw from members' cereal cultivation to heat the own members pig farms
	COCOPE Sociedad Cooperativa Wine producer and distillery of aromatic plants	Consumption of their residues (grape stem and lavender straw) to supply their own heat demand and other nearby facilities and solve a problem of residue disposal
FRANCE	La Cavale Distillery	Production of pellets based on grape marc in synergy with another company to feed their future gasification plant
	Sofragrain Feedstuff producer	Creation of biomass logistic centre based on silo dust using their pelletising line and in cooperation with an energy service company
	Luzeal Forage dehydration facility	Production of straw based pellets in their existing facilities to cover biomass market demands
ITALY	Oleificio Cooperativo Produttori Agricoli Molfetta Oil mill	Use of underutilised olive prunings as fuel in a planned cogeneration facility in coordination with 3 other oil mills and a logistic operator of the area.
	Serragiumenta Wine producer, owns olive fields, vineyards and orchards	Use of prunings from olive trees, vineyards and orchards currently burnt on-field for the planned cogeneration plant to heat their facilities
	Cooperativa Agricola Rinascita Oliena Dairy product producer	Pellets production from olive tree and vineyards prunings, grape pomace and grape stems to cover their heat demand and an oil mill' demand aside
AUSTRIA	Tschiggerl Agrar GmbH Agro-industry harvesting and processing of corn grains and cereal straw for animal feed	Creation of a biomass logistic centre based on corn cobs, using an adapted machinery that integrates the maize and cob harvesting and taking advantage of the synergy with a feedstuff association. Own heat demand and local biomass market
	Alwera AG Logistic operator and cereal dryer	Creation of a logistic centre of corn cobs to fulfil their own heat demand and in cooperation with Tschiggerl Agrar GmbH

OUTPUTS

7

Handbooks and guidelines oriented to the agriculture sector to promote the integration of biomass logistic centres

- Lessons learned and good practice examples
- How to carry-out a feasibility study
- Guideline to implement a logistic centre
- Auditors guide
- Others

Analysis of **regional situation, biomass resources** and priority areas of **20** EU REGIONS

TECHNICAL MATERIALS

4 Tailor-made business models to become agricultural biomass logistic centres

+160

Potential actors of initiatives engaged in bilateral meetings

+1180

ATTENDANTS to European, national and regional workshops

38

TECHNICIANS TRAINED from agrarian associations

NETWORKING

68 Policy-makers engaged

146 Personal meetings to identify sector opportunities and barriers

+170 Publications with +2 mill. people audience

+700 Contacts carried out with the agrarian and bioenergy sectors

CHALLENGES

A MARKET

- Low oil and gas prices
- Large amount of wood stock
- Lack of appropriate technology for agro-fuels at a reasonable price

B LACK OF AWARENESS/KNOWLEDGE

- Change the “residue” into a “by-product”
- Social acceptance of new products
- Lack of information - confidence
- Existing farming practices

C POLICY, REGULATORY AND LEGISLATIVE FRAMEWORK

- Lack of political commitment
- Regulation subject of interpretations

D ORGANISATIONAL ISSUES

- Sector not structured
- Difficulties in securing signed commitments
- Large logistic efforts for upscaling

E FINANTIAL SITUATION

- Lack of incentives

SUCELLOG **CONCEPT**

MAIN **BARRIERS**

LESSONS LEARNED

- The opportunity to implement logistic centres on agriculture biomass inside the agro-industries has a special sense when this activity is strictly linked to their main business as food product producer. Therefore, when **the agro-industry faces a problem of "residue" disposal and presents an energy demand to be covered.**

- Agro-industries have significant influence in rural territories and therefore are **essential actors to trigger the development** of new initiatives in the local scale.

- The distance between the agriculture and energy sector is an important obstacle. A **national entity representing all involved sectors** can help to shape more positive public opinion on agriculture biomass, to join stakeholders and to influence policy decisions.

- **One successful example:** promotes initiatives, triggers technological innovation and creates awareness for policy makers. However, one bad example at the initial phase of a new business activity may stop the progress for several years.

Combining direct support actions and capacity building activities, SUCELLOG has planted a seed for the further development of local initiatives to *valorise residues* from agriculture, and thus to increase the *competitiveness* and sustainable development of *rural economy*

SUCESS STORY

Tschiggerl Agrar GmbH - agro-industry dedicated to the harvesting and processing of corn grains and cereal straw for animal feed and NOW...thanks to SUCELLOG...a biomass logistic centre based on corn cobs

In 2007, the agro-industry **decided to use local biomass** instead of fossil fuels

They adapted a regular corn harvester to **collect corn grains & cobs in one step**

They use corn cobs as biomass for their grain drying process **saving 200 000 €/yr**

In 2015, they started to work as **biomass logistic centre using their facilities** for the pre-treatment and storage

Cob based products (loose, grits and pellets) are sold on the **local market**