

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

Project No: IEE/13/574



2nd training report for public land managers/owners

Lorient, 12/10/2016

WP 4 – Task 4.4

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SRCplus website: www.srcplus.eu

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1 Introduction

The City of Lorient is strongly involved in the development of wood energy. It started in 2002 with the development of the first wood boiler to heat municipal greenhouses and the development of a first wood boiler district. The annual consumption is about 2200 tons of wood. It will be tripled in few years with the development of wood energy boilers and districts.

The municipality developed its own storage capacity, with 6000m³ available on two main storage platforms. Woodchips are produced from wood collected at the Municipal Garden Unit and National Forests Office, managing public forests.

As a complementary resource to produce wood energy, the City of Lorient targets to plant 20,000 trees by 2020. 11 hectares of been identified in Lorient and cities around Lorient. The Lorient's municipal council approved an annual budget of 20.000 euros per year to plant trees for 10 years. Indeed, some of the community's land needs to be managed without any externality (no public use, nor natural protected area). They could be planted to produce wood energy.

2 Involved stakeholders

AILE organised the training in partnership with city services which sent the invitation to the relevant contacts.

Participants were municipalities from Lorient Agglomeration that are managing energy in the city buildings, energy planning, green services, and also wood energy producers.

François Corre (mairie Lorient)

Dominique Renouf (élue, mairie Guidel)

Laurent Tonnerre (élu, mairie Lorient)

Jérôme Bourgoïn (ONF)

Pierre Crépeaux (mairie Lorient)

Christophe Philippe (Nass et wind Bois Energie)

Franck Davilma (Lorient agglomération)

Vincent Guillemot (Nass et wind Bois Energie)

Isabelle Malot (Lorient agglomération)

Jean-Luc Audfray (particulier)

Charlotte Le Maguer (Lorient agglomération)

Jacques Bernard (Aile)

3 Results

3.1 Organisation of the training

| TOPIC | TIME | GOAL | SOURCES |
|---|--------|--|--|
| Site visits | 45min | Visit of the 2,2ha of woody crop and other potential area closed to the woody crop | D6.7 |
| Lunch | | | |
| Introduction | 15 min | Understanding the objectives of the community in producing wood chips | Laurent Tonnerre, deputy mayor of Lorient |
| 2000 trees plantation by 2020 programme | 15 min | Presentation of the programme methodology | François Corre, Garden Service of Lorient |
| SRCplus project and SRC crops | 15 min | Presentation of the SRC+ project Understanding what SRC are (species, rotation cycles, soil, water requirements, production process in brief, yields.) Explain how SRC can contribute to improve landscape. SRC harvest machines | SRC leaflet, SRC poster, SRC handbook, SRC web, materials from WP 3 (presentations), D.2.5 |
| Heat from SRC | 15 min | Introduction into logistic, markets, end user technologies boilers, woodchip quality factors. | D.2.5, Pictures of wood chips from SRC |
| SRC in the target region-current situation, opportunities and barriers Practical example from the target region /country | 15 min | Understanding the situation in Brittany. Explanation of the concrete case plantation and practical experience. | D. 2.1; |
| SRC best practices | 15 min | Introduction to examples from Pleyber-Christ municipality / Wilwater Focus on feedbacks from a water catchment protection site | D.2.2, Materials form |
| Sustainability of SRC | 15 min | Insight into recommendations and criteria for SRC | D.2.3; D.2.4 |
| SRC economics | 15 min | Presentation of plantation and harvesting costs | D 3.1 |
| Analysis of SRC potential at Lorient green areas | 15 min | Understanding how SRC can fit with Lorient practices (road maintenance, no pesticide management, reduced maintenance labour time...) Identification of opportunities. | LORIENT development strategies |
| Final discussion on an action plan on SRC | 15 min | Discussion on an action plan to implement an experimentation | D6.4 |

3.2 Main points of the discussions

- Discussions on the Lorient experimentation and the 2,2 ha visit



Photos of the SRC poplar plantation

Lorient Service Park and Gardens has implemented 2.2 hectares of woody crop. The main objective of the plantation is landscape feature. Woody crops are also implemented to produce wood energy and enhance biodiversity.

Lorient Services estimate biomass yields around 150 T / ha over 10 years, ie 15 T / ha /year (CNBF figures on poplar TCR).

Lorient services are interested in implementing a small area of SRC acacia to experiment a full mechanized harvest.

AILE can help the municipality to select some contractors for harvesting acacia.

Nass and Wind is a provider of wood chips n it owns 500ha of forests and would be interested in planting 100ha of black locust SRC.

Jérôme Bourgoïn from ONF raised the issues of invasiveness of black locust.

- ***Discussions on the presentations***

The participants discussed about the interests of SRC. AILE underlined the multiple interests of SRC woody plantations:

- environment: GHG (carbon storage), water quality (protection of drinking water, erosion, sludge post-treatment), biodiversity...
- land: valorisation of unused land, retrocession
- landscape
- energy: wood energy production
- economy: creating added value compared to conventional grassed areas,
- social: educational, participative / citizen project
- agronomy: to amend the soil with woody organic matter to improve soil life and to improve nitrogen fixation

=> Aile encouraged the community to create woody biomass on unused areas. Once the planting strategy will be defined by Lorient, Aile will be able to advice the municipality on the establishment plant.

Lorient Agglomeration services would like to implement SRC as a compensatory afforestation. However, the administration seems to be more favourable to forest than SRC, perhaps due to the ignorance of SRC plantations?

=> Aile proposed to inform again about SRC to the administrative technicians (DDTM and DREAL).

3.3 The results of the questionnaires

Results from the questionnaires are:

Knowledge improvement

| | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| knowledge on SRC <u>p</u> rior to the training | 2 | 1 | 3 | 1 | |
| knowledge on SRC <u>a</u> fter the training | 1 | | 1 | 6 | 1 |

Evaluation of the presentations ranges from 1 to 5 with main answer being 4 (1 equals to no improvement at all, 5 equals excellent knowledge on the topic).

The content or the training reached the expectations of 1 participant and fully reached the expectations of 6 participants. One participant wasn't concerned about the training.

All the participants would like to work on identifying potential sites on which SRC experiment can be implemented.

3.4 Improvement for AILE's further trainings

Such training could involve more elected people for decisional aspects and administrative technicians from state authorities (DDTM, DREAL) for regulatory aspects.

4 Annexes

4.1 Invitation to the 12/10/2016

la Ville de Lorient vous invite à une conférence

Mercredi 12 octobre de 14h à 16h30

développement du bois énergie: valorisation des friches par la plantation de taillis

*Jacques Bernard, de l'association AILE dans le cadre du programme
SRC+*

Hôtel de ville de Lorient, Salle Ludwigshafen

programme:

introduction par Laurent Tonnerre, adjoint à l'environnement de la ville de Lorient

"plantation de 20 000 arbres pour 2020 à Lorient: méthodologie" par le service parc et jardins de la ville de Lorient

"les taillis et le bois énergie, perspectives de développement" par le service environnement de la ville de Lorient

"présentation des cultures ligneuses en taillis à vocation énergétique T(t)CR" par Jacques Bernard, de l'association AILE

temps d'échange sur les pratiques de plantations

"mobilisation de la matière ligneuse existante" : par Jacques Bernard, de l'association AILE

temps d'échange sur les pratiques d'entretien des zones et linéaires boisés

inscription recommandée auprès du service environnement:

cperrodo@mairie-orient.fr / 02 97 35 32 72



4.2 Participants list and signatures

développement du bois énergie: valorisation des friches par la plantation de taillis

| Nom | structure | fonction | Adresse courriel | Cochez cette case si vous souhaitez recevoir des informations sur la démonstration de récolte de TTCR organisée par AILE/SRC+ |
|---------------------|-----------------------|-----------------------------|---|---|
| BOURGOIN Jérôme | ONF | Technicien Forêt | jerome.bourgoin@onf.fr | <input checked="" type="checkbox"/> |
| TONNERRE Laurent | Mairie Lorient | Adjoint Maire | Laurent.Tonnerre@ville-lorient.fr | <input checked="" type="checkbox"/> |
| DAVICHA Frank | Lorient Agglomération | Technicien CEP | Frank.Davicha@agglomeration-lorient.fr | <input checked="" type="checkbox"/> |
| Guillaume Vincent | NordWind Gas Energy | Chargé de développement | vincent.guillaume@nordwind.com | <input checked="" type="checkbox"/> |
| PHILIPPE Stéphane | .. | Directeur Exploitation | stephane.philippe@prom-sta-wind.com | <input checked="" type="checkbox"/> |
| MALOT Isabelle | Lorient Agglomération | Mission plan climat | isabelle.malot@agglomeration-lorient.fr | <input checked="" type="checkbox"/> |
| AUDFRAY Luc | PAPE | - | luc.audfray@orange.fr | <input checked="" type="checkbox"/> |
| LE MAGUER Charlotte | Lorient Agglomération | Chargée études et travaux | charlotte.lemaguer@agglomeration-lorient.fr | <input checked="" type="checkbox"/> |
| '-REBEAUX Franck | Ville de Lorient | responsable forêt communale | franck.rebeaux@ville-lorient.fr | <input checked="" type="checkbox"/> |
| Dominique RENOUF | Mairie Guiber | Elue M. | dominique.renouf@mairie-guiber.fr | <input checked="" type="checkbox"/> |
| BERNARD Jacques | AILE | chargé études | jacques.bernard@aile.asso.fr | <input checked="" type="checkbox"/> |
| Collec Françoise | Ville de Lorient | technicien environnement | francoise.collec@ville-lorient.fr | <input checked="" type="checkbox"/> |
| | | | | |
| | | | | |
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4.3 Photos



Jacques Bernard presenting the SRC+ project

4.4 Questionnaire