

# THE COHESION POLICY COMBATS CLIMATE CHANGE IN MOUNTAIN AREAS

## **DID YOU KNOW?**

Climate change acts faster in mountain regions compared to lowland areas, and it strongly alters the mountain biodiversity, population and economies. Since 1980, the Pyrenees lost half of their glaciers and their average temperature increased 30% faster than the global average in the last 50 years. Similarly, by 2050 half of the glaciers in the Alps will disappear regardless of what actions will be adopted.

## **WHY IS CLIMATE CHANGE SO IMPORTANT?**

Climate change in mountains hinders biodiversity levels and water availability, impacts the local economy and increases natural hazards. The effects of climate change in the mountains have a cascade effect on lowland areas. For this reason, what happens in the mountains will not stay there but should be considered a European issue.

## **WHAT SOLUTIONS ARE BEING FOUND IN THE MOUNTAINS?**

Both mitigation (trying to limit climate change) and adaptation (finding ways of adapting to changes that are already happening) are crucial to ensure the resilience and viability of the mountains. From lowering carbon emissions in heating, promoting sustainable energy production and tourism, to monitoring wildfires and other impacts across key sectors of the mountain economy, mountain regions have already introduced numerous measures to tackle climate change.

**With the Cohesion Policy, the European Union is supporting projects and initiatives to combat climate change in mountain regions.**

**Read on to find out more.**



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# PEGASUS

## Microgrids for renewable energy in rural areas

In the municipality of Saint-Quentin-en-Quin (France), bad weather and strong winds regularly cause power cuts, endangering the electricity supply to residents' cold stores or woodchip boilers.

To cope with this problem and make local residents energy independent, a solar microgrid has been installed in the village. A microgrid is a small network of electricity users that consumes local energy supply.



© Auvergne-Rhône-Alpes Region

In this case, 32 houses and a total of 45 consumers could connect their solar energy panels to the main power substation, which then transmits the energy produced to other households in the grid according to their needs. This solution allows residents to use local energy to make up for shortfalls in the external energy supply and generate electricity and heat, as well as lowering carbon emissions by supporting the installation of solar panels.

**Mountain area:** French Alps

**Cohesion support:** European Regional Development Fund through Interreg Med Programme

**Period:** 2017-2019

**Website:** <https://pegasus.interreg-med.eu/>

# BB CLEAN

## Low carbon domestic heating in Alpine households



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Fossil fuel consumption for domestic heating is a major source of CO<sub>2</sub> emissions. In the Alps, biomass burning – especially wood burning – is a viable renewable alternative to fossil fuels. It mitigates the climate impact of household heating and leads to better use of local resources. Nevertheless, biomass burning can also increase the presence of micro-pollutants such as particulates, which are harmful to human health and the environment. Because of this, in some cases, fossil fuels are still preferred to biomass for domestic heating.

To address this issue, the BB-Clean project has developed a free mobile app to explain to householders how they can make more sustainable use of biomass burning for domestic heating. By combining wind and precipitation trends in a meteorological calculation model, the BB-Clean App helps them to monitor the status of micro-pollutants in the whole Alpine region over a 48-hour period via a traffic light system (red: high concentration – low dispersion; yellow: average; green: low concentration – high dispersion). This useful app allows people to easily see the status of micro-pollutants in their region and decide the best time of day to replace fossil fuel with biomass burning to heat their homes, while ensuring that this latter choice does not have a negative environmental and health impact in their mountain area.

**Mountain area:** Alps

**Cohesion support:** European Regional Development Fund through Interreg Alpine Space programme

**Period:** 2018-2021

**Website:** <https://www.alpine-space.eu/projects/bb-clean/en>

# SMART ALTITUDE

## Lowering the carbon footprint of your winter holidays

The Alps are home to 1132 ski resorts, attracting 20 million skiers every year and generating €40 billion in annual turnover. Today, ski resorts need to adapt to the challenges posed by climate change and reduce their carbon emissions.

SMART Altitude tested and implemented measures in 4 Living Labs and 20 more Alpine ski resorts to move towards low-carbon ski resorts. For instance, Verbier and La Tzoumaz are among the biggest ski resorts in Switzerland with more than 400 km of ski slopes.

Here, a heat pump has been installed to recover the heat produced by the ski lift, creating a 10% reduction in energy consumption. Furthermore, visitors can now stay in smart low-carbon buildings that rely on energy sourced from recuperated heat, such as from the sky lift motor and solar panels.



© Smart Altitude

**Mountain area:** Alps

**Cohesion support:** European Regional Development Fund through Interreg Alpine Space Programme

**Period:** 2018-2021

**Website:** <https://www.alpine-space.eu/projects/smart-altitude/en/home>

# DISARM

## Drought and Fire Observatory and Early Warning System



© DISARM

Climate change will drastically increase the number and extension of wildfires in Europe over the coming decades, with negative consequences for mountain forests. To better prevent, address and mitigate the impact of wildfires and droughts in South-Eastern Europe, the DISARM project started as a collaboration between Bulgaria, Cyprus and Greece.

Thanks to the data and analysis carried out by the DISARM project, the relevant authorities of these three countries established a common strategic framework for tackling droughts and wildfires. They have developed improved strategies for adapting to climate change. Through these measures, local people are less exposed to the dangers of drought and wildfire thanks to more efficient prevention and monitoring methods.

**Mountain area:** South-Eastern Europe (Bulgaria, Cyprus, Greece)

**Cohesion support:** European Regional Development Fund through Interreg Balkan Mediterranean Programme

**Period:** 2017-2019

**Website:** <http://disarmfire.eu/>

## A cross-border observatory on climate change in the Pyrenees

In 2016, the Pyrenees Observatory of Climate Change was launched as a cross-border initiative with the aim to investigate, monitor and adapt to climate change across the 7 mountainous regions of the Pyrenees.

The Observatory has developed its activities in line with the socio-economic impacts of climate change in mountains, such as in relation to tourism, agropastoralism, energy sectors and natural disasters, and with the alteration of biophysical systems, such as water, wildlife, and forests.

Thanks to the Observatory's findings and ongoing research over several years, local private and public stakeholders, as well as citizens, can understand the current and future changes in the Pyrenees, their impact on specific sectors of the economy and society – such as tourism, energy, agropastoralism and forest ecosystems – and apply the recommendations in order to better adapt to climate change.



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Mountain area: Pyrenees (Andorra, France, Spain)  
 Cohesion support: European Regional Development Fund through Interreg POCTEFA programme  
 Period: 2016-2019  
 Website: <https://www.opcc-ctp.org/en>

## WHAT IS MONTANA174?

Montana174 is a communication campaign to inform you – mountain residents - about the many opportunities offered by the Cohesion Policy in mountain areas.

In mountain areas, the Cohesion Policy provides funds to reinforce digital and social innovation, accelerate climate mitigation and adaptation, support tourism, foster youth employment and enhance mobility.

[www.montana174.org](http://www.montana174.org)



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