

CASE STUDIES OF SELECTED GOOD PRACTICES

1. GENERAL INFORMATION

- a. Case Study Title: Forests of Vallès Fire prevention based on the dynamization of the forest biomass market
- b. Location: Vallès Occidental, Barcelona



Priority theme: Fire prevention based on the dynamisation of the forest biomass market

CONTACT INFORMATION

- a. Name: Olga González i Relats
- b. Position: Head of Area of Local Cooperation and Territory and Project director
- c. Mail: gonzalezro@ccvoc.cat

3. CONTENT: Collection and analysis of information

In the first phase, the available information from the selected good practices is analysed. This will include:

- a. Type of practice:
 - Extraction
 - **X** Transformation
 - Demand
- b. Positioning in the value chain: Regional Forest Biomass Service that promotes the installation of biomass boilers to encourage the mobilization of wood in the region and help prevent the risk of fire
- c. Structure:
 - o Size of the company: local supramunicipal public administration
 - Existence of other business lines

















www.promobiomasse.eu

- Required investments: The project costed around 1,780 K€ in investments for the construction of a logistic centre of forest biomass (with capacity to store up to 4,000 tons of wood and produce up to 6,600 tons of biomass -forest chips- per year) and for the installation of two biomass boilers of great thermal consumption in the Terrassa Sanitary Consortium for the building of the Terrassa Hospital and in the Autonomous University of Barcelona for the service of physical activities.
- o Sources of financing: It was financed mainly by the Government of Catalonia (investment in equipment and supplies, logistics centre and two boilers) and cofinanced by the Barcelona Provincial Council and Vallés Occidental County Council, also with the cost of its human resources assigned to the project (multidisciplinary technical team).
- o Work team: own multidisciplinary technical team (general administration, industrial engineering, forestry and architecture).
- o Agents involved: during the development of the project, work has been carried out with stakeholders (forest owners, wood suppliers, forest work companies, chip manufacturers, biomass boiler installers, energy service companies), as well as the Government of Catalonia, Barcelona Provincial Council, CREAF (research centre) and the municipalities of the region.

d. Scope of:

\boxtimes	Insertion of disadvantaged groups
×	Entrepreneurship and business creation
\boxtimes	Corporate social responsibility
	R+D+i Research
	Equal opportunities for women and men
	Other:

Business model implemented:

- o Idea / business opportunity: Creation of a Regional Forest Biomass Service, a legal system that allows to apply public resources, both in investments and in human resources, to promote the valorization of the biomass of the forests of the region. It is considered the promotion of energy from biomass km.0 as an action of public interest.
- Marketing model: the facilities created within the framework of this public service are managed through administrative concessions to companies in the sector and in this way the administration is allowed to control the product parameters of proximity, wood traceability and quality of the biomass produced. A public price has been established with different tariffs: kWh for the supply of energy from biomass















www.promobiomasse.eu

to the boilers owned by the Regional Council installed to third parties, and ton of chips of two different qualities (P45S and P31S) that are produced in the logistics centre.

- o Customer profile: The main interest groups and beneficiaries are: forest owners, wood dealers, forest service companies, wood chip manufacturers, equipment installers and energy suppliers, local municipalities...
- f. Economic impact: in one year of operation of the regional public service for forest biomass (not yet evaluated) an estimated income of up to 65,000 € approx. for forest work companies and owners (assuming a purchase price of wood at 15 €/t). In addition, 2 direct jobs have been created own administrative concession contract and it is estimated that at full performance the concession can generate 11 direct jobs in the mobilization of wood and 12 indirect jobs induced.

g. Degree of innovation:

- o In products or services: Novel products or services (do not exist previously): creation of a public forest biomass service, managed through an administrative concession contract, whose business model conditions, as key elements, the (inverse) canon to be paid to the administration by the concessionaire company (the lesser the more wood it mobilizes and its origin is from the region's forests); control of the traceability of the wood mobilized; the limitation of CO2 emissions in the transport of the chip, bonuses if it is justified that in the work of extraction of the mobilized wood special work centers participate; the penalties if the parameters of traceability of the wood, quality of the biomass and limits of emissions are not fulfilled; as well as improvements of the contract for the diffusion and transfer of knowledge.
- o In products or services: Improved products or services.
- o In organizational methods: The logistics center is managed as an administrative concession through the Public Forest Biomass Service.
- o In marketing and commercialization: the biomass logistics centre has been conceived as a pedagogical tool and, through the administrative concession contract, has been equipped with laboratory and educational equipment to facilitate the development of knowledge transfer and education activities.

4. RESULTS

- a. Effectiveness or degree of compliance with objectives: 90% of the wood mobilized in the logistics center comes from forests in the region.
- b. Effectiveness or achievement of results in relation to resources used:
- c. Scope or extent of the influence of the practice. Practice has influenced:
- d. Degree of effectiveness















www.promobiomasse.eu

- e. Degree of sustainability: The project includes criteria for traceability and quality control of the chip. It also anticipates the application of European regulations on the reduction of boiler emissions, so that their installation is compatible with areas close to periurban forests with a greater risk of air pollution.
- f. Transferability: Templates of administrative specifications have been drawn up for the implementation of the service in other regions of other municipalities.
- g. Products: Availability of 3 new facilities: a logistics centre (with the capacity to handle 6,600 t of wood chips per year) and the installation of two large boilers (1,850 kW in the Terrassa Health Consortium and 500 kW in the Sports Activity Service of the Autonomous University of Barcelona)

CONCLUSIONS

- a. Impact and usefulness of good practice: Increased association of private owners, and increased interest in producing high-quality wood chips and reducing the impact of their combustion on air pollution.
- b. Main lessons learned













