

Short Rotation Woody Crops (SRC) plantations for local supply chains and heat use

Project No: IEE/13/574



Report on European Workshop in Brussels

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SRCplus website: www.srcplus.eu

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Introduction

The SRCplus final workshop is part of the dissemination activities of WP7. According to Annex I, the original idea was to assess the opportunity to organise the final event by joining forces with other IEE projects in the occasion of the European Sustainable Energy Week (EUSEW). In the end, SRCplus joined forces with the IEE SUCELLOG project, but not in the occasion of the EUSEW.

The concept idea of the event was initiated in autumn 2016 together with all the logistic arrangements. In cooperation with SUCELLOG, the final agenda was set and the first invitation round was successful sent by December 2016. The title given for the workshop was: *The mobilisation of agricultural solid biomass for local energy*.

In the invitation, a link to register was mandatory for all interested participants. The dissemination process was very similar to the dissemination procedures for the Newsletters; by sending an invitation E-mail to all our stakeholders and by promoting the event with the programme in our social media channels. In the end, +40 interested participants registered to assist the event. Finally, the dissemination workshop event was held in Brussels, Belgium on 15 February 2017 with a total of 33 participants.

The workshop focused on the following topics:

- SRCplus project results
- SUCELLOG project results
- Agriculture and solid bioenergy
- Promotion of solid biomass for energy in the IEE programme
- Results of short rotation coppice in the SRCplus target countries
- Experiences and sustainability aspects of the short rotation coppice development in Sweden
- Concept implementation of SUCELLOG across Europe
- Market uptake of solid biomass in Europe



Figure 1: Impressions of the Workshop

Objectives

The SRCplus and SUCELLOG projects have been founded by the Intelligent Energy - Europe (IEE) Programme of the European Commission. The IEE programme was launched in 2003 by the European Commission, as part of a broad push to create an energy-intelligent future for Europe. The overall goal of the workshop was to present the final results of both projects to an international audience, in particular to the target audiences like DG AGRI, DG ENER, DG REGIO, DG ENV, farmers' associations, nature conservation associations, biomass association.

The overall goal of the SRCplus project is to support and speed-up the development of local supply chains of Short Rotation Woody Crops (SRC) by implementing various capacity building measures and regional mobilization actions for the key actors in local supply chains. The countries that have the largest areas of SRC for energy are Sweden, UK and Poland. The potential in other European countries remains largely untapped. However, there is an increasing demand for wood chips supported by the targets of national and European energy policies. This creates a gap between the rising demand and supply in Europe in several countries. The SRCplus consortium was created to respond to this demand and to implement actions to tackle the market barriers. SRCplus is implemented in 8 target regions within Germany, Croatia, Latvia, France, Czech Republic, Greece, and Macedonia. A partner from Sweden is involved in the project actions due to the long-time experience with SRC in Sweden. The action is coordinated by WIP Renewable Energies, Germany.

SUCELLOG aims to widespread the participation of the agrarian sector in the sustainable supply of solid biomass in Europe. SUCELLOG action focuses in an almost unexploited logistic concept which evidences the large synergy existing between the agro- economy and the bio-economy: Agro-industry facilities can be utilised in the idle periods to handle and pre-treat agricultural residues to produce qualitative solid biomass to be introduced into the market. Through a combination of direct supporting actions to agro-industries and capacity building activities to the sector, SUCELLOG has definitely plant the seed to a further development of sustainable local initiatives to valorise the agriculture residues, increasing the competitiveness and the sustainable development of rural areas.

Summary

The workshop on “The mobilisation of agricultural solid biomass for local energy” opened its registration table at 8:30 and at 9:00 the official welcome and opening was given by **Dominik Rutz** – WIP Renewable Energies and **Eva López CIRCE** – Research Centre for Energy Resources and Consumption.

Dominik Rutz moderated the first session on the “overview on agricultural solid biomass development”. The first presentation was given by **Silvia Vivareli**, Project Advisor from the Executive Agency for Small and Medium-Sized Enterprises (EASME) from Belgium. Ms Vivareli’s presentation was on the “promotion of solid biomass for energy in the Intelligent Energy Europe (IEE) programme”. The presentation focused on the programmes managed by EASME, what is Horizon 2020 programme, and the main deliverables of the IEE programme to support the EU policy on energy efficiency and renewable. The programme was reviewed by Ricardo Energy & Environment, a contracted company to assess impacts and achievements within 47 bioenergy projects supported under IEE II (2007 – 2013), some of the results highlighted barriers as the lack of information and experience along the market uptake activities; the existence of underdeveloped biomass supply; and the unfavourable policy framework.

Ms **Dominique Dejonckheere**, Senior Policy Advisor in renewables raw materials and biomass from COPA-COGECA from Belgium was the second speaker, who presented a key note speech focused on commenting the last policy paper prepared to the EU Commission on agricultural solid biomass. COPA-COGECA is an organisation that brings together the interest of European farmers and European agricultural cooperatives to the responsible authorities of the agricultural sector within European Institutions (European Commission, Council of Ministers, European Parliament, Economic and Social Committee and Committee of the Regions, European socio-economic partners and European civil society, etcetera). The perspective presented was certainly well-known by many participants. The presentation of these policy papers can be found [here](#).

Dominik Rutz, as third speaker from the session, presented the SRCplus project in a glance, focusing on the drivers to promote the cultivation of SRC in Europe to provide energy through new techniques developed and implemented mainly in Sweden. The development shall not and has not entered in conflict with the ecosystem services and nature conservation measures. In order to understand the SRC dilemma, some of the main barriers were summarised as follows:

- fixed land use of more than 20 years
- large investment in the 1st year
- lack of harvesting machines (chicken or egg problem)
- land classification issues
- low subsidies (greening/direct payments)
- woodchip markets (competition with oil price)
- sustainability concerns

The actions implemented along the project focused on offering capacity building events, knowledge transfer, regional mobilisation actions, cooperation activities with industry and show cases of good practice examples. All these actions were supported by the milestone deliverable – SRCplus Handbook. The handbook has been supporting all the capacity building events and is available in the national languages of the project. It is shown that SRC plantations can reduce soil erosion, improve soil properties, increase yields, and diversify incomes, among many other capacities. The project reached the proposed objectives with constant learning processes on how to implement and create further opportunities for SRC within and outside the project regions.

The final speaker of the session was Ms **Eva López**, who focused her presentation on the dynamics of the SUCELLOG project. The project's efforts are derived in finding the significant potential of agricultural resources to expand the share of energy and materials production from biomass for the next decade. Thus in order to support this growth the potential lays on focusing in certain biomass resources that at the moment are currently underutilised, such as wood from forest, some agricultural residues, wastes, and other forest biomass. The results of the project lay in the support given to more to agro-industries to become a biomass logistic centre in a short period of time, by providing the networking, materials and technical trainings. The analysis of the end-results reflects the diversity of interest and availability of resources from region to region.

The second session was on Short Rotation Coppice in Europe, where the results were and activities were presented within each target region of the SRCplus project. The session was moderated by **Juan-Manuel Ugalde** – WIP Renewable Energies. The session was structured to present first the results and in the end have time for questions and answers.

Mr **Christian Epp** from Biomass Trading Centre Achental in Germany was the first speaker of the session. The SRCplus partner in Achental presented the main activities done within the SRC plantation and the harvesting activities where an optimised planning was the key for their success in the region. Through their experience, some of the lessons learnt statements are:

- SRC should be designated in a way to serve double purposes
- SRC should meet high environmental standards
- Environmental standards are expensive but an open niche market
- SRC in the catchment of surface water have capacity to reduce nitrates

Mr **Jacques Bernard** from AILE in France presented the SRC roll-out in Brittany. The presentation focuses on the history of SRC in the region and the cooperation provided with other EU projects in the region. Some of their good practice examples focused on harvest with a prototype machines from France and Denmark. The issue with the stems is still a problem in all Europe. Water protection was the main activity done within the SRCplus project, similar that in Achental. Many regional activities involving local farmers took place like odour control by biofilters (70% wood and 30% compost), the treatment and energy of activated carbon in agriculture for litter and cattle feed activities, among others.

Mr **Tomas Perutka** from EAZK in Czech Republic presented a concrete example on how SRCplus contributed in the self-sufficiency energy in the region of Zlín. SRC is not a common practice in the regions because of the lack of awareness and the technical barriers. The regions have a very good potential for the development of bioenergy; within the project the region identified 10 new regions to develop SRC. In the presented region more than 20 ha have been plated and the SRC woodchips are planned to be exported outside the Zlín region to the large scale boilers that belong to big companies. Some of the benefits found during the implementation of best practice examples were: to decrease the import of biomass from other regions of the CZ, increase the use of local biomass in a peripheral are of 100km for boilers, establish a local supply chain, set the objective to plant 50 more SRC ha in the near future.

Ms **Gordana Toskovska** from SSA-Resen in Macedonia presented “the capacity building on SRC in a new market in the Prespa region”. The implementation of SRC in the region within the last 36 months has been a challenge for farmers, public land owners and even for businesses working in the agro sector and energy efficiency sector. However, the interest for plating and growing SRC in the region has increases and the expertise and know-how inputs are more than necessary in the future. The SRCplus Macedonian partners have been working on promoting sustainability and cultivation in order to inform interests stakeholders on how to set-up and manage SRC plantation in a best sustainable approach. Also the

benefits of using woodchips, mostly for heating, were effectively promoted. Some of the key actions to promote SRC in the region were:

- Awareness provided among farmers, public land owners and users of woodchips through capacity building activities
- Feedback obtained from the participants providing conclusions and recommendations to be taken into account for the development of further SRC in the region and for further capacity building activities

Some of the most relevant results seen in the region are: the positive results among public institutions, one hospital and many municipal buildings had replaced the use of oil boilers for woodchips and pallets boilers; the government has implemented a national energy efficiency measure by reducing 5% in tax to those woodchips boilers users; the appropriate condition for SRC investments by domestic and foreign investors rely on the excellent climate conditions that the region has, lot of free land, prices of lands are low, and a tax releases increases the potential conditions pro market up-takes.

Mr **Ioannis Eleftheriadis** from CRES presented “the cooperation with farmers: SRC in the Kentrinski Makedonia Region in Greece”. The target region is a typical agricultural area in Greece with typical agricultural issues like droughts, floorings, nutrients lost due pesticides, etc., therefore the implementation of SRCplus in the region would help to lower some of the impacts and recover the land. SRCplus implementation and production was obtained due divers training courses for farmers, good practice visits, discussion, presentations, etc.

Some of the results were presented in a lessons learned table showed in the [power point presentation](#).

The results obtained from the region are presented as SRC advantages in plain arable lands; SRC provides support to arable lands with marginality issues; farmers prefer SRC under subsidy schemes; the rotation period are around 12 years; the plantation density is from 2 to 4 m; and the responds from farmers to positive to keep implementing further SRC activities in the region.

Ms **Željka Fištrek** from EIHP in Croatia presented “the development of a legal framework for SRC in Croatia”. The precondition for SRC in Croatia involved that the forest and forest land is about 47% with water surfaces of 1.6%. In the country the issue is that many areas are public, stated own land, which make that the parcel are normally small. However Croatia is working very closely with the development of renewable energies. Since 2011 there was a study providing the estimation of theoretical and technical potential of woody SRC in the country, the information provided threw relevant results that presented the SRC development in the country. However, while taking a closer look to the study, EIHP discovered that the SRC plantations mentioned in the study weren't real SRC parcels; most likely the study was based on farmer's statements. The law in SRC started to be developed in 2013, it is not finishes yet, but EIHP is cooperating now. Within the law is not stated what kind of species should be included; the category for land for plating SRC isn't defined yet, and is pushed to the lowest category, however there are still inconsistencies in the law draft, that points out that all stakeholders should be involved.

Mr **Aivars Žandeckis** from Ekodoma presented “multiplying the SRC experiences in Vidzeme region in Latvia”. The target region is located in the north region of the country; its quality soil is a midlevel, and there is big use of wood fuel consumption by locals. There is not an official registry of SRC plantations in the region, though the only available statistics are from direct payment registration reports. There are some areas accepted for subsidies, there are four species like Grey alder, Aspen and Willow to be planted as SRC to be approved for subsidies; though in the region, the subsidies in region are way too low comparted to the total statistics in the country.

There are several SRC plantations in the region, the land is privately owned, willows are planted with 15000 cuttings per ha. The first harvest was in 2016 and biomass trader

supplied the local boilers for 40km. The current harvest will be exported and after filling the local market. Unfortunately the cuttings are mainly manually, due the lack of machinery.

The final presentation of the session was given by Mr **Nils-Erik Nordh** in behalf of Jannis Dimistriou from SLU. The presentation was about the experiences and sustainability aspects of the short rotation coppice development in Sweden. The drivers behind SRC development in Sweden lays on: in the 60's the was a fear of wood deficiency; in the 70's the energy crisis pushed to look for different energy sources; in the 80's there was surplus on the SRC production, farmers didn't know what to do with the exceeding amount of wood produced; and finally the environmental use.

SRC started to be commercialised in Sweden in the 1990. Breeding has been produced to be free of insects, leaf rust, and in particular to frost, there are no methods of spraying use in the country.

The Swedish experience of SRC plantations was shared, from the implementation of new crops, its management, weeding, ploughing, harrowing, till different harvest methods.

From the farmers point of view, the SRC plantations are a challenges for them, due it is a new crop compared with their previous experience, the life span of the crop is 25 years, changes the landscape, the harvest takes place every 3 or 4 years, and the use of machineries is low. These are changes from the traditional farming methods that must of the farmers know. However the question from farmers is how to return to previous traditional agricultural fields? The famer can do it and the soil will be recovered with nutrients, but there are a few processes to keep, like not removing the roots for 2/3 years, the roots should decay and then the farmer can plough.

Some of the lessons learned are: drivers are changes over time; there is need for breeding programs that continue to provide the market with new materials; plantations has be designed in advance; provide advices to farmers; understand that SRC is long commitments for all parties involved; international cooperation is important for further development.

Then, the floor was opened for question and comments. The session was very active and some of the relevant questions were asked:

- What were the contributions for SRCplus in the regions if France and Croatia, where it seems that SRC was previously used before they joined to the project?
- What is the experience of marginal use within the Project?
- On the quality of wood produced by SRCplus plantation, is there any crop that runs 100% in renewable energy according with the quality of wood produced? +

The session was full of participants and unfortunately the time for questions was a bit limited. However many interesting comments were shared in support of SRCplus to keep promoting SRC plantations across Europe. The project does not have any foreseen continuations, though it was recommended.

The third session on Solid biomass from Agriculture in Europe was moderated by **Ilze Dzene** from WIP – Renewable energies. The session presented the results in the different target regions of the SUCELLOG project.

Ms **Susana Rivera** from the Spanish Cooperatives presented the “awakening the interest on the valorisation of own agricultural residues in Spanish cooperatives”; followed by **Ms Camille Poutrin** from the Service Coop de France focusing on “triggering a national awareness about the use of agricultural residues from the production of solid biomass in France”. Then Ms **Chiara Chiostrini** from DREAm Italy presented the “promotion enterprises network and local supply chains for the energy valorisation of agro-pruning” in Italy. At last Mr **Klaus Engelmann** from the Agriculture Chamber of Styria in Austria presented the “successful implementation of the SUCELLOG concept based on corn cobs in Austria”.

The presentations of all speakers are available for download by following the next link: <http://bit.ly/2maNC3N>

Finally, the last part of the workshop was a panel discussion moderated by Mr **Juan Sagarna**, from the Spanish Coops. The panel discussion's topic was focused on the market uptake of solid biomass in Europe – The impact of the projects SRCplus and SUCELLOG. The panellist from SRCplus were Mr **Kristaps Makovkis** from Silava in Latvia, and **Nils-Erik Nordh** from SLU; from the SUCCELO side Ms **Ilze Dzene** from WIP and **Vincent Naudy** from RAGT Energies in France. The main discussion was focused on sharing the main experiences and success of the projects, considering the most important factors that have been slowing down the development on the mobilisation of agricultural solid biomass for local energy in Europe.

The topic of the workshop was very interesting and it call the attention from many other participants involved directly in the target groups; DG AGRI, DG ENER, DG REGIO, DG ENV, farmers' associations, nature conservation associations, biomass association; or working similar topics, and groups involved in lobbying to keep promoting sustainable energy sources across the EU.

Annex II Programme

International Workshop

The mobilization of agricultural solid biomass for local energy

Final Workshop of the EU projects SRCplus and SUCELLOG

15th February 2017

Science 14 Atrium

Rue de la Science 14b, 1040 Brussels, Belgium



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

Workshop Description

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agricultural residues to produce qualitative solid biomass to be introduced into the market. Through a combination of direct supporting actions to agro-industries and capacity building activities to the sector, SUCELLOG has definitely plant the seed to a further development of sustainable local initiatives to valorise the agriculture residues, increasing the competitiveness and the sustainable development of rural areas.

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'ÉNERGIE 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 (EAŽK), 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

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

Multiplying the SRC experiences in Vidzeme, Latvia

AIVARS ZANDECKIS, EKODOMA, 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

KRISTAPS MAKOVSKIS, LATVIAN STATE FOREST RESEARCH INSTITUTE SILAVA, LATVIA

ILZE DZENE, WIP RENEWABLE ENERGIES, GERMANY

VINCENT NAUDY, RAGT ENERGIE, FRANCE

NILS-ERIK NORDH, SLU, SWEDEN

16:30 *End of the workshop*

Practical information

Date & Venue:

15th February 2017; Science 14 Atrium, Rue de la Science 14b, 1040 Brussels, Belgium

**Registration:**

Participation is free of charge, but registration is required!

Please register before **01.02.2017** using this [REGISTRATION LINK!](#)

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