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**Report on the dissemination activities at
EU level**

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About SUCELLOG project

The SUCELLOG project - Triggering the creation of biomass logistic centres by the agro-industry - aims to widespread the participation of the agrarian sector in the sustainable supply of solid biofuels in Europe. SUCELLOG action focuses in an almost unexploited logistic concept: the implementation of agro-industry logistic centres in the agro-industry as a complement to their usual activity evidencing the large synergy existing between the agro-economy and the bio-economy. Further information about the project and the partners involved are available under www.sucellog.eu.

Project coordinator



Project partners



About this document

This report is summarising dissemination activities of SUCELLOG project implemented on the European level during the project lifetime. Dissemination activities included 2 European workshops and 8 meetings with EU multipliers of the agro-industry – EU associations of specific agro-industrial sectors. The report has been prepared by:

WIP Renewable Energies
 Sylvensteinstr. 2, 81369 Munich
 Ilze Dzene and Rainer Janssen
 E-mail: ilze.dzene@wip-munich.de; rainer.janssen@wip-munich.de
 Tel: +49 89 720 12 740, +49 89 720 791

Other contributors: SPANISH COOPERATIVES and CIRCE

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1. Introduction

This report is summarising dissemination activities at European level where SUCELLOG project has been presented and the concept promoted. During the project lifetime two European dissemination workshops have been organised and project have been presented in 7 meetings with EU multipliers – EU associations of various agro-industry sectors.

This report covers all EU dissemination activities implemented during the SUCELLOG project lifetime.

2. European dissemination workshop with COPA-COGECA

On the occasion of Working Party on Environmental issues of the COPA-COGECA (European Association of farmers and cooperatives) meeting a European dissemination workshop of SUCELLOG project has been organised by Spanish Cooperatives on **7 June, 2016** in **Brussels, Belgium**.

The aim of the workshop was to transfer the concept of SUCELLOG project and experiences gained on regional and national levels to European level and to discuss the non-technical barriers which have been identified during SUCELLOG project activities regarding their relevance on wider European level.

Juan Sagarna (Spanish Cooperatives – member of the SUCELLOG consortium) attended the meeting of COPA-COGECA to:

- Inform the participants of the WP Environment about the state of play of the project
- Invite to participate them in the activities planned in the project, mainly the execution of a three days training focusing the countries outside the project consortium
- Collect the feedback and comments concerning the non-technical barriers for the implementation of project concept and valorisation of agricultural residues as alternative to wood fuel.

2.1. Agenda

SUCELLOG project workshop has been integrated in the meeting of COPA-COGECA members and corresponded to the topic “**Example of circular economy: Exchange of views about the use of Agricultural residues for biomass and the role of logistic centers - SUCELLOG project**” of the meeting agenda.

2.2. Presentation

Juan Sagarna (Spanish Cooperatives) presented the overall targets of the project and their relevant outcomes at the time being (see Figure 1). He highlighted the pilots that are currently got underway, since it was the best way to demonstrate the practical approach of the project. The full presentation is provided in Annex I of this report.



Figure 1: SUCELLOG presentation given by Juan Sagarna

After the presentation an exchange of views was driven by giving the floor to the meeting participants. The discussion was focused on non-technical barriers known by them about biomass from agriculture residues and logistic centres.

2.3. Participants

29 people participated in the event.

Among participants there were representatives from DG CLIMA, FNSEA (the main French farmer's organization), Coop de France-(the main French cooperative organization), Austrian Chamber of Agriculture, UPA (Union of Spanish Small Farmers), German association of farmers, Irish Farmers Association, NFU (National Farmers Union of the UK), MTK (Finish farmers association), Lithuanian farmers association, farmers organisation of Poland, AACZ (farmers organisation in Czech Republic) and Italian farmers represented by Confagricultura and CIA.

2.1. Summary and outcomes of the discussion

After the presentation of Juan Sagarna a discussion and exchange of opinions regarding SUCELLOG concept and potential non-technical barriers has been initiated.

The main concern of the participants was related to the use of agricultural residues for energy production which might negatively affect the organic matter content of the soil in case when too much crop residues and biomass is brought out from agricultural lands. The Polish delegation was especially reluctant to use this biomass for energy purposes. An example of the EU strategy for CO₂ sequestration was mentioned, where agricultural land is foreseen as a carbon sink. Discussion participants found the increased use of agricultural biomass contradicting with the mentioned strategy.

The British delegation also emphasized the importance of maintaining the fertility of the soil. However, they would be ready to balance it with the new potential income for farmers. They explained that already now some British farmers are using agricultural biomass in their grain drying installations and that they have reported some problems with high chlorine content of the fuels causing negative effects on the burners in boilers.

Other delegations strongly supported the use of agricultural biomass for different purposes if they are offering new income opportunities for farmers. They were more positive regarding development of new bio-economy value chains, including the use of agricultural residues for energy production.

The opinion of the Lithuanian delegation was that the best use of agricultural residues is the electricity generation.

Representative of the Finnish delegation informed that in Finland due to extensive rainfall periods and floods the quality of cereal straw is not good for solid biofuels production. However, the straw is currently much used for feeding biogas plants.

Juan Sagarna started discussion on regulatory issues, mentioning that in some countries and regions the use of agricultural residues as fuel in households is forbidden because the material is classified as “waste”. None of the discussion participants were aware of similar issue in their countries. The general opinion was that it makes no sense; also because agricultural residues are part of the food chain. The material should be classified as “waste” only in cases if it contains some harmful compounds (e.g. hazardous components).

Another point of the discussion was the general ban for incineration of agricultural residues on fields in the European Union. The widespread exceptions provided by managing authorities are in fact limiting the effect of the prohibition. It implies comparatively low contribution to the mitigation of the climate change and fire-fighting and a collateral damage for the potential use of this residue for biofuel production.

3. Meetings with EU multipliers of agro-industry

3.1. Meeting with CIDE

Date: 02.06.2016

Time: 14:30-15:30

Location: First Euroflat Hotel, Bld Charlemagne 50, B-1000 Brussels, Belgium

Participants: Members of the Board of Directors of CIDE and WIP

The CIDE, *Commission Intersyndicale des Déshydrateurs Européens* (European Dehydrators' Working Group) was set up in the 1950s. It is a non-profit association, (NGO), governed by Belgian law.

The members of the CIDE are national associations of fodder processors, dehydrators but also processors of sun-dried products. A country can only be represented by one sole association. The national associations are legal members of the Board of Directors.

The CIDE fulfils several kinds of purposes:

- It acts on behalf of the sector with world and European institutions, as well as NGOs, by informing them about the specific features of the sector. For example, the CIDE has made contributions related to different reforms of the common agricultural policy to the European Commission Council of the European Parliament, along with the European Economic Committee and the Regional Committee.
- It promotes dissemination of technical and scientific information about dehydrated and sun-dried fodder. The CIDE also holds an international congress every two years.
- It ensures suitable communication among its members aimed at improving good industrial, environmental and other practices.
- It ensures the visibility of the sector and its products outside of the European Union.

Preparation for the meeting started in April, 2016. On 20.04.2016 WIP had a phone call with CIDE to discuss the opportunity to present SUCELLOG project during a meeting of CIDE members. During the call it has been agreed that WIP will be invited to make a presentation on 2nd of June, 2016 in Brussels on the occasion of the meeting of CIDE Board of Directors. It was further discussed that CIDE has a strong branch of members in Germany, in Bavaria. They have grass drying facilities and mills, and pelletizing equipment. They would be able to use the equipment from October until March (when they have an idle period) for bioenergy production.

In the meeting in Brussels WIP presented the SUCELLOG project concept and stressed in particular the opportunities for alfalfa drying facilities for replication of the concept developed in the project (see presentation attached in Annex II). The equipment used for alfalfa processing is highly compatible for biofuels production lines. In addition two case studies of SUCELLOG project have been presented, one of them being alfalfa drying facility in Spain – cooperation partner of the project. Results of the feasibility study and the business model have been presented.

The presentation has been concluded by discussion about SUCELLOG concept and the extent it could be transferrable to the alfalfa drying facilities. The awareness of the participants about bioenergy and biomass logistics centres was different. Some of the participants were well informed about the issues related to biofuels production in their countries and regions; however, some others were less aware. Therefore WIP explained in details what the biomass logistic centre is and what kind of operations it might include.

Regarding the transferability of SUCELLOG concept, the participants raised some concerns that agro-pellets are lower quality fuel compared to wood pellets and if they decided to start developing this product, they would have to face strong competition in the biofuel market dominated by conventional wood pellet producers. They were concerned that it would not be possible to obtain a significant market share with the lower quality product (agro-pellets) and it would impose bad image of their companies.



Figure 2: Participants of the meeting of CIDE Board of Directors

Another concern was about using their drying, chipping and pelletizing equipment for biofuels production. At least in the Netherlands if already existing machinery would have been used for other purposes than alfalfa processing, the facility would have to apply for a new certificate of their production lines. In the meanwhile the rules of the certification have been made stricter (compared to the time when the facility was commenced) and they are not keen to undergo the new certification procedure.

In the end of the meeting WIP collected contact information of interested CIDE members and agreed to send them SUCELLOG project newsletters to spread the news to the drying facilities and farmers in their respective countries. 13 members from Germany, Spain, Italy, France, the Netherlands and the UK were participating in the meeting (see Figure 2). Moreover, WIP informed about the possibility to participate in the training session organised by CIRCE in September or October, 2016 and shared the contact details of SUCELLOG national partners if CIDE members from SUCELLOG project partner countries would like to contact them.

3.2. Meeting with CEEV

Date: 18.11.2016

Time: 12:30-13:30

Location: CEEV, 43 avenue des arts, 5th floor, 1040 Brussels

CEEV – *Comité Européen des Entreprises Vins* – is a key European professional platform which leads the dialogue and coordination in the combined European and international wine sector. CEEV is the voice of the EU Wine Companies and leads successful dialogue and advocacy of the EU Wine sector towards the European and international institutions in all policy areas affecting the Wine business.

It represents 23 national associations, a group of leading European wine companies and 2 non-EU observer associations (Switzerland and Ukraine), covering all wine categories: still wines, aromatised wines, sparkling wines, liqueur wines and other vine products (read more at: <http://www.ceevee.eu/about-us>).

On 18th of November, 2016 WIP had a bilateral meeting with a Policy Officer, responsible for internal market and environmental issues in CEEV. The meeting took place in Brussels at the office of CEEV.

The aim of the meeting was to present the concept of SUCELLOG project, to inform about lessons learned during auditing studies implemented in project countries regarding the use of wine prunings for solid biofuel production and to discuss further cooperation opportunities in dissemination of SUCELLOG project results to the members of the association.

At the beginning of the meeting WIP presented the concept of SUCELLOG project and several examples of biomass supply chains regarding utilisation of wine pruning residues in SUCELLOG project countries (see presentation attached in Annex III).

The representative of CEEV thanked for the presentation and appreciated the approach of SUCELLOG project and the presented supply chain organisation examples. CEEV also informed that one of the good practice examples which have been presented is actually the member of their association. On the other side, CEEV represents mostly large vine producers and trading companies. Their members are large companies, whereas, the target group of the SUCELLOG project is wine farmers which are not so well represented in CEEV. CEEV suggested establishing connection to smaller wine farmers through COPA-COGECA network.

Nevertheless, CEEV has internal environmental committee which will meet in early 2017 and CEEV proposed to spread the concept of SUCELLOG project and examples of wine pruning utilisation among the members of the committee. It was agreed that WIP will send the presentation showed on the meeting and it can be shared with persons responsible for environmental issues at each member of the association.

It has been further discussed whether some of the CEEV members would be interested in benefiting from the international training course provided by CIRCE. CEEV suggested getting in touch with their member – vine producer from Portugal and provided their contact information.

Unfortunately CEEV does not have regular newsletter where the information of the project could have been disseminated, but as agreed earlier, the information will be shared during the next environmental committee meeting in early 2017.

At the end of the meeting potential barriers for SUCELLOG concept have been discussed. CEEV shared their concerns regarding organisation of logistics. For example, in France there are mostly small wine farms, often located in steep, difficult to access areas. For them it would be very difficult to develop feasible logistic concepts and also benefits in form of time saving would be less prominent.

It has been agreed that WIP will send the presentation and CEEV will propose to include it in the next meeting of the environmental committee of CEEV.

3.3. Meeting with International Olive Council

Date: 16.01.2017, 11:00-12:00

Location: Headquarters of the International Olive Council, Calle del Príncipe de Vergara, 154, 28002 Madrid

Participants: 3 persons from Spanish Agri-food Cooperatives, and the Deputy Director and Executive Secretariat from International Olive Council (IOC).

IOC – *International Olive Council* – is the world’s only international intergovernmental organization in the field of olive oil and table olives. The Council is a decisive player in contributing to the sustainable and responsible development of olive growing and it serves as a world forum for discussing policymaking issues and tackling present and future challenges.

Its current membership includes the leading international producers and exporters of olive oil and table olives. IOC producer members account for 98% of world olive production, located primarily in the Mediterranean region (read more at: <http://www.internationaloliveoil.org/>).

On 16^h of January, 2016 Spanish Agri-food Cooperatives had a meeting with IOC – Deputy Director and Executive Secretariat respectively. The meeting took place in Madrid at the main building of IOC (see Figure 3).

The aim of the meeting was to present the concept of SUCELLOG project, to inform about lessons learned during auditing studies implemented in project countries regarding the use of olive biomass for energy production and to discuss further cooperation opportunities in dissemination of SUCELLOG project results to the members of the association. In advance of this meeting Spanish Cooperatives sent to IOC a video presentation of the SUCELLOG Project. At the beginning of the meeting IOC confirmed that they have seen the video and expressed their interest in cost efficient initiatives to strengthen the olive production sector and at the same time to reduce climate change.



Figure 3: Meeting between Spanish Cooperatives and IOC in Madrid

At the beginning of the meeting Spanish Cooperatives presented the concept of SUCELLOG project and the intention to disseminate project results to the associations of the EU agro-industries within the affected sectors, among them, the olive producers. Spanish Cooperatives highlighted the necessity of generating a circular economy and the added value that the olive oil mill by-products (olive pits and dry pomace) presents due to its high heating value, as well as its great densification, which reduces its needs of pre-treatment.

Asked about the current dimension of the use of by-products of the olive sector as bio-fuels, Spanish Cooperatives presented several cases of cooperatives that currently are working with this kind of resources. Thus, the main issues related to the audit developed in TROIL were commented, highlighting the importance of its interest in using the residues of pruning of the olive trees of its associates to cover the heating demands of the TROIL olive pomace drying process. The activities carried out by El Tejar, using dried pomace and prunings and leaves of the olive trees of its members for electricity production in its own power plants, and some ideas about the activities developed in Italy on this sector were also explained.

IOC stressed the importance of Spain in generating solid biomass from the agrarian sector, pointing out that only Andalucía represents already 33 % of all production amounts. IOC thinks that SUCELLOG concept would be interesting for the industrial structures of new planned oil industries, allowing taking advantage of the biomass in an efficient manner (cogeneration, direct combustion, etc). Much of their interests in this issue are in emerging producers, Morocco, China and South America.

They were also very interested in the implication that the biomass can have in the calculation of the carbon footprint by ACV in the oil, since they are currently working on this issue and are trying to propose a standard for oil. They also mentioned that the current PCR limit the possibility of offsetting the emissions of the residues destined for biomass, which could be considered as a barrier.

Finally, they were informed about the relevant set of documentation released by SUCELLOG and the possibility of consulting it as well as additional information about the project in the web site www.sucellog.eu.

It has been agreed that Spanish Cooperatives will send an invitation to IOC for the upcoming SUCELLOG final workshop of 15th February in Brussels, where the results and lessons learned from project will be presented.

3.4. Meetings during the International Green Week in Berlin

Date: 20-29.01.2017

Location: Messe Berlin, Berlin, Germany

Participants: WIP and various organisations participating in the fair

International Green Week (IGW) is a one-of-a-kind international exhibition of the food, agriculture and gardening industries organized every year in January in Berlin, Germany. IGW is the origin of the Global Forum for Food and Agriculture. Around 400 000 visitors attend the exhibition every year. In 2017, during the 82nd IGW more than 300 forums, seminars, conferences and committee meetings took place.



To be able to use IGW as a platform for the dissemination of SUCELLOG project activities and results, and to meet with the project target groups, WIP contacted FNR (Fachagentur Nachwachsende Rohstoffe e.V.). FNR is the central coordinating institution for research, development and demonstration projects in the field of renewable resources in Germany and during the IGW the organization have been responsible for an exhibition area “nature.tec” – addressing the bio-economy topics, including bioenergy and re-use of wastes and by-products. WIP had an opportunity to display SUCELLOG flyers during the whole week at the FNR stand in the nature.tec area (see Figure 4) and to organise bilateral meetings with the participants of the exhibition. WIP was present in the exhibition for 2 days – on 23rd and 24th of January, 2017.



Figure 4: Display of SUCELLOG flyers in nature.tec stand in IGW

During the two days WIP met several stakeholders relevant to SUCELLOG project target groups and discussed with them the concept of SUCELLOG project and how it can help agro-industries to strengthen their competitiveness. Among the contacted organisations were 4 associations and 5 equipment producers. The following companies were met and informed about SUCELLOG concept at the IGW:

- Biopark e.V. – Association of farmers focused on biological farming (>500 members)
- ASG – Agrarsoziale Gesellschaft e.V. – Association of farmers and local tourism
- Verband Deutscher Müller e.V. – Association of German Millers
- Deutscher Verband Tiernahrung e.V. (DVT) – Association of German Animal Feed producers
- Riela International – equipment producer (post-harvest technologies for cleaning, drying, storing, conveying, milling and mixing etc.)
- Naturfeuer AG – boiler and combustion equipment (including CHP) manufacturer
- ThermoFlux Deutschland – GmbH – pellet boiler manufacturer
- Windghager Zentralheizung GmbH – chips and pellet boilers manufacturer
- Hargassner – multi-fuel boiler manufacturer

In addition around 100 SUCELLOG flyers in English and German languages have been distributed.



Figure 5: Stands of two German agro-industrial associations visited during IGW

3.5. Meeting with AEBIOM

Date: 25.01.2017

Time: 09:30-16:30

Location: AEBIOM, Place du Champ de Mars 2, 1050 Brussels, Belgium

Participants: The meeting took place on the occasion of the experts meeting: Agricultural Biomass and Energy Crops and several experts and economic operators along the agricultural biomass and energy crops value chain participated. The SUCELLOG project was represented WIP.

Based on a suggestion made by CEEV (*Comité Européen des Entreprises Vins*) to whom the SUCELLOG project have been presented earlier, AEBIOM – European Biomass Association contacted WIP with an invitation to represent SUCELLOG project experiences at the Experts

Meeting organised by AEBIOM. An expert meeting in Brussels took place on the 25th of January, 2017 in which members and non-members of AEBIOM as well as experts and other economic operators have been invited to discuss pressing issues and joint actions that may contribute to the uptake of the use of agricultural biomass and energy crops. Agenda of the meeting is provided in Figure 6.

Agenda

**Experts Meeting:
Agricultural Biomass and Energy Crops**

NB: Agricultural Biomass intended here as solid vegetal agricultural biomass from byproducts or residues, such as straw or husks.

WHEN January 25th, 2017

WHERE AEBIOM Office – Place du Champs de Mars 2, 1050 Brussels (BE)

WHO Experts and other economic operators along the Agricultural Biomass and Energy Crops Value Chain, ranging from Producers to End-users.

09.30 – 10.00	Welcome coffee
10.00 – 10.30	Objective of the day and tour de table Chair: Jean-Marc Jossart, Secretary General, AEBIOM
10.30 – 11.00	Conditions for a take-off of Energy Crops Kevin Lindgaard, Director, Crops for Energy Ltd
11.00 – 11.30	Energy Crops projections in the ReceBio Study Viviane Andre, DG ENVI, European Commission
11.30 – 11.45	Coffee Break
11.45 – 12.15	Role of Agriculture in the European Bioenergy objectives and the coming CAP Reform Antonia Luetticken, DG AGRI, European Commission
12.15 – 12.45	SRC production and use: Berlin DH and German Regulatory framework on H&C Jan Grundmann, Director, WATTENFALL
12.45 – 13.15	SRC production: The largest willow plantation in Europe Michael Diekamp, Head of Forestry, SRC and Renewable Resources, Klamann Deilmann
13.15 – 14.00	Lunch
14.00 – 14.30	Miscanthus production and use: Barriers and challenges to market uptake Emmanuel de Maupoux, President, NOVABIOM
14.30 – 16.30	Expert discussion. Identification of potential joint objectives and services Chair: Jean-Marc Jossart, Secretary General, AEBIOM

- Presentation of possible actions
Carlo Girolambato, Policy Assistant, AEBIOM
- Brainstorming and group discussion
- Next steps

Register here.

Figure 6: Agenda of the experts meeting at AEBIOM

The meeting was attended by 32 experts. WIP participated in the expert discussion group where possible actions for raising awareness of policy makers have been discussed and presented later for all participants. Within this discussion group WIP contributed to the definition of main awareness issues for policy makers and mentioned several barriers discovered by SUCELLOG project. Group participants shared similar experiences with introduction of agricultural biomass in market. For instance the agro-pellet producer from Germany has experienced the same phenomena like SUCELLOG project partners in Italy that pellets in darker colour compared to regular wood pellets are associated with a bad

quality and have difficulties to find a market. Miscanthus fuel producer from France shared some barriers identical to the ones identified in SUCELLOG project, e.g. low prices of fossil fuels in the market, technical knowledge about combustion conditions – not all boilers are appropriate, competition for the market with other renewables instead of cooperation or diversification actions, low awareness of energy agencies, water management, landscape architects, civil engineers etc. in integrated project planning.

SUCELLOG project flyer has been disseminated during the workshop. After the official end of the expert meeting, WIP discussed with AEBIOM the possibilities to disseminated invitation to the final workshop of the SUCELLOG project among the workshop participants. AEBIOM agreed to circulate invitation upon request of the WIP.

3.6. Meeting with Ukrainian associations

Date: 14.03.2017

Time: 15:00-16:30

Location: Video-conference

Participants: 2 persons from UCAB, one person from SECB

With the goal of spreading SUCELLOG lessons learnt and barriers, CIRCE hold a video conference with two Ukrainian stakeholders from the agrarian and the bioenergy sectors – Association “Ukrainian Agribusiness Club” (UCAB) and Scientific Engineering Centre “Biomass” Ltd. (SECB), interested to spread SUCELLOG concept in Europe.

CIRCE explained the most interesting achievements and challenges of the project and the logistic centres developed within the project with maize cobs and silo dust. Information about situation in Ukraine was provided by the attendants. SECB highlighted the fact that there is one agro-industry supplying maize cobs to one municipality to cover their heat demands.

Attendants agreed to remain in contact in order to exchange information about initiatives in this sense.

3.7. Meeting with FEFAC

Date: 20.03.2017

Time: 10:00-11:00

Location: FEFAC, Rue de la Loi, 223 Bte 3, B-1040 Brussels, Belgium

The European Feed Manufacturers' Federation (FEFAC) was founded in 1959 by five national compound feed associations from France, Belgium, Germany, Italy and the Netherlands. FEFAC membership today consists of 24 national associations in 23 EU Member States as full members as well as Associations in Switzerland, Turkey, Norway, Serbia and Russia with observer/associate member status. FEFAC is the only independent spokesman of the European Compound Feed Industry at the level of the European Institutions.

On 20th of March, 2017 WIP had a bilateral meeting with the Deputy Secretary General of FEFAC. The meeting took place in Brussels at the office of FEFAC.

The aim of the meeting was to present the concept of SUCELLOG project, to inform about lessons learned during auditing studies implemented in project countries and with biomass resources available for feed producers, and to discuss further cooperation opportunities in dissemination of SUCELLOG project results to the members of the association.

The meeting was started with a presentation of the concept of SUCELLOG project and examples of biomass supply chains interesting for the feed producers in SUCELLOG project countries (see presentation attached in Annex IV).

FEFAC appreciated the conceptual approach of SUCELLOG project; however, also several barriers for the application of SUCELLOG concept in feed industries have been pointed out. Feed producers usually do not have long idle periods and the production is relatively stable during the year. However, capacities for using equipment for solid biofuel production purposes exist since in many cases there are over-capacities not used due to decreasing demand for the feed in the market.

From a legal and organisational point of view switching production lines between regular production and fuel production could be problematic because of the lack of a clear classification of the raw material. Feed sector customers are very sensitive regarding origin of the raw material. There could be a problem if the same production lines are used for treating material classified as “waste”. In order to solve this issue a guideline how to avoid cross-contamination and how to assess safety aspects and related constraints should be developed.

WIP asked whether it would be possible to publish brief article about this meeting and SUCELLOG project on the website of FEFAC. FEFAC confirmed that it is possible and that all news published on the website are summarized in a weekly newsletter and sent to all members. It has been agreed that WIP will prepare draft article and FEFAC will review it and publish on the website in the coming weeks. WIP also will send the given presentation by email.

3.8. Outreach to other EU multipliers and countries beyond the project consortium

Additional EU multiplier organisations have been informed about the concept and outcomes of SUCELLOG project communicated by e-mail. WIP prepared a list of relevant EU multiplier organisations and sent them information about the project (together with a request for a meeting). Unfortunately not all organisations were interested and ready to take time for the meeting. Following organisations were informed about SUCELLOG project, but it did not result in the meeting:

- FoodDrinkEurope
- C.E.P.M – European Confederation of Maize Production/CONFÉDÉRATION EUROPÉENNE DE LA PRODUCTION DE MAÏS
- European flour milling association
- PFP – Primary Food Processors
- EUVEPRO – European Vegetable Protein Federation
- FEDIOL – European Vegetable Oil and Proteinmeal Industry

- ENSA – European Natural Soy and Plant Based Foods Manufacturers Association
- COCERAL - Comité du Commerce des céréales, aliments du bétail, oléagineux, huile d'olive, huiles et graisses et agrofournitures
- FERM – Federation of European Rice Millers

During the final workshop of SUCELLOG project, the coordinator has been invited to apply for the **call for contributions: Attractive Systems for Bioenergy Feedstock Production in Sustainably Managed Landscapes by IEA Bioenergy Task 43.**

The purpose of this initiative is to identify attractive examples of landscape management and design for bioenergy and the bio-economy. Bioenergy Task 43 intends to catalogue and highlight world-wide examples of biomass production systems, throughout all stages of production that contribute positively to biodiversity and the generation of other ecosystem services. Information about biomass production systems and their impacts, as well as information about governance and policy initiatives that encourage adoptions of solutions leading to positive outcomes are welcomed.

CIRCE prepared and submitted the application describing the concept of SUCELLOG project. Through this initiative the SUCELLOG concept will be eventually spread further through inclusion in the report prepared by IEA Bioenergy Task 43 and possibly by a publication in a specialized peer-reviewed journal *WIREs Energy and Environment*, published by Wiley.

Outreach of SUCELLOG concept and results have been facilitated through several international publications, which are summarized in the report on presentations and publications (D8.3). There are some publications which are submitted for publishing, but not yet published. They will be followed up beyond the duration of the SUCELLOG project activities.

4. Final workshop

Final workshop of the SUCELLOG project “The mobilization of agricultural solid biomass for local energy” has been organized by WIP on 15th of February, 2017 in Brussels, Belgium. The workshop was organised in cooperation with SRCplus project, also supported by the Intelligent Energy Europe Programme.

The agenda for the workshop have been prepared at the end of 2016 jointly by both projects and invitations to the workshop were disseminated in January, 2017. More than 40 registrations were received and finally the event was attended by 32 people.

4.1. Agenda

The day was organised in 4 sessions. During the first session the developments of agricultural solid biomass in Europe have been discussed. The second session provided an overview of the main outcomes from the SRCplus project discussing the developments of short rotation coppice in Europe; the third session was dedicated to the presentation of SUCELLOG project results and lessons learned. The workshop was closed with the fourth session including panel discussion on market uptake of solid biomass in Europe. Agenda of the workshop is provided in Figure 7.

Programme

08:30-09:00 Registration

Session 1: Overview on Agricultural Solid Biomass Developments

Moderation: Dominik Rutz, WIP Renewable Energies, Germany

09:00-09:10 **Welcome and introduction**

DOMINIK RUTZ, WIP RENEWABLE ENERGIES, GERMANY

EVA LOPEZ, CIRCE - RESEARCH CENTRE FOR ENERGY RESOURCES AND CONSUMPTION, SPAIN

09:10-09:30 **Promotion of solid biomass for energy in the IEE programme**

SILVIA VIVARELLI, EXECUTIVE AGENCY FOR SMALL AND MEDIUM-SIZED ENTERPRISES (EASME), BELGIUM

09:30-10:00 **Key note speech: Agriculture and solid bioenergy**

DOMINIQUE DEJONCKHEERE, COPA-COGECA – SENIOR POLICY ADVISOR IN RENEWABLE RAW MATERIALS AND BIOMASS, BELGIUM

10:00-10:15 **The SRCplus project: Mobilizing short rotation coppice in Europe**

DOMINIK RUTZ, WIP RENEWABLE ENERGIES, GERMANY

10:15-10:30 **Results of the SUCELLOG project: Triggering the creation of biomass logistic centres by agro-industries**

EVA LOPEZ HERNÁNDEZ, CIRCE - RESEARCH CENTRE FOR ENERGY RESOURCES AND CONSUMPTION, SPAIN

10:30-11:00 *Coffee Break*

Session 2: Short Rotation Coppice in Europe

Moderation: Juan-Manuel Ugalde, WIP Renewable Energies, Germany

11:00-12:10 Short rotation coppice in the SRCplus target countries

First SRC harvests and plantations in Achenal, Germany

DR. CHRISTIAN EPP, BIOMASS TRADE CENTER ACHENTAL, GERMANY

SRC roll-out in Brittany, France

JACQUES BERNARD, ASSOCIATION D'INITIATIVES LOCALES POUR L'ENERGIE ET L'ENVIRONNEMENT (AILE), FRANCE

SRC for increasing the energy self-sufficiency of urban agglomerations and rural areas in the Zlín Region, Czech Republic

TOMÁŠ PERUTKA, ENERGY AGENCY OF THE ZLÍN REGION (EAZK), CZECH REPUBLIC

Capacity building on SRC in a new market: Prespa, Macedonia

GORDANA TOSKOVSKA, SECONDARY SCHOOL OF AGRICULTURE CAR SAMOIL – RESEN (SSA-RESEN), MACEDONIA

Cooperation with farmers: SRC in Kentriki Macedonia Region, Greece

IOANNIS ELEFThERiADIS, CENTRE FOR RENEWABLE ENERGY SOURCES AND SAVING (CRES), GREECE

The development of legal framework for SRC in Croatia

ŽELJKA FIŠTREK, ENERGY INSTITUTE HRVOJE POŽAR (EIHP), CROATIA

Multiplying the SRC experiences in Vidzeme, Latvia

KRISTAPS MAKOVSIS, LATVIAN STATE FOREST RESEARCH INSTITUTE SILAVA, LATVIA

12:10-12:30 Experiences and sustainability aspects of the short rotation coppice developments in Sweden

NILS-ERIK NORDH, SWEDISH UNIVERSITY OF AGRICULTURAL SCIENCES (SLU), IEA TASK 43 LEADER, SWEDEN

12:30-12:45 Discussion

12:45-13:45 *Networking Lunch*

Session 3: Solid biomass from Agriculture in Europe

Moderation: Eva López Hernández

- 13:45-15:15 **SUCELLOG concept implementation across Europe:**
- Awakening the interest on the valorisation of own agricultural residues in Spanish cooperatives
SUSANA RIVERA, SPANISH COOPERATIVES
- Triggering a national awareness about the use of agricultural residues for the production of solid biomass in France
CAMILLE POUTRIN - SERVICES COOP DE FRANCE
- Promoting enterprise network and local supply chains for the energy valorization of agro-prunings in Italy
CHIARA CHIOSTRINI – DREAM ITALIA
- Successful implementation of the SUCELLOG concept based on corn cobs in Austria
KLAUS ENGELMANN – AGRICULTURE CHAMBER OF STYRIA, AUSTRIA
- 15:15-15:45 *Coffee Break*

Session 4: Market uptake of solid biomass in Europe – The impact of the projects SRCplus and SUCELLOG

Moderation: Juan Sagarna, Spanish Coops

- 15:45-16:30 **Panel discussion**
SILVIA VIVARELLI, EASME, BELGIUM
AIVARS ZANDECKIS, EKODOMA, LATVIA
ILZE DZENE, WIP RENEWABLE ENERGIES, GERMANY
VINCENT NAUDY, RAGT ENERGIE, FRANCE
NILS-ERIK NORDH, SLU, SWEDEN
- 16:30 *End of the workshop*

Figure 7: Agenda of the SUCELLOG final workshop

4.2. Participants

32 people from 13 countries and representatives of several European organisations participated in the workshop. Among participants there were several representatives of policy makers (e.g. from national Ministry of Agriculture, from the European Commission) and EU multiplier organisations (COPA-COGECA, AEBIOM, national associations). Several participants attending the workshop came following the invitation circulated by AEBIOM on behalf of WIP after the expert workshop held in January, 2017.



Figure 8: SUCELLOG final workshop participants

4.3. Summary of workshop presentations and discussions

The workshop was opened by two welcome speeches from the coordinators of SRCplus and SUCELLOG projects. The session was opened by the first presentation given by Ms **Silvia Vivarelli** from EASME. She gave an overview about support provided to the solid biomass projects and highlighted main outcomes of the evaluation of impacts and achievements of 47 bioenergy projects supported under IEE II (2007 – 2013).



The workshop was continued with a key note speech given by Ms **Dominique Dejonckheere** – senior policy advisor in renewable raw materials and biomass in COPA-COGECA. Ms Dejonckheere stressed that bioenergy is the opportunity for farmers to solve their environmental problems, to increase their energy efficiency and to solve problems related to the use of fertilizers. She explained the view of COPA-COGECA on the new legislation post 2020 regarding biomass, biofuels and forests, including sustainability criteria.

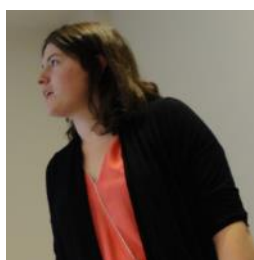
After the key-note speech **Dominik Rutz** (WIP) presented SRCplus project and the main achievements and **Eva Lopez Hernandez** (CIRCE) presented the concept of SUCELLOG project and results.



The second session of the workshop was dedicated to the presentation of SRCplus project results. Presentation about project activities in Germany, France, Czech Republic, FYR of Macedonia, Greece, Croatia and Latvia were given. Experiences and sustainability aspects

of the short rotation coppice developments in Sweden concluded the second session of the workshop.

After lunch the third session of the workshop was dedicated to the presentations of SUCELLOG project. The session was moderated by Ilze Dzene (WIP) and provided insight about how SUCELLOG project concept has been implemented in Spain, France, Italy and Austria. The session was opened by the presentation of **Susana Rivera** (Spanish Cooperatives). She presented the work done with the agricultural cooperatives in Spain to awaken their interest on valorisation of own agricultural residues. Results of three case studies in Spain have been presented.



The second presentation in this session was given by **Camille Poutrin** (Services Coop de France). This presentation explained how SUCELLOG project have triggered the overall awareness about using agricultural residues for biomass production in France. Achievements of SUCELLOG project, barriers, results of audited agro-industries in France, as well as three most successful case studies were demonstrated to the workshop participants.

Third presentation was given by **Chiara Chiostrini** (DREAM Italia). She explained the influence of SUCELLOG project on promotion of enterprise networks and local supply chains for valorisation of agro-prunings in Italy. Ms Chiostrini presented results of the assessment of regionally available bioenergy resources, types of supported agro-industries, the main barriers for the implementation of SUCELLOG concept and actions taken to overcome them. Similar to other presentations in this session, the results of three successful case studies in Italy have also been presented.



The last presentation in this session was provided by **Klaus Engelmann** (Agriculture Chamber of Styria, Austria). He presented experiences of SUCELLOG project in Austria which were based on successful implementation of biomass logistics centre in agro-industries working with corn cobs.



Mr Engelmann explained challenges and steps taken on the way to establishing biomass logistics centre in company Tschiggerl Agrar and presented results of two other case studies done in SUCELLOG project. He also addressed the main barriers in Austria – both technical and non-technical. The conclusion of his presentation was that it is very important to start with at least one successful example because it promotes new initiatives, triggers technological innovation and creates awareness among policy makers. These are the most important prerequisites for the success of SUCELLOG concept.

The workshop was concluded with the final session – panel discussion. The discussion was moderated by **Juan Sagarna** from Spanish Cooperatives. On behalf of SRCplus project **Nils-Erik Nordh** (SLU, Sweden) and **Kristaps Makovskis** (Silava, Latvia) participated in panel discussion and SUCELLOG project was represented by **Ilze Dzene** (WIP, Germany) and **Vincent Naudy** (Ragt Energie, France).



The discussion was focused on the factors that affected the success of both projects and the main barriers hindering the mobilisation of solid agricultural biomass for local energy in Europe.


All presentations of the workshop can be downloaded from the [SUCELLOG website](#).

5. Letters of Intent from the non-project countries


Thanks to the dissemination efforts on the European level, including presentations and trainings in non-target countries, several organisations have expressed their interest in replication of SUCELLOG project concept and have declared their interest in project results by providing Letters of Intent. The following organisations have provided their support to SUCELLOG project:

- ValBiom: Association for the valorisation of biomass, Belgium
- Chamber of Agriculture and Forestry of Slovenia
- Zemnieku Saeima (Farmers Parliament): Union of Farmers, Latvia
- UCAB: Agriculture association, Ukraine
- Scientific centre, Ukraine
- AEBIOM, Belgium
- ZEZ: Green Energy Cooperative, Croatia

Annex I: Presentation at COPA-COGECA workshop


TRIGGERING THE CREATION OF BIOMASS LOGISTIC CENTRES BY THE AGRO-INDUSTRY
SUCELLOG project (IEE/13/638/SI2.675535)
 April 2014 - March 2017

Juan Sagarna, Spanish Agrifood Cooperatives.WP Environment . COPA
 COGECA, Brussels 7th June 2016


The project is co-funded by the European Commission, contract N° IEE13/638/SI2.675535. The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein.


Project Summary

AGRO-INDUSTRIES as SEASONAL BIOMASS LOGISTIC CENTRE

Usual operation (Nov-Feb)


Operation as biomass logistic centre (Mar-Oct)



Partnership




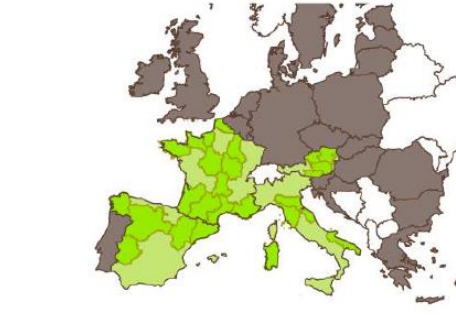

Technical support to agro-industries

The SUCELLOG project supports 4 agro-industries in Europe to become biomass logistic centres using agricultural residues as raw material. A feasibility study and a complete business model have been conducted for them.

The selected agro-industries are:

- Cooperativa Agraria San Miguel - Aragón region - Spain
- Luzéal-Saint Rémy – Champagne-Ardenne region - France
- Società Cooperativa Agricola Le Rene s.r.l. – Toscana region – Italy
- Tschiggerl Agrar GmbH – Styria region – Austria


SUCELLOG Regions




Results up to now: Are you interested in?

Knowing the potential of available biomass in your region and the existing agro-industries compatible with the production of solid biomass?
DOWNLOAD OUR REPORT ON REGIONAL SITUATION, BIOMASS RESOURCES AND PRIORITY AREAS

Understand the key messages to bear in mind when evaluating the possibility to become a biomass logistic centre?
DOWNLOAD OUR HANDBOOK WITH BASIC INFORMATION

Check your potential to become an agro-industry logistic centre?
DOWNLOAD OUR DIAGNOSIS GUIDE

Consult real feasibility studies made to 4 agro-industries that benefit from our services?
DOWNLOAD OUR FEASIBILITY STUDIES & BUSINESS MODELS

Main steps to make a techno-economic study on how to build a logistic centre in an agro-industry?
DOWNLOAD OUR HANDBOOK

ALREADY AVAILABLE AT
www.sucellog.eu
 Available languages:
 DE, EN, ES, FR, IT

Trainings to agrarian sector

In September-October, 2016 3 days training course will be organised by CIRCE for NATIONAL AGRARIAN ASSOCIATIONS in EU-28.

The training will include following topics:

- Concept of logistic centre
- Experiences in Europe
- How to support an agro-industry willing to become a logistic centre

Make your request: <http://www.sucellogconsultationtool.com>

Case study in Spain

Cooperativa Agraria San Miguel, Spain

Current activities	Existing equipment that can be used	Available agrarian residues	Outcomes of the feasibility study	Outcomes of the market assessment
Production of fodder pellets and bales from alfalfa	Two alfalfa production lines can be used for the pre-treatment of the solid biomass	Cereal straw >11,000 t/year Maize stalks >8,000 t/year	Straw is the most interesting raw material	Price of the product: • 117 €/t • 0.027 €/kWh
Cereal drying (mainly maize)			Blending with wood is required	The price is positioned in the middle range local solid biomass market
Production of fodder pellets from agro-industrial food residues			The most competitive product is a Class B agro-pellet with a maximum 70% share of straw	Secondary benefits should be offered to consumers: • ash as low-cost fertiliser, • reduction of Cl content of the soil

Recommended business strategy
Development of internal self-consumption chain targeted on the pig farmers (the members for cooperative) – being the suppliers of the straw and the consumers of the solid biomass. Biomass logistic centre should purchase the straw from pig farmers only under the condition that as well the annual or pluriennial agro-pellet sale contracts are made.

Current activities in Spain

- Pelletizing tests have been performed using two different mixtures:
 - 70% straw/30% wood
 - 50% straw/50% wood
- Combustion tests have been performed in several surrounding pig farms using existing boilers (originally designed for combustion of wood pellets and olive pits) finding some performance problems.
- Current test are being carried out in different boiler models adapted to agrarian fuels in collaboration with boiler manufacturers.



Challenges and barriers

Example of barriers identified in the project:

- Technical
 - Properties of the raw material not appropriate to be used in existing equipment
 - Risk of contamination while switching production line from bioenergy to regular activities
 - Lack of appropriate combustion equipment at customers
- Regulatory
 - «waste» origin of the product prohibits using it as fuel for households
 - Different taxing rates (raw material, product, fuel)
- Non-technical
 - Lack of funding
 - Complexity of new value chains (need for logistics, many actors involved, takes long time, purchase and sales contracts)
 - Customers acceptance of the new product (e.g. dark pellets vs light)
 - Market barriers- Prices of fossil fuels. Abundance of woody biomass. Comfort ability in gas use.

Focusing on environmental issues


- Waste vs residue
- Emissions in the combustion
- Competence with nutritional/fertilizing use
- Agricultural residues burning in the field
- Fight against fires

○What happens in your country? What are your ideas about the use of agricultural residues as biomass?


THANKS A LOT FOR YOUR HELP

11-07-2016

Annex II: Presentation of the CIDE meeting


TRIGGERING THE CREATION OF BIOMASS LOGISTIC CENTRES BY THE AGRO-INDUSTRY
SUCELLOG project (IEE/13/638/SI2.675535)
April 2014 - March 2017

Dr. Ilze Dzene, WIP Renewable Energies, Munich, Germany
 CIDE members meeting, 2 of June, 2016, Brussels


The project is co-funded by the European Commission, contract N° IEE130538/SI2.675535. The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein.



Aim and contents of the presentation

Aim of the presentation:
 To inform EU multiplier organisations (in particular associations related to the specific agro-industries addressed by the project) about SUCELLOG project and to engage them in project activities.

Contents:

- Introduction to SUCELLOG project and opportunities it offers to CIDE members:
 - Project summary
 - Background
 - Objectives and main steps
 - Partnership and regions
 - Technical support to agro-industries
 - Presentation of 2 case studies
 - Opportunity to receive information and training
- Discussion of technical and non-technical challenges and barriers
- Discussion of interest for further cooperation





Project Summary

AGRO-INDUSTRIES as SEASONAL BIOMASS LOGISTIC CENTRE


Usual operation (Nov-Feb)



Operation as biomass logistic centre (Mar-Oct)








Background

European energy scenario needs → New solid biofuels to fulfil demand


European agricultural sector needs → To diversify business activity



Take advantage of important SYNERGIES between bio-economy and the agro-industry sector

- Compatibility with existing equipment/facilities for conditioning of raw biomass
- Work under seasonal regime
- They produce residues or surrounded by residues
- Experience with organic feedstocks
- Concern about product quality

Let's adapt agro-industries to operate as logistic centres of quality solid biofuels with low investment





Objectives and main steps

SUCELLOG goal is to foster the participation of the agrarian sector in the supply of sustainable solid biofuels.

SUCELLOG will make it by:

- Providing technical support, helping decision-making and accompanying agro-industries willing to start operating as solid biofuel logistic centres.
- Creating capacity building in regional and national agrarian associations to provide this service to their associates beyond the end of the project.



Main areas of interest: Spain, France, Italy and Austria





Partnership





SUCELLOG Regions

Technical support to agro-industries

The SUCELLOG project supports 4 agro-industries in Europe to become biomass logistic centres using agricultural residues as raw material. A feasibility study and a complete business model have been conducted for them.

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- Tschiggerl Agrar GmbH – Styria region – Austria

Case study in Spain

Cooperativa Agraria San Miguel, Spain

Current activities	Existing equipment that can be used	Available agrarian residues	Outcomes of the feasibility study	Outcomes of the market assessment
Production of fodder pellets and bales from alfalfa	Two alfalfa production lines can be used for the pre-treatment of the solid biomass	Cereal straw >11,000 t/year Maize stalks >8,000 t/year	Straw is the most interesting raw material	Price of the product: • 117 €/t • 0.027 €/kWh
Cereal drying (mainly maize)			Blending with wood is required	The price is positioned in the middle range local solid biomass market
Production of fodder pellets from agro-industrial food residues			The most competitive product is a Class B agro-pellet with a maximum 70% share of straw	Secondary benefits should be offered to consumers: • ash as low-cost fertiliser, • reduction of Cl content of the soil

Recommended business strategy
Development of internal self-consumption chain targeted on the pig farmers (the members for cooperative) – being the suppliers of the straw and the consumers of the solid biomass. Biomass logistic centre should purchase the straw from pig farmers only under the condition that as well the annual or pluriennial agro-pellet sale contracts are made.

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- Combustion tests have been performed in several surrounding pig farms using existing boilers (originally designed for combustion of wood pellets and olive pits) finding some performance problems.
- Current test are being carried out in different boiler models adapted to agrarian fuels in collaboration with boiler manufacturers.

Case study in Austria

Tschiggerl Agrar GmbH, Austria

Current activities	Existing equipment that can be used	Available agrarian residues	Outcomes of the feasibility study	Outcomes of the market assessment
Corn harvesting, treatment and trading	Drying facility that is currently used for drying the cobs (afterwards used in animal bedding)	Cereal straw 5,190 t/year Hay 200 t/year	Corn cobs are the most interesting raw material due to the lack of competitive uses	Only corn cob-derived products are feasible. Grits offer large potential market and chance of good profit.
Logistic operating of straw		Corn cobs 15,249 t/year		Price of the corn cob products: Loose cobs • 58 €/t • 0.017 €/kWh Grits • 144 €/t • 0.038 €/kWh Pellets • 192 €/t • 0.044 €/kWh

Recommended business strategy
The main consumers are expected to be farms and industries using wood chips and pellets. The market would be extended to households, but they are currently not allowed to use corn cobs by law in Styria. The best strategy for the company would be also to produce a small amount of corn cob pellets to be proposed to the consumers as test products in order to facilitate the transition to grits.

Current activities in Austria

- Biomass logistic centre started operation end of 2015
- Fuel production tests have been performed. In general it works well with some minor issues to be solved.
- Combustion tests have been performed in several surrounding farms using existing boilers (originally designed for combustion of wood pellets and wood chips).

Trainings to agrarian sector

Regional agrarian associations have received specific training on how to make technical and economic feasibility study of an agro-industry willing to become a biomass logistic centre:

- 9 & 14 February 2016 in Paris, France
- 4 March 2016 in Böheimkirchen, Austria
- 29 - 30 March 2016 in Valladolid, Spain
- 20-22 April 2016 in Florence, Italy

In September-October, 2016 3 days training course will be organised by CIRCE for AGRARIAN ASSOCIATIONS in EU-28. The training will include following topics:

- Concept of logistic centre
- Experiences in Europe
- How to support an agro-industry willing to become a logistic centre

Make your request: <http://www.sucellogconsultationtool.com>

Results up to now: Are you interested in?

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Understand the key messages to bear in mind when evaluating the possibility to become a biomass logistic centre?

Check your potential to become an agro-industry logistic centre?

Consult real feasibility studies made to 4 agro-industries that benefit from our services?

Main steps to make a techno-economic study on how to build a logistic centre in an agro-industry?

Download our report on regional situation, biomass resources and priority areas

Download our handbook with basic information


Download our feasibility studies & business models

Download our handbook

ALREADY AVAILABLE AT www.sucellog.eu

Available languages: DE, EN, ES, FR, IT

Expected impacts





4 agro-industries logistic centres created. Direct technical support to 44 European agro-industries starting new agro-industry logistic centres. More than 1320 advice services provided to the agrarian sector.

15 regional and 4 national skilled teams to carry-out auditing and dissemination activities in Spain, France, Italy and Austria. Training of agrarian associations in other 3 countries in EU28


88 workshops and engagement events in participating countries to create awareness about opportunities for the agrarian sector

Elaboration of 3 handbooks and 2 technical guidelines to provide support beyond the project

15


Challenges and barriers



What do you think about SUCELLOG concept – is it interesting for your industry? Do you see any challenges?

Example of barriers identified in the project:

- Technical
 - Properties of the raw material not appropriate to be used in existing equipment
 - Risk of contamination while switching production line from bioenergy to regular activities
 - Lack of appropriate combustion equipment at customers
- Regulatory
 - «waste» origin of the product prohibits using it as fuel for households
 - Different taxing rates (raw material, product, fuel)
- Non-technical
 - Lack of funding
 - Complexity of new value chains (need for logistics, many actors involved, takes long time, purchase and sales contracts)
 - Customers acceptance of the new product (e.g. dark pellets vs light)
 - ...



Contact



circe CIRCE - Research Centre for Energy Resources and Consumption
Spain Contact: Eva López Email: sucellog@circe.es

lk Styrian Chamber of Agriculture and Forestry - Austria
Solar Tanja
Tanja.Solar@LK-STMK.AT

Service/COOP Services Coop de France- France
Camille Poutrin
camille.poutrin@servicescoopd
efrance.coop

agri-food cooperatives SPANISH COOPERATIVES - Spain
Susana Rivera
Rivera@agro-alimentarias.coop

DREAM - Dimensione Ricerca Ecologia Ambiente - Italy
Enrico Pietrantonio
pietrantonio@dream-italia.net

RAGT RAGT - RAGT Energie SAS - France
Vincent Naudy
V.Naudy@ragt.fr


WIP WIP - WIP Renewable Energies- Germany
Ilze Dzene
ilze.Dzene@wip-munich.de

Find out more at: www.sucellog.eu




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Annex III: Presentation of the CEEV meeting


TRIGGERING THE CREATION OF BIOMASS LOGISTIC CENTRES BY THE AGRO-INDUSTRY
SUCELLOG project (IEE/13/638/SI2.675535)
April 2014 - March 2017

 Dr. Ilze Dzene, WIP Renewable Energies, Munich, Germany
 Meeting with CEEV, 18th November 2016, Brussels



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Aim and contents of the presentation

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 To inform EU multiplier organisations (in particular associations related to the specific agro-industries addressed by the project) about SUCELLOG project and to engage them in project activities.

Contents:

- Introduction to SUCELLOG project and opportunities it offers to CEEV members:
 - Project summary
 - Background
 - Objectives and main steps
 - Partnership and regions
 - Technical support to agro-industries
 - Presentation of case studies in vineyard pruning residue utilization
 - Opportunity to receive information and training
- Discussion of technical and non-technical challenges and barriers
- Discussion of interest for further cooperation

2


Project Summary

AGRO-INDUSTRIES as SEASONAL BIOMASS LOGISTIC CENTRE


Usual operation (Nov-Feb)



Operation as biomass logistic centre (Mar-Oct)



4


Background

European energy scenario needs → New solid biofuels to fulfil demand

European agricultural sector needs → To diversify business activity

Take advantage of important SYNERGIES between bio-economy and the agro-industry sector

Let's adapt agro-industries to operate as logistic centres of quality solid biofuels with low investment

- Compatibility with existing equipment/facilities for conditioning of raw biomass
- Work under seasonal regime
- They produce residues or surrounded by residues
- Experience with organic feedstocks
- Concern about product quality

4


Objectives and main steps

SUCELLOG goal is to foster the participation of the agrarian sector in the supply of sustainable solid biofuels.

SUCELLOG will make it by:

- Providing technical support, helping decision-making and accompanying agro-industries willing to start operating as solid biofuel logistic centres.
- Creating capacity building in regional and national agrarian associations to provide this service to their associates beyond the end of the project.



Main areas of interest: Spain, France, Italy and Austria

5


Partnership



5

SUCELLOG Regions

Technical support to agro-industries

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- Luzéal-Saint Rémy - Champagne-Ardenne region - France
- Società Cooperativa Agricola Le Rene s.r.l. - Toscana region - Italy
- Tschiggerl Agrar GmbH - Styria region - Austria

More agro-industries have been supported by providing auditing services and expert consultations within the project. Some case studies...

Examples of the utilization of vineyard prunings

Prepared in collaboration with EuroPruning and uP_running projects

The project is co-funded by the European Commission, contract N° 30231-SUCELLOG-CY2020. The sole responsibility of this publication remains with the author. The European Union is not responsible for any use that may be made of the information contained therein.

What is done with prunings now?

Agrarian residues

Agricultural Pruning

Plantation removal

USUAL management or DISPOSAL

Disposal in open air fires

Mulching to soil

10/20/2016

How to make this initiative successful?

Agrarian residues → **ENERGY**

The key: **Every supply chain stakeholder must have a benefit**

Farmer	Trader / service company	Transporter	Consumer
<p>ECONOMIC</p> <ul style="list-style-type: none"> • Sells wood • Reduce pruning management cost <p>NON ECONOMIC</p> <ul style="list-style-type: none"> • Reduce gasoil • Saves time • Avoids bothering operations • Avoids open-fire permits 	<p>ECONOMIC</p> <ul style="list-style-type: none"> • Obtain a margin of benefit <p>NON ECONOMIC</p> <ul style="list-style-type: none"> • Diversify their activity • Possibility of integrated contract (pruning + collection) 	<p>ECONOMIC</p> <ul style="list-style-type: none"> • Obtain contracts <p>NON ECONOMIC</p> <ul style="list-style-type: none"> • Diversify their activity • Possibility of integrated contract (fruit + pruning wood) 	<p>ECONOMIC</p> <ul style="list-style-type: none"> • Biomass at lower price <p>NON ECONOMIC</p> <ul style="list-style-type: none"> • Diversify the energy resources • Increase competitiveness • Marketing strategy

In any case...

Prunings are competitive with forest resources because they are produced every year, always in the same place and with the same quantities

Key of success:

- ✓ The farmer becomes aware that it saves time avoiding burning and asking for permits

Case 1: PELLETS DE LA MANCHA

- Industrial production from 2011
- The only plant in the world working industrially on vineyard prunings
- Maximum capacity 20,000 t/yr (pellets and chips)
- 30,000 ha in a radius of < 30 km

Case 1: PELLETS DE LA MANCHA

EXPERIENCE: PELET, COMBUSTIBLE DE LA MANCHA

Pellet, combustible de la Mancha is a company producing solid biomass from vineyard prunings shed in the region of Castilla-La Mancha (Spain). With a maximum capacity of 20,000 tons per year, they represent the only industrial facility in Europe working with this type of residue. They supply pellets and chips to industries and the tertiary sector in a radius of up to 300 km.

The plant is placed inside an area of high density of vineyard plantations. The resource is gathered from a surface of 50,000 hectares (mostly small fields) around 30 km maximum. Before the pellet facility was settled, the common practice followed by the farmers was to store the pruning branches at the side of each field to be burnt in the open-air. Currently, the company offers them to pick-up the material once stored, so that farmers save time from the burning process and from all the administrative permits that they had to request. The perception of saving time from the farmer has been crucial for the development of this business line.

The pellet and chips from vineyard prunings present a competitive price in the biomass market in the area compared to the forestry resources. The advantage is not because the resource is obtained for free from the farmers, since the material coming from agricultural practices usually requires to be cleaned from exogenous matter while the forest resource do not normally need such an intense conditioning. The fact that the resource is produced every year, in the same quantities and at the same distance from the pellet plant is the characteristic that makes it competitive with forest wood products.

Case 1: PELLETS DE LA MANCHA

Chain type 1

Saves money and time in pruning management

Gets profit margin

Case 1: PELLETS DE LA MANCHA

Chain type 2:

Saves money and time in pruning management

Diversifies their economy
Gets profit margin

Gets profit margin

Case 2: BODEGAS EMINA

- Working with biomass from 2012
- 250 kW Boiler – for fermentation process and the offices
- 10 % fed with vineyard pruning chips
- 550 ha vineyards – 1 t/ha of prunings

Case 2: BODEGAS EMINA

Chain type 3

Saves money and time in pruning management

Saves in fossil fuels = Marketing (reduced carbon footprint of the company)

Case 3: Vilafranca del Penedés

- 40,000 inhabitants
- Area of high density of vineyard
- The council initiated dialogue among: Farmers, company of agricultural services and cluster of caves

Result: 1 cave (75 kW) heated and a small district heating (500 kW) operated with pruning chips

<http://vineyards4heat.eu/>

Case 3: Vilafranca del Penedés

Chain type 4:

Saves money and time in pruning management

Diversifies their economy
Gets profit margin

Savings in fossil fuels

Case 3: Vilafranca del Penedés

Chain type 5:

Saves money and time in pruning management

Diversifies their economy
Get a benefit margin

Savings in fossil fuels

No commercial machinery. System developed with a company

Case 4: Bodegas Torres

Chain type 6:

Saves time in pruning management
Pay 40 €/ha to the logistic operator

Diversifies their economy
Get a benefit margin

Savings in fossil fuels

Case 5: Xavier Muller (farmer)

- 25 ha – 2 t/ha (50 t/yr)
- Problems with diseases
- Self-consumption use

Chain type 7:

Saves money and time in pruning management
Saves money in fossil fuels

02/12/2016

New machinery in the market:

Bales 55 * 52 cm

02/12/2016

Trainings to agrarian sector

Regional agrarian associations have received specific training on how to make technical and economic feasibility study of an agro-industry willing to become a biomass logistic centre:

- 9 & 14 February 2016 in Paris, France
- 4 March 2016 in Böhleimkirchen, Austria
- 29 - 30 March 2016 in Valladolid, Spain
- 20-22 April 2016 in Florence, Italy

International 3 days training course will be organised by CIRCE for AGRARIAN ASSOCIATIONS in EU-28. The training will include following topics:

- Concept of logistic centre
- Experiences in Europe (case studies and business cases)
- How to support an agro-industry willing to become a logistic centre

Make your request: <http://www.sucellogconsultationtool.com>

Results:

Potential of available biomass in project regions and the existing agro-industries compatible with the production of solid biomass

Key messages to bear in mind when evaluating the possibility to become a biomass logistic centre

DOWNLOAD THE REPORT ON REGIONAL SITUATION, BIOMASS RESOURCES AND PRIORITY AREAS

ALREADY AVAILABLE AT www.sucellog.eu
Available languages: DE, EN, ES, FR, IT

Real feasibility studies made to 4 agro-industries that benefit from project services

DOWNLOAD THE FEASIBILITY STUDIES & BUSINESS MODELS

DOWNLOAD THE HANDBOOK WITH BASIC INFORMATION

Checking the potential of becoming an agro-industry logistic centre

DOWNLOAD THE DIAGNOSIS GUIDE

Main steps to make a techno-economic study on how to build a logistic centre in an agro-industry

DOWNLOAD THE 2nd HANDBOOK

Challenges and barriers

What do you think about SUCELLOG concept – is it interesting for your industry? Do you see any challenges?

Example of barriers identified in the project:

- Technical
 - Properties of the raw material not appropriate to be used in existing equipment
 - Risk of contamination when switching production line from bioenergy to regular activities
- Regulatory
 - «waste» origin of the product prohibits using it as fuel for households
 - Different taxing rates (raw material, product, fuel)
- Non-technical
 - Lack of funding
 - Complexity of new value chains (need for logistics, many actors involved, takes long time, purchase and sales contracts)
 - Customers acceptance of the new product (e.g. dark pellets vs light)
 - ...

Contact

CIRCE - CIRCE - Research Centre for Energy Resources and Consumption
Spain Contact: Eva López Email: sucellog@circe.es

lk Styrian Chamber of Agriculture and Forestry - Austria
Solar Tanja
Tanja.Solar@UK-STMK.AT

Service Coop Services Coop de France-France
Camille Poutrin
camille.poutrin@servicescoop.fr

COOP FOOD COOPERATIVES SPANISH COOPERATIVES - Spain
Susana Rivera
Rivera@agro-alimentarias.coop



DREAM - Dimensione Ricerca Ecologia Ambiente - Italy
Enrico Pietrantonio
pietrantonio@dream-italia.net

RAGT ENERGIE RAGT - RAGT Energie SAS - France
Vincent Naudy
V.Naudy@ragt.fr

WIP WIP - WIP Renewable Energies- Germany
Ibe Dzene
Ibe.Dzene@wip-munich.de

Find out more at: www.sucellog.eu

Annex IV: Presentation of the FEAC meeting


TRIGGERING THE CREATION OF BIOMASS LOGISTIC CENTRES BY THE AGRO-INDUSTRY
 SUCELLOG project (IEE/13/638/SI2.675535)
 April 2014 - March 2017
 Dr. Ilze Dzene, WIP Renewable Energies, Munich, Germany
 Meeting with FEAC, 20th March 2017, Brussels


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 The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein.


Aim and contents of the presentation

Aim of the presentation:
 To inform EU multiplier organisations (in particular associations related to the specific agro-industries addressed by the project) about SUCELLOG project concept and to enable them to benefit from the results and experiences gained during the project lifetime.

Contents:

- Introduction to SUCELLOG project and concept
- Examples of successful cases
- Technical and non-technical challenges and barriers
- Discussion of interest for further cooperation

 2


Agro-industries can become key actors in the supply of solid biomass...



WHY?

Equipment & facilities compatible with solid biomass production	Work under seasonal regime key actors in the territory	Produce residues or are surrounded by residues	Experience with organic feedstocks and aware about quality assurance
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SUCELLOG concept






Partnership




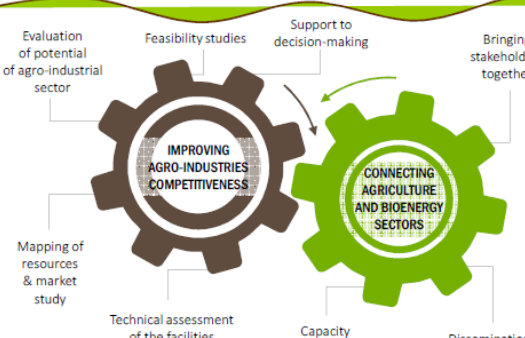




SUCELLOG Regions







Support from the project






OUTPUTS

63


Agro-industries supported

3 **14** **63** **AGRO-INDUSTRIES GIVING STEPS TOWARDS** becoming a biomass logistic centre in a short-term

BIOMASS LOGISTIC CENTRES integrated in an agro-industry created

MATERIALS 4 Tailor-made business models to become agricultural biomass logistic centres 7 Handbooks and guidelines oriented to the agriculture sector	NETWORKING 68 Policy-makers engaged 146 Personal meetings to identify sector opportunities and barriers 166 Publications with 42 mill. people audience +700 Contacts carried out with the agrarian and bioenergy sectors
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+160 Potential actors of initiatives engaged in bilateral meetings
1171 ATTENDANTS to European, national and regional workshops
38 TECHNICIANS TRAINED from agrarian associations



Example: Agro-industry SOFRAGRAIN (France)

Regular activity: compound feed production
Produce pellets from silo dust (own and collected from other companies):

- o Is using their existing storage facilities and pelletizer (6 t/h)
- o Investment: 5,000 € (for minor adaptation)
- o Current production 500 t/year
- o Capacities up to 5,000 t/year
- o Cooperates with Agronergy (ESCO) to extend their market (in Paris area)




16/05/2017

Example: Agro-industry Boortmalt – Axereal group (France)

Regular activity: malt production (energy intensive)
Since 2013, use silo dust (barley and other cereals) for covering own energy demand:

- o Large amount of silo wastes (4,000 t/year) – problem of disposal
- o Total investment 2.8 M€ (0.714 € from public funds – ADEME), pay-back time – 4 years
- o Cooperation project among:
 - Axereal → decreased energy costs
 - Vyncke (boiler manufacturer) → adapted a standard wood boiler and developed new business line with agro-fuel boilers
 - Dalkia (ESCO) → obtained new references with operating plants with agricultural biomass fuels



16/05/2017

Example: Agro-industry SAT El Cierzo (Spain)

Regular activity: cereal (maize) drying
In 2012 diversified their activities and started drying olive pits

- o Using their existing maize drier to dry olive pits M25% -> M15%
- o Investment: 150,000 € (for adaptation of the cereal drier and new of hoppers and conveyors)
- o Increased production from 600 t/year to 5,000 t/year in 4 years
- o Customers located in < 200 km radius




16/05/2017

Example: Agro-industry Tschiggerl Agrar GmbH (Austria)

Regular activity: maize dryer (works 3 months a year) and logistic operator for maize and straw harvesting
Produce 1,500 t/year of corn cob derived fuels (for self-consumption and for selling in local fuel market):

- o Modification of maize harvester (investment 30,000 €)
- o Started using corn cobs to cover own heat demand (250,000 l oil saved; 2 years pay-back time)
- o Is using existing belt dryer
- o Partnership with other company for pelletising process
- o Products: loose cobs, grits, pellets
- o Grits are 40 % cheaper than wood pellets



16/05/2017

SUCELLOG publications

Potential of available biomass in project regions and the existing agro-industries compatible with the production of solid biomass

REPORT ON REGIONAL SITUATION, BIOMASS RESOURCES AND PRIORITY AREAS

Key messages to bear in mind when evaluating the possibility to become a biomass logistic centre

HANDBOOK 1

Checking the potential of becoming an agro-industry logistic centre

DIAGNOSIS GUIDE

ALREADY AVAILABLE AT www.sucellog.eu

Available languages: DE, EN, ES, FR, IT

How to make the feasibility study for building biomass logistic centre in an agro-industry

HANDBOOK 2

Real feasibility studies made for 4 agro-industries

REPORTS ON FEASIBILITY STUDIES & BUSINESS MODELS

Key points for the success of building biomass logistics centre within agro-industry

HANDBOOK 3

Challenges and barriers

Is the SUCELLOG concept interesting for your industry?
Do you see any challenges?

Example of barriers identified in the project:

- Technical
 - Properties of the raw material are not appropriate to be used in existing equipment
 - Risk of contamination when switching production line back to regular activities
- Regulatory
 - «waste» origin of the product
 - Different taxing rates (raw material, product, fuel)
- Market organisation and awareness
 - Low fossil fuel prices, surplus of wood in market
 - Complexity of new value chains (need for logistics, many actors involved, takes long time, purchase and sales contracts)
 - Customers acceptance of the new product (e.g. dark pellets vs light)

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lk Styrian Chamber of Agriculture and Forestry - Austria
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