



## 6. PROTECTING THE ENVIRONMENT AND PROMOTING RESOURCE EFFICIENCY

### What does the EU want to achieve?

The EU wants the key goals of its Biodiversity Strategy and its Framework Directives on water, birds and habitats, soil, air quality and waste to be achieved:

- Protecting water resources and the aquatic environment
- Waste prevention and treatment
- Halting the loss of biodiversity and the degradation of ecosystem services by 2020, and restoring them as far as is feasible
- Nature protection
- Protection and sustainable use of soil resources
- Improving ambient air quality and provide cleaner air

### How?

The EU would like to primarily finance investments in **resource management** (water supply, treatment and re-use, waste management), in **green infrastructure** for protection and restoration of biodiversity, and in actions to reduce transport-related air pollution. The ERDF should also support diversification of local economies in both rural and urban contexts. The EAFRD will invest in the restoration of ecosystems and biodiversity and in improvements in water and soil quality.

### How/why mountains can contribute?

The European Environment Agency (EEA) described mountains as an “**underestimated ecological treasure**”, highlighting the many environmental functions they fulfil: water towers, which service lowland areas; recreational uses and aesthetics of the landscape; and areas of high biodiversity and many important habitats (EEA, 2010). Mountains are very rich in biodiversity and a crucial reservoir of species for Europe. The EEA (2010) identifies 42 mountain habitats and 256 species endemic to mountain ranges. The forests, the landscapes, the purity of air and water, the rich biodiversity of these areas benefit not only mountain people, but Europe as a whole.

Mountain farming and forestry and land management play major roles in enhancing the environment. The positive contribution of mountain agriculture to the environment is widely recognised and supported by a comprehensive body of literature. Throughout the EU, mountain agriculture, including the production of food, plays a central role in the preservation of both biodiversity and natural landscapes. It also tends to use relatively few chemicals (fertilisers, pesticides), which is critical, particularly because the water that flows from Europe’s mountains is of high quality and is vital for a large proportion of Europe’s population.

The climate, topography, and natural and human history of mountains explain why they have specific ecosystems. These are often **fragile and threatened in particular by changes of human activity** (e.g. changes of land use) and by climate change. Protecting the environment in mountain areas means supporting traditional land-use models, pasture and grassland-based farming practices and also the forests, permanent crops and terraced fields which constitute unique cultural landscapes.

It is in the interest of all Europeans to protect the mountain environment by avoiding or overcoming threats to activities which benefit the environment and by limiting the expansion of harmful practices.



## What do they need in order to contribute?

**Mountains need to be recognised for the public goods and ecosystem services they deliver to Europe and to be rewarded for them.** The activities which contribute positively to the environment need to be strengthened; protection against harmful practices is also essential.

In many mountain areas across Europe, traditional farming practices are at risk of disappearing due to their lower profitability compared with more competitive lowland farming systems, as well as the ageing of the farming population. This leads to the abandonment of less productive and/or less accessible land and the intensification of agriculture in valley bottoms. Reversing this trend requires **support to these forms of environmentally-friendly farming**. The same situation applies to mountain forests, in which harvesting costs are greater than in the lowlands. In more densely populated mountain areas or those close to agglomerations, the **loss of agricultural land** through urban sprawl and **fragmentation of land parcels** is a major problem which needs to be overcome.

## Example of actions/practices/policies/projects which could deliver on this objective

- **Improve water and waste treatment infrastructures:** mountain communities must have the capacity to upgrade their infrastructures to cope with their needs (especially tourism needs);
- **Improve energy efficiency in mountain buildings:**
  - The [Alphouse](#) “Alpine building culture and ecology” project worked on combining preservation of traditional building culture with acceptable energy performance building in the Alpine area, looking at local know-how and skills, local materials and techniques and promoting the competitiveness of the territory, transferring these competences to the refurbishment and restoration sector.
  - The INTERREG SUDOE [EcoARQ](#) project worked on restoration of built heritage in touristic areas using ecological practice, and organising workshops and training exercises, especially in Portugal and Spain.
- **Support land managers in their production of public goods:**
  - In areas facing high pressure on land, controlling urban sprawl, especially on the most productive land and land of high value for providing ecosystem services, such as biodiversity and flood control;
  - Payments that compensate the on-costs of production of mountain farming (LFA payments) in order to prevent land abandonment.
  - Agri-environmental measures: in mountain areas, these should reward the continuation of existing beneficial practices:
    - Maintenance of pastoralism activities including grazing less productive land;
    - Water efficiency of farming systems based on permanent crops;
    - Maintenance of terraces;
    - Adoption of practices protecting against erosion;
    - Support mowing of meadows and grassland by hand, rather than machines;
  - Development of quality supply chains that contribute to the provision of public goods, ensuring links between the protection of the environment and the marketing and added value of the products.
- **Improve energy efficiency and transport alternatives:** as described under priorities 4 & 7, mountain communities have high energy needs and, at present, few energy choices. Investment in renewable energies and sustainable and alternative forms of transport is also essential.

- **Develop sustainable energy action plans and energy cadastres (see priority 4).**
- **Rationalize the use of energy through industrial ecology, which can be realised in the mountains:**
  - [Hallingdal Trepellet](#) is a wood pellet production company in Buskerud, Norway, that uses the heat from a neighbouring waste incineration plant, the raw material from the surrounding forests, and waste from nearby paper pulp mills.
  - In the Achen valley (Bavaria, Germany), a “[biomass farm](#)” has been created, with both a wood pellet production plant that transforms local raw material and then supplies companies, individuals and surrounding heat networks, and a biomass information centre.
- **Protecting and enhancing cultural heritage:** cultural landscapes, traditional food production, and ensuring valorisation through economic activities such as tourism;
  - The [mountain community of Valle Trompia](#) (Italy) created a strong and vital integrated cultural system through the SIBCA project (Integrated system for Cultural and Natural Heritage of Valle Trompia), able to connect its own territory, its population and public users, involving them in a cultural path to create the conditions for social development. Rediscovering and improving the peculiar local culture such as ‘Geosites’ was key.
  - In [Soca Valley](#) (Slovenia), a [European Destination of Excellence](#) in the field of tourism, the ‘[walk of peace](#)’ was created to valorise heritage from the World War I Isonzo front and foster sustainable development. A signed 100-km pathway between the Julian Alps and the Adriatic Sea connects 6 outdoor museums, fortifications, cemeteries and natural heritage sites. A historical study and research centre was also created.
  - In the Neamț mountains (Romania), [cultural and natural heritage](#) are promoted and used as a tool to develop specific [types of tourism](#) while protecting the environment.
  - In the framework of the [programme of regional and local parks](#) in Norway, a dynamic, long-term, committed relationship platform for communities, governments and businesses with an interest to preserve and develop natural and cultural assets in a defined landscape and identity area has developed. [Valdres natur- og kulturpark](#) in Oppland and [Nærøyfjorden](#) in Sogn og Fjordane are good local examples.
  - In the Pyrenees, the [Plan for support to the agro-sylvo-pastoral economy](#) helps to maintain traditional agro-systems and pastoral sheds.
- **Improving environment protection and resource efficiency in forestry:**
  - **Including environmental concerns within all activities** (e.g. biodegradable oil for forestry machineries);
  - Better design of forest roads (or use of cable technologies) to minimise water pollution;
- **Halting the loss of biodiversity through target actions :**
  - The Alpine Space project [SILMAS](#) - Sustainable Instruments for Lakes Management in the Alpine Space - facilitated dialogue between the different institutions involved in managing Alpine lakes. Over a three-year period, scientists, academics and technicians from the public authorities in charge of managing the lakes have pooled their knowledge, with a particular focus on three main areas: the effects of climate change on the lakes, resolving conflicts between the different uses of the lakes, and educating the public in sustainable development.

**More information:**

Euromontana thematic page on [environment](#) - Euromontana thematic page on [energy](#)

Euromontana report “[Mountain development based on environmental and cultural assets](#)”