

## SECTION 3

### CONCLUSIONS AND RECOMMENDATIONS

## A summary of the 11 good practices

This report presents 11 examples of **solutions implemented in the mountainous areas of Europe to more effectively utilise and exploit the wood in mountain forests**. They have been chosen by the steering committee of the project from proposals received by Euromontana in response to the call launched during the summer of 2011, and reflect the diversity of these proposals. The proposals essentially contained examples of the use of pine; hardwoods received little mention. The problems of climate change and the adaptation of forests, management of fire hazards, and the problem of disease were also not addressed in the proposals of good practice. However, all participants generally take the question of environmental protection into account. Finally, no proposal described practices implemented in Mediterranean forests. The cases come mainly from areas where the forest sector is very dynamic. They are intended to serve as an inspiration to other European countries and regions.

The 11 cases are as follows (see their locations on the map on the following page):

- Companies:

- Ticinoro, focusing on larch and chestnut products
- Gurndin, specialised in harvesting with cable yarding
- ARPANA Formacion Forestal, offering services of timber harvesting and specialised training in mountain forest exploitation
- Hallingdal Trepellets, recovering the heat from a nearby incinerator to produce wood pellets
- Material Banken, which specialises particularly in the use of heavy timber
- Achentel biomass farm, offering services of timber harvesting and specialized training

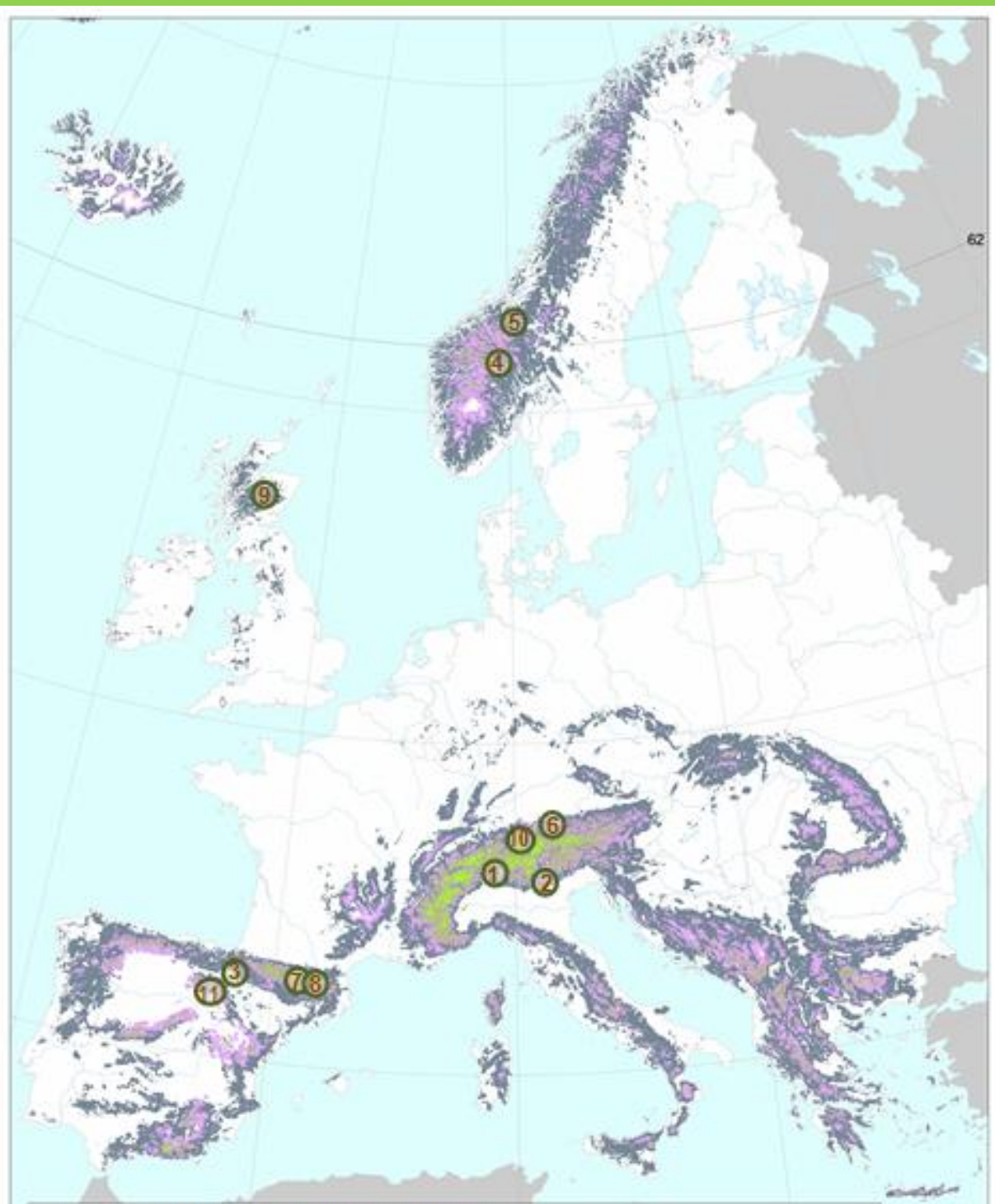
It should be noted that Hallingdal Trepellets and Material Banken were founded as public companies, and became private following participation from private stakeholders.

- Cooperation projects

- MOVAFOREST to improve private forest management
- UNCI'PLUS to exploit mountain pine species
- Cairngorms National Park and the Clim-ATIC project to develop a wood energy sector

- Method of industry organisation

- Organisation of the forest sector in the province of Vorarlberg
- Private brand Pino Soria Burgos to exploit the pine species



- Localisation of the examples of enterprises and initiatives
- 1/ TICINORO, Switzerland
  - 2/ GURNDIN, Italy
  - 3/ ARPANA *Formación Forestal*, Spain
  - 4/ Hellingdal, Trepellets, Norway
  - 5/ Material Backer, Norway
  - 6/ *Achteral biomass* farm, Germany
  - 7/ MOVAFOREST, France-Spain
  - 8/ UNCIPLUS, France-Spain
  - 9/ Cairngorms Park and *and* Clim-ATIC project, Scotland
  - 10/ Voralberg, Austria
  - 11/ Marque Pina Soria Burgos, Spain

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## Analysis of practices and recommendations

Although the practices presented are very diverse, certain common factors explain their success and the difficulties encountered.

### 1. PROJECTS INTEGRATED INTO TERRITORIAL DYNAMICS

#### Valuing the local context

Most of the projects form part of a local setting and use a local resource hitherto undervalued and for which market potential exists. Knowledge of the field and the players who can take part in the project are of great importance. It is because companies were already using wood pellets that the Achental biomass farm was able to develop its potential. In the case of the Clim-ATIC project, there was not a pre-existing demand for local biomass, so the project had to take this constraint into account by working on both supply and demand. It should be noted that the exploited markets are not necessarily local: quite the opposite as some companies lean towards exporting.


The presence of downstream companies or an existing market helps to foster the growth of upstream companies. Indeed, the demand for the raw material generated by the downstream company is a potential local market for upstream companies which are created, thus facilitating their development. The geographical proximity between upstream and downstream companies then decreases the need for transportation, which has a positive effect on the environment and on the competitiveness of companies since transport costs are reduced. The mobilisation of resources is itself facilitated thanks to the better knowledge of stakeholders and local policies and to well-identified regional spin-off effects.

Knowledge of the field is also a prerequisite to be able to take full advantage of the synergies between companies. The organisation of the company Hallingal Trepellets, which recovers heat from an incineration plant to produce wood pellets, is therefore a good example of industrial ecology developed through proper observation of the industrial area and possible energy flows between companies.

 Recommendation 1.1. The development of the forest sector must begin with the observation of the local context and the involvement of initiatives within this context.

#### Preparing upstream projects

The cases illustrate the importance of guidance in the field, upstream project preparation and planning (MOVAFOREST, UNCI'PLUS, the Soria Burgos pine mark, Clim-ATIC). These stages required a consultation time of at least 1.5/2 years.

 Recommendation 1.2. Support and guidance in activities throughout and at the start of the project are necessary to create a dynamic environment and, where applicable, to unite stakeholders around a common and shared approach.

## Establishing a multi-stakeholder governance within an integrated approach

The capacity for stakeholders, especially forest owners, to talk together and organise themselves is important in the implementation of their actions. The opportunity for owners to plan for wood marketing therefore has a strong impact in many cases. Finally, the owners are also involved financially, sometimes bringing a significant proportion of investment funding (funding forest roads in the Vorarlberg region).

Public sector involvement is very common. It may come in many ways, especially the form of direct or indirect financial support (direct funding, public bodies as project partners, loan guarantees). The different levels of the public sector are involved (State, regional authorities, etc.)

The practices presented show the usefulness of integrated projects, with no segmentation between upstream and downstream. The introduction of exchanges between all actors involved in the timber industry is a key factor for success. And discussions should take place not only between different levels within the sector, but also with the stakeholders of territorial development.

→ Recommendation 1.3. To promote integrated approaches, development tools such as massif plans must be involved. Similarly, national and regional parks may also have a role in strategic orientation. In general, a succession of discussions on the sector must be held.

→ Recommendation 1.4. The implementation of integrated approaches requires the creation (or maintenance) of tools, especially on a community level, and funding to promote governance and project integration.

## Developing complete industries for more added value for the region

As regards regional development, it is essential not just to stop at primary production, but to also aim for the development of complete industries, since the secondary processing companies create most of the added value. This is therefore the direction taken by the French mountains in their development plans for massif development<sup>1</sup>.

→ Recommendation 1.5. For mountain wood industries to experience a real boom, forest development strategies must not limit themselves to hotspots, but cover the whole sector.

## Political support for the duration

The need for political support with a long-term vision is repeated several times in the case studies. This is particularly important when developing a new industry, in which several types of stakeholders should be involved, but also to deal with the unexpected (such as the problem of the fires at Hallingdal Trepellets where the reconstruction of the company would not have been possible without the constant support of its mayors).

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<sup>1</sup> See section 1 part 2.5.


## 2. FINANCIAL SUPPORT FOR INDUSTRIES

### Public support from various sources

Most of the solutions presented have benefited from public financial support. The 11 practices have identified:

- Support from ERDF in the case of Interreg III A cooperation projects (MOVAFOREST, UNCI'PLUS) or III B (Clim-ATIC). This funding allows activities on a regional scale. The Interreg projects can also play a key role in spreading inspiring ideas for other territories, as was the case with Clim-ATIC.
- Support from EAFRD via rural development programmes to fund investment in equipment (Gurndin). These are timely, targeted subsidies.
- Support from communities or local authorities
  - o Regions/townships: ARPANA FF, Soria Burgos pine mark (operational funding), TICINORO
  - o Municipalities: Achental, Material Banken, Hallingdal Trepellets
  - o Regional parks: Cairngorms

Subsidies and equity participation from the public sector are very common and can take be important in financial terms, especially when creating the project or company (less frequently for operations). The different funds have a complementary role: production is supported by EAFRD, processing by FEDER. Although it was not cited in the 11 examples of the study, the ESF can also be used to finance the stakeholders, notably through the funding of training activities.

 Recommendation 2.1. The complementarity between the different funds (ERDF, EAFRD, ESF) means the support of a wide range of possible actions for the development of truly integrated projects. This is to be maintained and encouraged. The Common Strategic Framework and Partnership contracts must contribute to clarifying this coordination.

### The role of the CAP

The draft Rural Development Regulation 2014-2020<sup>1</sup> includes a forestry component in the continuity of the Rural Development Regulation 2007-2013: although measures to support forestry are not drawn up in the same way, all the measures already available for 2007-2013 are reflected in the new draft regulations. Several measures can be used and should be taken into account in the Rural Development Plans of Member States and European regions. It goes without saying that sufficient budget should be allocated for their implementation.

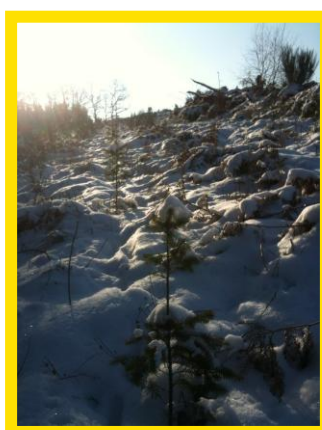
The definition of specific "mountain" sub-programmes, which is possible under the current legislative proposals of the 2014-2020 Rural Development Regulation published in October 2011, offers even more ways to better support the mountain forests<sup>2</sup>.

<sup>1</sup> Proposal for a Regulation of the European Parliament and Council on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), 2011.

<sup>2</sup> See p. 17 section 1, paragraph 2.1.c.

➔ Recommendation 2.2. The support for forest investments must be maintained in the second pillar. The measures provided for in the 2014-2020 Rural Development Regulation will be used to their full potential and optimized for the mountains by establishing mountain sub-programmes.

➔ Recommendation 2.3. Support for replanting should be continued. Financing could be through leveraging the capabilities of the European Carbon Fund<sup>1</sup>. This private fund consists of 14 financial institutions from 8 countries and funds projects to reduce emissions of greenhouse gases under the Clean Development Mechanism (CDM) of the Kyoto Protocol. Currently, all funded projects are located in developing or emerging countries. The opportunity of a second type of non-targeted project for emerging or developing countries and aiming actions or financing positive measures to reduce emissions of greenhouse gases should be studied. In this case, this fund could particularly be used to finance activities such as forest replanting.



Replantation after exploitation (source: O. Bertrand)

### Various forms of support

The financial support provided by communities/local authorities plays a complementary role to the funds available through the ERDF and EAFRD and can take several forms:

- Operating subsidies (Pino Soria Burgos mark)
- Construction funding (Hallingdal Trepellets)
- Guarantee/bond to obtain funding (Achtental biomass farm)

➔ Recommendation 2.4. The territorial projects funded by the European Structural Funds and the EAFRD require co-financing by regional authorities. Local authorities can also provide additional funding or financial solutions.

➔ Recommendation 2.5. Financial solutions are required for investment. These solutions can take different forms and should not only be in the form of direct subsidies (loan guarantee, for example).

NB: Compensation for extra production costs is not mentioned in the examples of good practice presented in the study.

<sup>1</sup> <http://www.europeancarbonfund.com/>

### 3. THE ROLE OF BRANDS AND CERTIFICATIONS

The examples of good practice show several examples of the use of certifications or marks:

- PEFC certification is mentioned in several cases: the company ARPANA FF is PEFC certified, Materialbanken uses certified wood, the Vorarlberg forest association provides a service for this certification, PEFC certification is one of the criteria for use of the Pino Soria Burgos mark.
- Pino Soria Burgos mark identifies the wood from the forest to its secondary processing.
- The "marchio Ticino" brand is not specific to wood since it can be used for food products. However, it can be used to certify the source of wood and brings added value thanks to the notion of quality which is attached to it.

The use of brands and certification can complement each other, as in the case of Pino Soria Burgos pine and the PEFC certification.

Obtaining additional income is therefore not always the main goal of these certifications: the primary interest of marks and certifications for loggers and processors is to segment the market. They can also be a criterion for access to certain markets. This is particularly the case of PEFC or FSC certifications, which are sometimes required by buyers.

### 4. INNOVATION AND PERFORMANCE

Several forms of innovation are demonstrated in the cases of good practice:

- Adapting machine to the needs of industries
- Developing local industries
- Integration with pre-existing activities

Innovation is used by companies to improve productivity or quality of production. Research performance is indeed a constant in the examples presented.

The Lillehammer declaration "Exploiting the innovation potential of European mountains" published during the Euromontana 7th European Mountain Convention on the theme of innovation<sup>1</sup> emphasizes the innovative capacity of mountain regions and the need to strengthen it. In particular, this will require cooperation between mountain stakeholders who can be encouraged by through long-term networks or short-term cooperation projects within Cohesion Policy. The Scottish case and that of Material Banken in Norway illustrate the merits of facilitating the input of ideas from other regions.

The declaration also stresses the role that research institutions and education play and encourages them to develop exchanges and partnerships with companies and stakeholders

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<sup>1</sup> The European Mountain Regions – A breath of innovation. 7th European Mountain Convention. 15-17 September 2010, Lillehammer, Norway  
See <http://www.euromontana.org/agenda/assises-europeennes-de-la-montagne/assises-europeennes-de-la-montagne-de-lillehammer-norvege.html>



in the field. The Gurndin and Material Banken companies are good examples of this type of action.

## 5. DIFFICULTIES LINKED TO ACCESSIBILITY AND FRAGMENTATION

The problem of the lack of road infrastructure in forests was cited several times in the case studies. In addition, there is the problem of forest fragmentation. Addressing this particular problem is crucial for the maintenance of mountain forests. Pertinent solutions must be provided to these two problems in order to develop mountain forest economies.

Activities for the communal management of plots are a possible response to the problem of fragmentation of ownership. For the 2007-2013 period, measure 142 in the Rural Development Programme envisaged the possibility of funding producer groups. However, this measure was not implemented in France.

Still on the problem of fragmentation of ownership, tools of a varied nature can be used: land grants, preferential rights of neighbours when plots come on the market, land associations, paying agency fees, are a few possible examples. Their implementation, however, must be accompanied by adequate publicity so that they are actually used.

➔ Recommendation 5.1. Specific financial support could be considered to allow access to land subject to management plans.

➔ Recommendation 5.2. There is a great need for opportunities to fund infrastructure, which should come from the ERDF. The complementarity between forest roads and other road infrastructure, especially farm roads, should be researched further.

➔ Recommendation 5.3. Funding for the implementation of a forest producer group, currently provided for in Article 28 of the 2014-2020 draft Rural Development Regulation, should be implemented in Member States to facilitate the common management of private forest holdings.

➔ Recommendation 5.4. Defining and mobilising specific funds for property guidance activities and the mobilisation of owners could be a relevant driver to combat fragmentation.



Mountain forest road (source: O. Bertrand)

## 6. TRAINING STAKEHOLDERS

Several cases demonstrate the need for appropriate training, especially for forest owners. For forest owners, particular needs concern awareness of the need for, and the acquisition of skills in, forest management. In this regard, the role of forest owner associations in the implementation of management plans is to be highlighted and encouraged.

For companies and industries, the skills used, often acquired through experience (e.g., use of heavy timber, chestnut) or training, are not sufficiently adapted to the needs of businesses (GURNDIN). Finally, it is often the companies themselves who train their employees. This niche is exploited by ARPANAFF, specialised in training workers for harvesting mountain timber.

➔ Recommendation 6.1. Training and information for forest owners and managers are required for the maintenance and exploitation of forests. Management plans are relevant tools for developing the wood supply and should be promoted to the owners.

➔ Recommendation 6.2. A better match between existing training and the real needs of companies must be found. The principle of on-the-job training could become standard by encouraging sandwich training courses, internships or practical in-company training sessions. In particular, it might be interesting to include training in the knowledge and the practice of specific and advanced techniques such as cable yarding.



Forest exploitation in mountainous areas (source: O. Bertrand)

## General Conclusion

Above all, the limitations of the study should be remembered: the objective was not to present all the types of business activities in the wood sector in mountainous zones. The sole aim was to present a selection of interesting examples which can serve as inspiration to develop new initiatives to promote increased wood exploitation and the development of processing companies in mountainous regions.

Despite these limitations, the case studies were analysed and used to make recommendations based on six aspects of the development in the mountain forest sector:

- The integration of forestry project in regional dynamics
- Financial support to the sector
- The role of marks and certifications
- The research of innovation and performance
- Difficulties linked to accessibility and fragmentation
- The need to train stakeholders

In addition to these six points, the study brings up the relevance of funding projects at the expense of the direct subsidies system (per hectare or per m<sup>3</sup> of wood). Indeed, measures and actions taken should aim to develop all of the wood industry, from operation through to processing. This is why guidance (between stakeholders at the same level in the sector, including forest owners, but also between different levels of the sector) has an essential role in development approaches. However, despite some needs, funding opportunities for guidance are almost non-existent in current programmes (EAFRD, ERDF).

Moreover, the need to integrate defining, consistent strategies across forests was emphasized, and a better contribution to forest industries in the development of mountain territories must be sought.

Finally, the study highlights the value of guidance activities and joint management of forest holdings. It therefore appears appropriate to promote them by using the available measures in the Rural Development Regulation. While measure 142 of the Rural Development Programme relating to groups of producers was not open in the French Rural Development Programmes for the 2007-2013 period, it may make sense to implement it for the 2014-2020 period.

## ANNEX

### A SELECTION OF PROJECTS OF INTEREST FOR THE DEVELOPMENT OF MOUNTAIN FOREST INDUSTRIES

The list presented below has been made thanks to information provided during meetings for the project. These projects emphasize better solutions for utilising wood or exploiting forests and forest products. While all efforts are not located in mountain areas, their example may be inspiring for the development of mountain forests.

This list is obviously not exhaustive.

### **Inventory of good practices on the sustainable utilisation of wood (March 2010):**

A study was conducted in partnership between Forest Europe, the FAO and DG AGRI on this important issue for all Member States. A 75-page document in English, produced in March 2010 brings together more than 20 good practices, some of which are in the mountains or relevant to the issues of cooperation between the sectors. The paper highlights two particularly large problems for mountains: the logistical issue of accessibility to mountain forests; and the issue of fragmentation of forest ownership, which increases the difficulty of organising the offer and the relationship between owners, operators and industries. The documents provided do not detail all the economic components, namely the return on added value for mountain stakeholders, but the contracts identified could provide a basis for further study.

The most interesting initiatives given for mountainous areas in the document include:

- A.2. Improving the organisation of forest owners
- B.2. Improving accessibility to forests, especially in mountains
- C.3. Establishing long-term partnerships between owners, public forest services and industries
- C.5. Establishing a sustainable wood energy sector

### **ROBIN WOOD Project (INTERREG IVC)**

March 2010, 48 months until the end of 2013. Budget: €3 million

Objective: The main objective of the project is the promotion of the multifunctional role of forests as a motor for economic development, environmental protection, and the improvement of the quality of life in rural zones.

Partners: Limousine (FR), Liguria (IT), Harghita (RO), Kainuu (FI), Calabria (IT).

The project has sub-projects including themed projects, such as:

- Renewable biomass energy
- The management of forest resources
- Information/education on forests
- Protection of natural wooded areas
- Forest tourism
- Timber/non-timber products
- Use of local wood

<http://www.robinwoodplus.eu/index.php?v=fr>

The last two are of particular interest for mountain forests.

## **EFORWOOD Project (FP6)**

Nov. 2005 to Oct. 2009, budget: € 20 million

Objective: Impact study on wood sector sustainability

Partners: 38 organisations in 21 countries: in France, INRA, FCBA and CIRAD.

Results: prospective analysis, indicators, methodologies for the analysis of sustainability, scientific literature.

<http://www.eforewood.com/>

## **INTERREG Protective Forests Project (IFP)**

2003-2006 and 2009-2012 projects

INTERREG "Protective forests: management and innovation techniques in the Eastern Alps" 2009-2012, a pilot project to:

- Developing zoning with a protection function with priorities for action, according to diversified types of issues
- Developing technical and budgetary references to the size of forest management construction sites with the purpose of protection and to establish better public policies on this theme
- Consider the respective responsibilities of local stakeholders, and the legal means available and suited to the context
- Integrate an econometric approach to the interest of forest management, with the objective of protecting against other types of interventions to reduce hazards (particularly construction)

The results of these projects will allow Alpine communities at local and regional levels to:

- identify the protective role of forests and their capacity to mitigate risks
- to plan interventions on the territory depending on their priority issues
- to mobilise assistance procedures to communities for their action plans in the area of risk prevention

The INTERREG III A Alcotra n°66 project "Sustainable management in protective mountain forests" (2003-2006) led to the creation and popularisation of technical tools to optimise forestry, related particularly to hazards.

France, Italy and Switzerland each have a manual for mountain forest management, two of which result from the Interreg III A Project "Sustainable management in protective mountain forests." :

- The NaiS (Sustainable management in protective forests, 2nd edition, 2005) for Switzerland
- The GSM (Mountain forestry guide. The Northern French Alps – 2006) for France,
- The SFP (Selvicoltura nelle foreste di protezione, 2006) for the Aosta Valley and the Piedmont, Italy

<http://www.interreg-forets-protection.eu/>

### **Regiowood Project (INTERREG IV A)**

Nov. 2008 to Oct. 2011

Interreg IV A Large regions Programme (Wallonia, Grand Duchy of Luxembourg, Lorraine and Rhine-Palatinate)

This project has two work components: better utilisation of forest resources and economic development of businesses in the timber industry. Although not conducted in mountain areas, initiatives in the project are also relevant to mountain areas, including initiatives related to the utilisation of forest resources in fragmented private forests and to improving dialogue between stakeholders at all levels in the sector.

[www.regiowood.eu](http://www.regiowood.eu)

### ***Forest based sector Technology Platform (FTP) – technology platform the forest industry***

The Forests Technology Platform has defined a roadmap for research and development in the European forest sector which it is in the process of implementing. It also makes proposals to direct research funded by the European Union. Many in the forestry sector and wood industry support the platform. It works in three sectors: forest, paper and wood.

<http://www.forestplatform.org/>