

Interreg Sudoe



PROMOBIOMASSE

European Regional Development Fund

*Integrated
Model for the
Sustainable
Management
of the **Forest
Biomass
Market in
Short Loop
in the SUDOE
area***



PARTNERS



Index

1. Introduction	3
2. The Promobiomasse project. Interreg Sudoe	4
3. Biomass concept applicable to the project	5
4. Short Loop Market Concept applicable to the project	5
5. Working Methodology of the Transnational Technical Committee	6
5.1. Starting point	6
5.2. Workshops of the Technical Committee	9
6. Main Lines of Action and Measures Proposed by the Transnational Technical Committee	10
Axis 1: Knowledge and Cataloguing of the Forest Resource in each region.....	10
Axis 2: Sustainable Management of the Regional Forest Resource.....	11
Axis 3: Facilitating Access to and Mobilising the Regional Forest Resource	12
Axis 4: Cooperation between public and private forest ownership. Promoting Forest Governance and Partnership	14
Axis 5: Promoting and supporting the Forest Business Sector	14
Axis 6: Creation of a Biomass Operators Network at regional/Sudoe level	16
Axis 7: Promoting the Quality Certification of Woodchips	17
Axis 8: Promoting Model Installations from the Public and Private Sector	18
Axis 9: Generating a short-loop model at regional level	19
Axis 10: Strengthening the social acceptance of forest management in general and of locally sourced energy biomass in particular	20
7. Bibliography & references	22



1. Introduction

This document is the result of the work carried out by the technical team of partners and associates of the Promobiomasse project (SOE2/P5/E0755) and represents the realization of the workshops and other tasks included in the WG2 of the project "Design and Capitalisation of the Integrated Model of Local Management of the Forest Biomass Market in Short Circuit in the SUDOE Territory".

The document, therefore, although it proposes a series of **Axes and Measures** for the development of this **Comprehensive Model** at the level of the regions participating in the project, does not represent nor does it pretend to be a Strategic Plan or Strategy for the mobilisation of biomass for the entire Sudoe territory. In order to complete such work it will be necessary to adapt the Model to the different realities (forest ownership, forest species, regulations...) of the regions that make up the project or of other regions that are part of the Sudoe territory.

The aim of the Integrated Model is to reflect on how to encourage and coordinate the different **links and agents in the value chain** of the forestry sector in general, and biomass in particular, in order to obtain maximum use of the existing forest biomass in each territory and to obtain and use it as a resource in renewable energy projects at a local level.

The **Model** has been designed based on the **challenges** identified by the partners and through a participatory method based on workshops with experts from the regions participating in Promobiomasse. It integrates actions ranging from the sustainable management of forests in the Sudoe area, the management and marketing of biomass and the promotion of measures to stimulate demand at the local level.

The work developed in the workshops has been complemented by existing local and regional strategic documents provided by the partners.

The practical experiences of partial implementation of the model through pilot projects in the participating territories (Navarre, Extremadura, Catalonia, Central Portugal, Pyrénées-Atlantiques and Sud Occitanie) have made it possible to adjust and contribute practical and demonstrative experiences to each of the axes proposed in this Model.



2. The Promobiomasse project: Interreg Sudoe

The **Interreg Sudoe Programme** is part of the European territorial cooperation objective known as "Interreg", financed through one of the European regional policy funds: the European Regional Development Fund (ERDF). The current programming period runs from **2014 to 2020**, and is the successor of two previous generations: **Sudoe 2000-2006** and **Sudoe 2007-2013**.

This Programme supports regional development in South-West Europe by financing **transnational projects** through the **ERDF Fund**. It promotes **transnational cooperation** to address issues shared by the regions of this territory, such as low investment in research and development, low competitiveness of small and medium-sized enterprises and exposure to climate change and environmental risks.

The **Promobiomasse** project is part of priority axis 5, 'Environment and resource efficiency', one of the five priority axes of the Interreg Sudoe Programme whose objectives are:

1. Improving management methods of common natural and cultural heritage through networks and joint experimentation.
2. Reinforcing the cooperation of stakeholders of natural sites in the Sudoe region through joint methods.

Promobiomasse is a transnational cooperation project that aims to promote the forest biomass energy market in the SUDOE territory (South-West Europe), developing a supply and demand management model that applies the concept of "short circuit" or "short loop" and solves current issues: lack of supply structure, small forest ownership, inefficient methods of obtaining resources, lack of knowledge and insufficient demand.

The **Promobiomasse** project has involved different actors in the short-circuit biomass market value chain in the territories as well as experts in the three areas of work: management, marketing and promotion of demand.



3. Biomass concept applicable to the project

The PROMOBIOMASSE project focuses on plant biomass from forestry and proposes networking for the development of an integrated model for the sustainable management of forest biomass in short circuit applicable to the mountain areas of the SUDOE area.

4. 'Short-circuit market' concept applicable to the project

When we speak of Short Marketing Circuits in the food sector, we are referring to those forms of marketing agri-food products in which there is just one or no intermediary at all between production and consumption.

However, in addition to this condition, there are other basic principles that are crucial in the design of these forms of marketing.

On the one hand, the establishment of relationships based on knowledge and trust between both parties – producer and consumer; on the other hand, the commitment to the economic sustainability of farms based on a fairer distribution of the added value of the products.



5. Working Methodology of the Technical Committee

5.1 Starting point

The territories participating in the **Promobiomasse** project face a common challenge: how to develop an environmentally and economically sustainable forest management enabling to maintain and improve forest heritage whilst generating income for the local population.

The project faces this challenge through networking, so as to develop a forest biomass management model that integrates the whole value chain, supply and demand, from a short-circuit approach, similar to that applied to local agri-food products as described in the previous point.

The starting point is a SWOT analysis carried out by all the partners. The initial conclusions were the following:

Weaknesses

- A significant part of the forests in the SUDOE lack timber value and their management and maintenance are currently burdensome for both public and private forest owners, resulting in a lack of clearing and thinning and considerably increasing the risk of fires in some areas.
- The traditional auction systems used by public forest owners are not suited to the characteristics of forest management for biomass.
- Forest owners often lack the technical and administrative resources for proper forest management.
- In many forest areas of SUDOE, accessibility is very dubious or insufficient for carrying out forestry work, thus limiting the potentially interesting areas for obtaining resources.
- There is currently a low level of mechanisation in the extraction of forest resources.
- The Forest Biomass market is insufficiently developed from the point of view of demand, in many cases due to lack of information and knowledge of potential public and private users.
- The Forest Biomass market is also insufficiently developed from the supply point of view, due to the fact that it is very fragmented and not sufficiently organised, which does not guarantee buyers a continuous supply over time and with quality standards.

Threats

- The effects of climate change may increase the risk of forest fires if forests are not properly managed and maintained.
- Depopulation of rural and mountain areas is a critical situation in many SUDOE regions.
- Changes and oscillations in support policies for renewable energies in certain southern European countries have hindered the development of the biomass market.

Strengths

- Practically all the regions of the SUDOE have an important extension of forests with forest harvesting potential for developing energy from biomass.
- There are successful experiences of generating local forest biomass markets by integrating supply and demand, which have demonstrated their viability.
- Forestry is a traditional activity in many territories of the SUDOE, so there is an important base of small companies engaged in this activity spread across the territory.
- Forest biomass is a sustainable resource. Applying sustainable forest management guarantees a resource that can be used over time and is capable of covering an important part of the heating energy needs of a large part of the SUDOE territory.

Opportunities

- The Commission Communication on "EU Strategy for heating and cooling" - COM (2016) 51 final, sets efficient and sustainable air conditioning as a clear priority for the EU and proposes the development of renewable energy sources in district heating and the support to local authorities in the elaboration of strategies for the promotion of renewable energy sources in heating and cooling.
- Forestry activities are one of the potential "sources of employment" that can be developed in many rural and mountain areas of the SUDOE, which are facing gradual depopulation processes and can be key to maintaining the local economy and population.
- There are forestry techniques and machines that optimise forestry work and the obtaining of forest resources, thus dignifying work in the forest and improve profitability.
- Transnational networking (Spain-France-Portugal) will make it possible to identify best practices, both in the development of supply and demand for biomass, and will facilitate the development of management models that can be transferred to the vast majority of SUDOE territories.
- Many of the SUDOE regions already have Biomass Promotion Strategies (e.g. Catalonia, Navarre, Extremadura, Aquitaine...), as a source of renewable energy and regional economic development.
- Sustainable Development Goal 7 of the United Nations 2030 Agenda is to ensure access to affordable, secure, sustainable and modern energy for all.

5.2. Workshops

The **Transnational Technical Committee** of the **Promobiomasse** project has been the consultative body for the design and sharing, among the different regions participating in the project, of the measures and actions that, in the opinion of these experts, should be taken into account for the implementation of a local biomass short-circuit market.

The importance of the Transitional Technical Committees lies in approaching the Sudoe Model jointly, overcoming the differences between the different regions and contributing diverse solutions that may have already been tested and developed, with good results, by the experts of some other regions.

In this sense, the **Model** includes the problems of all the regions, so that the proposed solutions can be adapted to each regional reality.

With the results of the work and the proposals resulting from the two workshops of the Transnational Technical Committee and the analysis of the existing strategies, plans and aids in the participating regions, an **Integrated Model for the Sustainable Management of the Short Circuit Forest Biomass Market in the SUDOE area** was elaborated.

The following section contains the Axes and Measures proposed by the Transnational Technical Committee.



6. Main Lines of Action and Measures proposed by the Transnational Technical Committee

NASUVINSA: www.youtube.com/watch?v=wweX_65mPFQ

CCPL: www.youtube.com/watch?v=hfOd_tAGc6s

CTFC: www.youtube.com/watch?v=NDJIsipG5oA

AGENEX: www.youtube.com/watch?v=haK_aF7Eu1E

ENERAREA: www.youtube.com/watch?v=CoqxhRzGeuc

COFOR64: www.youtube.com/watch?v=97VTd9jWBS

AXIS 1. Knowledge and Cataloguing of the Forest Resource in each region

Description

Generating updated information and making it available to the entire sector through geographic information systems and the application of new technologies and other existing information systems in the different countries and regions.

The contents of these applications should provide updated and transparent information on the following aspects: stock, availability of timber by quality and by product; planted area; species and growth; forest management plans; access and stocking infrastructures; production capacity; felling forecasts; market flows; price evolution.

Proposed Measures

Measure 1.1: Exchanging information on existing applications.

Measure 1.2: Developing geo-referenced IT systems for the identification and monitoring of forests stands and access infrastructures.

Measure 1.3: Developing agile and reliable systems for measuring forest harvesting.

Measure 1.4: Developing computer applications and websites for public consultation with useful information for the planning, management and marketing of forest harvesting.

AXIS 2. Sustainable Management of the Regional Forest Resource

Description

It is necessary to improve society's perception of Sustainable Forest Management and, in particular, of forest harvesting, and to disseminate the values of this management, as well as of the resulting products due to their natural, sustainable, renewable and recyclable nature, which are key to the transition towards a bioeconomy – including sustainable harvesting.

The use of forest resources is perfectly compatible with their conservation. Environmental sustainability must also be economic and social. Environmental, ensuring proper conservation of biological diversity; economic, ensuring income for forest owners and industry; and social, generating jobs and maintaining the rural population.

Forest management involves a range of different activities: silviculture, assessment and conservation of forest resources and biodiversity, species growth monitoring, forest planning and management, soil and water preparation and management, clearing, planting and regeneration of species, timber harvesting, production and sustainable yield controls, fire prevention, pests and diseases, etc.

Proposed Measures

Measure 2.1: Promoting, by the Public Authorities of each region, sustainable forest management, job creation and territorial rebalancing, under sustainability criteria in cooperation with public and private forest owners.

Measure 2.2: Encouraging the Development of Forest Management and Sustainable Management Plans for public and private forests throughout the Sudoe territory. The promoter of such sustainable management plans should be the landowner.

Measure 2.3: Establishing a promotion plan for certified forest certification (PEFC, FSC or similar). Establishing homogeneous certifications at Sudoe level. Supporting the concept of forest certification, including it in all procurement documents.

Measure 2.4: Improving silvicultural models for the different types of stands and species in the different regions. Taking into account their adaptation to the consequences of climate change, market demands, etc.

Measure 2.5: Studying the general possibility of Forest Energy Crops in environments where this is possible.

Measure 2.6: Establishing pest and disease control and prevention measures at regional level.

Medida 2.7: Carrying out an Assessment of Sustainable Forest Management through Certification and Control bodies. Regional or National (this differs in different countries).

Measure 2.8: On the basis of the above, making the rules for obtaining resources more flexible for owners. Simplifying and modernising auctions. Modifying forestry legislation and regulations to encourage the development of new forms of timber sales.

AXIS 3. Facilitating access to and mobilising the regional forest resource

Description

To ensure optimum management and harvesting of forestry resources in the Sudoe regions, the administration must collaborate with forest owners to guarantee the existence of a network of forestry infrastructures facilitating the mobilisation of resources in an economically viable manner and establish the means for the regular updating of information on existing forestry infrastructures and their state of conservation and use.

This axis also includes aid for the mechanisation and technification of management.



Proposed Measures

Measure 3.1: Creating a Regional Forestry Fund to encourage and invest in access infrastructures in the forest environment, both in the construction of new roads and in the improvement of existing ones. The objective will always be to improve conditions with a view to management and to adapt to new ways of working.

Measure 3.2: Equipping and reviewing public aid lines to forest owners for the development and maintenance of access and stocking/logging infrastructures.

Measure 3.3: Adapting existing investments for the creation of forest biomass collection infrastructures. In mountain settings where it is not possible to place a lorry for biomass collection, creating access for chipping machinery to facilitate the logistics of biomass collection.

Measure 3.4: Promoting the existence of loading bays in the forest to facilitate stacking areas and subsequent loading onto lorries and even "in situ" chipping, with the aim of improving working conditions.

Measure 3.5: Encouraging the incorporation of innovations for forestry management and related work in mountain areas with the aim of reducing environmental impact and improving worker protection, such as portable cable technology or the use of airships or special machinery for mountain areas, by means of information, training and aid.

Measure 3.6: Speeding up and facilitating inter-administrative coordination for the authorisation, construction and improvement of forestry infrastructures.

Measure 3.7: Advancing and supporting the necessary legislative changes for the transport of round wood by road. Increasing the permitted tonnage for road transport of forestry timber and coordinate compatibility between the different regions of Sudoe. Considering the transport of timber as special, allowing to increase the load and the length of the vehicle (as it reduces costs and gas emissions) in order to improve competitiveness.

AXIS 4. Cooperation between public and private forest owners. Encouraging forest clusters and associations

Description

One of the weaknesses observed in forest ownership in the Sudoe area is the fragmentation of forest ownership, which in some cases does not allow for the correct management of forests in terms of environmental and economic sustainability. This axis includes measures proposed by forest owners to address and overcome the weaknesses caused by this fragmentation.

Proposed Measures

Measure 4.1: Creating forums for public and private forestry agents to meet and participate.

Measure 4.2: Promoting forest clusters to address the problem of ownership fragmentation, in order to improve procurement and joint management.

Measure 4.3: Encouraging associations in the sector to join forces with a common objective. Facilitating the operation of these associations with public incentives.

Measure 4.4: Establishing methodologies for the valuation of forest property in order to favour the grouping of forests and agreements between owners.

Measure 4.5: Promoting inter-administrative coordination and re-evaluating the balance of public aid between agriculture and forestry. Incorporating the figure of a qualified technical person for joint planning and project management.

Measure 4.6: Studying the possibility of promoting subsidies in the Sudoe regions for integrated forest management involving all the improvement actions for the prevention of fires, the fight against desertification and climate change.

AXIS 5. Promoting and supporting the Forest-based Business Sector

Description

The timber industry, a strategic sector at European level, due to its role in rural development, the circular economy and the fight against climate change, is currently facing challenges of growth, modernisation and adaptation to new market requirements, which are essential to ensure the competitiveness of companies and their future survival.

The small size of timber and primary processing companies makes the support of the administration and collaboration between companies essential to face these new challenges and overcome the deficits derived from the excessive fragmentation of the sector.

The companies participating in the working groups of the Transnational Technical Committee of the Promobiomasse project are committed to promoting the following measures for the growth and strengthening of the sector at the level of each Sudoe region.

Proposed Measures

Measure 5.1: Maintaining and improving direct aid for the forestry sector and the first-processing industry. Providing a budget to aid schemes for forestry work in relation to demand. Annual budget review. Integrate different calls for proposals. Streamline aid campaigns.

Measure 5.2: Studying the inclusion of RDP aid (Mountain Aid) for forestry service companies and job creation, and transferring agricultural measures to forestry.

Measure 5.3: Drawing up a Forestry Training Plan that involves and coordinates all actors in the sector and developing a plan for employment and new business opportunities in the Sudoe area.

Measure 5.4: Promoting R&D&I in integrated forest management (mechanisation of forestry work). Encouraging a network of actors divided by theme, interested in collaborating in R&D&I across the Sudoe area.

Measure 5.5: Developing a plan to improve the competitiveness of companies in the timber sector, incorporating incentives for investment, diversification and job creation.

Measure 5.6: Creating specific regional financing lines so that biomass companies can undertake Energy Services projects, with specific lines to finance investments or working capital.

Measure 5.7: Facilitating aid and advice lines for the incorporation of equipment and technology to guarantee the production of quality biomass fuel.

- Granulometry: crushing, shredding, screening and dedusting material.
- Moisture: Moisture measurement materials.
- Weights...
- Sorting of wood products: Separators for suction of ferrous and non-ferrous metals.

Measure 5.8: Creating specific subsidy lines for investments by biomass companies, such as screening machines, pneumatic lorries and other specific machinery.

AXIS 6. Creation of a Biomass Operators Network at regional/Sudoe level

Description

Not all forestry or timber companies are involved in the biomass sub-sector. This sub-sector also requires specialisation, both in the product(s) offered by companies and in customer service. If you want to operate as an energy supply or energy services company based on biomass, you have to be prepared to respond to the demands of the market.

The Biomass Cluster of Catalonia, which formally came into being at the end of 2015 within the framework of the Biomass Strategy of the Catalan Government, has consolidated itself as a reference group for the biomass sector in the region. It is currently made up of around forty companies that represent 70% of the biomass sector in Catalonia.

Building on this good practice, the Transnational Technical Committee proposes to operate in the same way in the regions that make up the Promobiomasse project.

Proposed Measures

Measure 6.1: Creating a specialised biomass web portal to bring supply and demand closer together at regional level. A web space of reference in the biomass sector that includes all the updated information on the sector:

- Current news and publications.
- Information on companies (directories).
- Market information (installations, prices, statistics).
- Subsidies and tenders (specifications).
- Legislation and regulations...

Measure 6.2: Creating a Sector Observatory at regional/Sudoe level. Directory of companies and inclusion of socio-economic and environmental indicators of forestry activity (employment, forestry accounting, reduction of emissions...).

Measure 6.3: Advancing in the creation of a specialised cluster or regional association of companies specialised in biomass that can cover the entire value chain and even tackle joint projects.

Measure 6.4: Promoting a regional network of stocking-logistics hubs operating as mobilisers of the regional and local biomass, where different companies may share resources. Regional reference logistic hubs where wood is taken, classified and distributed. These logistic hubs should be established near the customer.

Measure 6.5: Promoting joint ventures between biomass installers and operators to bid jointly for energy supply (with forest biomass) plus maintenance of the installations.

Measure 6.6: Promoting chain of custody certification of companies to obtain final products with type-approval certificates.

Measure 6.7: Studying, promoting and encouraging forms of cooperation between biomass companies that can cover the entire value chain from the wood in the forest to the boiler, with a quality product and with a guarantee of origin from sustainable forest management.

AXIS 7. Promoting the Quality Certification of Woodchips

Description

Working on the traceability, standardisation, normalisation and certification of the woodchip produced and marketed in each region and for the whole of the Sudoe territory, with the aim of providing security for installers and consumers, thereby favouring market security and transparency, which will favour the growth of demand and fair competition between producers.

The aim of the work of this axis is to convert the woodchips supplied in each region or area into certified biofuel and to facilitate the certification of producers.

Proposed Measures

Measure 7.1: Promoting existing certification systems in each country and at European level among producer and consumer companies.

Measure 7.2: Promoting certified zero-kilometre wood: This certification must be considered in three aspects if sustainability and circularity are to be guaranteed.

- Wood chips come from certified forests under sustainable management (PEFC, FSC or similar), or with Management Plans.
- The distance between the point of extraction and the point of consumption is also considered because of its impact on the "Carbon Footprint".
- The quality of the woodchip is certified and/or characterised if it is to be perceived as a guaranteed fuel.

Measure 7.3: Promoting certification in the chain of custody.

Measure 7.4: Informing consumers and purchasers about the conditions they must demand from biomass suppliers to avoid inefficiencies, problems with boilers or non-compliance with the emissions required in certain environments.



AXIS 8. Promoting model facilities from the public and private sector

Description

In the process of developing biomass as an alternative energy source, it is necessary to move towards a real promotion of existing installations from the public sector as a transferable example. A positive practice is, once boilers have been commissioned in public buildings, to carry out pilot actions to demonstrate the existing knowledge, an assessment of their operation and performance and their continuous improvement through continuous demonstration and evaluation processes.

Complementarily, the administration should encourage changes in energy supplies at the level of private, residential and/or industrial facilities.

Proposed Measures

Measure 8.1: Legislative action at European, regional and national level for the promotion of biomass installations.

Measure 8.2: Creating an advisory group for the start-up and monitoring of new installations, with experts in the different links of the chain to provide interested parties with all the information and experience necessary for the successful completion of all new proposals.

Measure 8.3: Creating lines of public aid for the replacement of fossil fuels with biomass or for the promotion of new installations based on biofuels, providing maximum incentives for local biomass. Analysing the direct and indirect impact of public aid for installations.

Action 8.4: Developing other regional measures and incentives for the use of biomass (tax deductions...).

Measure 8.5: Designing an internal training plan for the people in charge of the administration and local authorities to help them in the transition process.

Measure 8.6: Developing pilot actions in public buildings of different categories (health, administration, housing, industry, etc.) by the Public Administration to assess the results and collect good practices for their dissemination.

Measure 8.7: Designing regional promotion and information campaigns on existing installations for local agents and installers.

Measure 8.8: Working on the promotion of the use of biomass in various actions: construction regulations, tender specifications, specific aid, legislative amendments, etc.

AXIS 9. Generating a regional short-circuit model

Description

It is necessary to work on the generation of a "short circuit" model for biomass, as an example of the use of existing local resources, in order to change the energy model towards a responsible and shared management that is analysed all the areas involved in it.

Proposed Measures

Action 9.1: Analysing the starting situation in each region and designing a "road-map" with input from all stakeholders to optimise regional biomass-based resources.

Action 9.2: Developing a specific action plan in each region with concrete and representative measures.

Action 9.3: Linking projects for boiler replacement and installation models with local management of biomass in the environment.

Action 9.4: Removing regulatory barriers and developing instruments for the supply of biomass between neighbouring local authorities.

Action 9.5: Getting regional authorities to facilitate the use of forest biomass on equal terms with other renewable energy sources in accordance with the provisions of Directive 2010/31/EU (Article 2-section 6, Energy from renewable sources).

Measure 9.6: Promoting a local industry for the development of projects related to biomass, its maintenance and management, close to the end consumer and with all the guarantees.

Measure 9.7: Offering specific training to installation and maintenance personnel.

AXIS 10. Strengthening social acceptance of forestry management and locally sourced biomass energy

Description

An educational campaign is required to reinforce the current social acceptance of forest management and the opportunity that arises to make local biomass available for energy purposes.

It is necessary to work with all sectors (from the Administration itself to society in general) and in all areas to reinforce and value the positive impacts that forest management can have on the availability of resources, their sustainability, the generation of wealth and the creation of stable employment in the local environment.

Proposed Measures:

Measure 10.1: Creating or appointing a body at regional level to bring together all action to promote forest management and all its uses, including biomass.

Measure 10.2: Explaining the role of the forest as a whole: carbon sink, reservoir of biodiversity, generator of timber resources, etc.

Measure 10.3: Creating a guide to sustainable forest management to explain how resources are obtained and explain their environmental and social benefits. Informing the population about the functions of forest stakeholders in the territory: rangers, engineers, shepherds, hunters, loggers, and in general all the actors involved in forestry management.

Measure 10.4: Evaluating the results and impact of the regional action plans (measure 9.2) including impact assessment studies of forestry investments and support, direct returns and employment created. Creating pedagogical documents on financial flows between biomass and fossil fuels. Generating simple reports to be communicated to administrations and target audiences.

Measure 10.5: Monitoring socio-economic and environmental indicators of forestry activity (forestry accounting, employment, industrial destination of forestry production, profile of forest owners...).

Measure 10.6: Getting the administration to promote wood as a recyclable, biodegradable and renewable material, being more efficient, sustainable and less polluting than other products widely used in our society, so its use should be increased.

Measure 10.7: Education: Collaborating in and designing cross-cutting actions with the Education departments to promote the value of the forestry sector and the importance of caring for and maintaining forests, as well as the benefits of the management and use of their resources.

Measure 10.8: Creating institutional campaigns and generating stable activities over time (fairs, exhibitions, company directories...) with information for the different levels of the sector and society, stressing the change of energy model, the sustainability of forest biomass for energy purposes, and the positive impacts of correct forest management.



7. Bibliography & references

1. Energy Balance of Navarre, 2006-2017
www.navarra.es/home_es/Temas/Empleo+y+Economia/Energia/l-balances-energeticosnavarra.htm
2. Forestry Agenda of Navarre
<https://gobiernoabierto.navarra.es/es/participacion/procesos/agenda-forestal-navarra>
3. Law on Transition Energy of Navarre
<https://gobiernoabierto.navarra.es/es/participacion/procesos/anteproyecto-ley-foral-cambio-climatico-transicion-modelo-energetico>
4. Biomass Strategy of Catalonia
http://icaen.gencat.cat/ca/plans_programes/estrategia_biomassa/
5. Energy and Climate Change Plan of Catalonia 2012-2020
http://icaen.gencat.cat/ca/plans_programes/pecac/
6. Operational Programme on Investment in Growth and Development in Catalonia, ERDF 2014-2020
http://fons europeus.gencat.cat/web/.content/80_fons_europeus/arxius/2014_2020/PO_FEDER_CATALUNA1420_nov18.pdf
7. Biomass Certificate
<http://biomassud.eu/es/>
8. PEFC Certificate
www.pefc.es/pefc.html
9. FSC Certificate
www.fsc.org/

10. Navarra Certificate

www.navarra.es/home_es/Temas/Medio+Ambiente/Montes/Certificacion+forestal.htm

11. Forestry Plan of Extremadura

http://extremambiente.juntaex.es/index.php?option=com_content&id=3609&Itemid=307

12. Climate Change Strategy of Extremadura 2013-2020

www.observatorioclimatico.es/files/Estrategia%20de%20Cambio%20Climatico%20de%20Extremadura%202013-2020%20-%20definitivo.pdf

13. Portugal: Regional Plans and Aids

- Decree-Law 64/2017 of 12 June 2017.
- Decision of the Extraordinary Council of Ministers of 21 October 2017.
- Decision of the Assembly of the Republic of Portugal no. 73/2018.
- Decision of the Council of Ministers no. 20/2013 of 10 April 2013.
- Decision of the Council of Ministers no. 163/2017 of 31 October 2017.
- Decision of the Council of Ministers no. 116/2018 of 6 September 2018.
- Solutions to Prioritized Challenges - Portugal.

14. National Strategy on the Mobilisation of Biomass – France

www.ecologique-solidaire.gouv.fr/sites/default/files/Strat%C3%A9gie%20Nationale%20de%20Mobilisation%20de%20la%20Biomasse.pdf

15. FAO's Political Directive "Fôret-Clima" (in French)

www.fao.org/forestry/17677-0487fe5e92920e358a0633ade128960db.pdf

← Index

← Previous page

Interreg Sudoe



European Regional Development Fund

www.promobiomasse.eu

www.interreg-sudoe.eu

PARTNERS



Projeto cofinanciado pelo Programa InterregSudoeatravés do Fundo Europeu de Desenvolvimento Regional (FEDER)
Projet cofinancé par le Fonds Européen de Développement Régional (FEDER) dans le cadre du programme Interreg Sudoe
Projecto cofinanciado por el Programa InterregSudoe a través del Fondo Europeo de Desarrollo Regional (FEDER)