FOREST4EU

ITHub 5 – Agroforestry Systems

FOREST4EU partner: CNPF

OG: BUCHDENS

OG's country: France

Type of Innovation: Organisational

Local densified log industry

Introduction

Currently, hedgerows are used in two local sectors: wood energy (wood chips used for heating) and biomass (mulch). However, a significant proportion of this material is not compatible with the production of quality fuel.

The Cooperative for the Use of Agricultural Equipment (CUMA) of western Normandia runs the local agricultural hedgerow valuation. In the Manche department, the project is being organised with the Ecovaloris CUMA (wood chipping), locals CUMA (storage platforms) and the Haiecobois association (commercialisation of chipped wood in local boiler rooms, colleges and local authorities).

Methodology and results

The project has both a technical component and a territorial development component involving local stakeholders. The basis shared by all the stakeholders in the project is based on a common vision of commitment to local development of natural resources, with a focus on the environment, social issues and business creation. The aim of this operational group is to set up a local densified wood supply chain (shredded wood and co-products of shredded wood screening) by making use of the hedgerow wood produced by farmers as part of a circular economy approach. The type of investment studied will be accessible to small production workshops and will be based on an agricultural and cooperative-type organisation. This sector would be complementary to wood chips and would strengthen the economic viability of the local wood energy sector by increasing opportunities. The end users are private individuals with a log-burning stove.

The volumes of wood have been identified and are easy to mobilise, given the lack of outlets for hedgerow wood.

Several non-agricultural supply sources are also being studied. These are difficult to identify but represent an economically interesting source for the project. They are mainly occasional resources that require large storage capacities. The source linked to private individuals has not yet been explored beyond occasional contacts.

A test was carried out in 2019, validating the technical feasibility of the project using agricultural raw materials. The briquetting was carried out with the company Agriopal.

It was found that there were no problems in applying the product and that the hydraulic press system met the requirements. Samples were also sent for analysis to check the quality of the product (physico-chemical measurements of the product and its thermal performance). The production site will have to be close to a dryer ("flat drying" type associated with a methaniser). The project is also based on complementary work with wood screening on Haiecobois' wood chip storage platforms in order to exploit the "fines" produced by screening.

Lessons learned

It has been possible to confirm the feasibility of a local industry producing densified logs from local resources. One of the difficulties lies in mobilising the players and being able to free up time for project engineering and structuring the activity.

The Cooperative for the Use of Agricultural Equipment of western Normandia supports local structures in their territorial projects and the work initiated with the BUCHDENS programme has been extended beyond densified logs. In fact, as part of the project to develop hedgerows, farmers have joined forces within the SECCOPA project to produce pellets from hedgerows as a complement to their project concerning the promotion of alfalfa.

The information presented in this factsheet was developed by the FOREST4EU partner, drawing on the innovations and knowledge generated by the indicated operational group with their explicit authorization.

Further information

https://www.xn--reseau-national-agricultures-ruralits-bkd.fr/centre-de-ressources/projets/buchdens-nouvelle-filiere-locale-de-valorisation-des-haies-buches

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