

# Strategic tools towards a sustainable use of biomass

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

This project is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme.





## ABOUT OUR GOALS

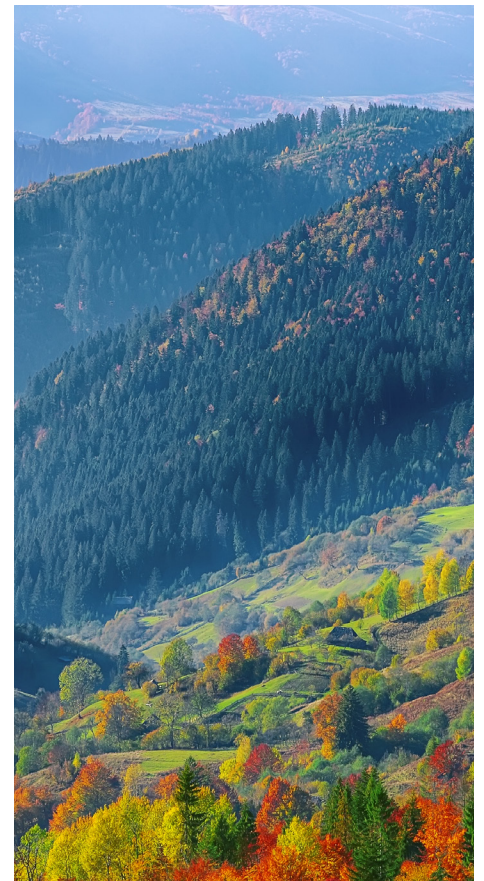
The aim of the BB-CLEAN project is the development of transnational policies for a sustainable use of biomass for domestic heating in the Alpine region. This aim will be reached starting from the state of the art of very different regulations linked to small scale biomass appliances in the countries of the Alpine region and the development of innovative approaches for the awareness raising of citizens and local administrators.

Technological, economical and informative tools will be used to mitigate the impact of a local widespread energy source (biomass) on air quality, human health and climate change.

- **AWARENESS RAISING OF CITIZENS AND LOCAL ADMINISTRATORS**
- **REDUCTION OF THE IMPACT OF BIOMASS BURNING IN ALPINE VALLEYS**
- **DEVELOPMENT OF TRANSNATIONAL POLICIES FOR SUSTAINABLE USE OF BIOMASS FOR DOMESTIC HEATING**

## 8 PARTNERS, 5 COUNTRIES

- Università Cattolica del Sacro Cuore, Italy
- Agenzia Regionale per la Protezione dell'Ambiente della Valle d'Aosta, Italy
- Communauté de communes Pays du Mont-Blanc, France
- Atmo Auvergne-Rhône-Alpes, France
- Zavod Energetska agencija za Savinjsko, Šaleško in Koroško, Slovenia
- e-Zavod, Slovenia
- FH JOANNEUM Gesellschaft mbH, Austria
- ECONCEPT, Agentur für nachhaltiges Design, Germany



**PROJECT BUDGET**  
**1.665.715 EUR**

**ERDF FUNDING**  
**1.415.858 EUR**

**DURATION**  
**APRIL 2018 - APRIL 2021**



## PILOT AREAS

- SAINT MARCEL MUNICIPALITY,  
VALLE D'AOSTA REGION, ITALY
- THÖRL VILLAGE,  
STYRIA, AUSTRIA
- STORO MUNICIPALITY,  
TRENTINO REGION, ITALY
- VIONE MUNICIPALITY,  
LOMBARDY REGION, ITALY

## MEASUREMENT CAMPAIGNS

Field measurement campaigns of air quality are performed in 4 pilot areas measuring pollutants such as nitrogen oxides, PM10, PM2.5 and PM1 atmospheric particulate matter and black carbon resulting from woody biomass burning as well as sensible and latent heat fluxes, net radiation, ground heat, vertical temperature and humidity. Measurements are performed by using special measurement stations and equipment, operated by researchers and PhD students. Thanks to innovative data evaluation systems it is possible to distinguish the PM10 concentrations deriving from combustion of woody biomass from those deriving from the use of fossil fuels.



## CROWDSOURCING ACTIVITIES

The crowdsourcing approach is a fruitful open innovation tool, since it engages various stakeholders, namely citizens and local administrators, to share their experiences, challenges and solutions and attracts interest on the topic of biomass burning. The crowdsourcing activity started with two challenges targeting the awareness of the public and potential technological ideas to promote BB Clean and will continue in spring 2020 with the aim to set up an expert group and to stimulate exchange and innovation across countries. Everyone is welcome to participate!





## AWARENESS RAISING ACTIVITIES

Meetings, training sessions and workshops are held with citizens (including school children) and local administrators to explain the project themes and illustrate the results of the measurement campaigns. Main objective of the awareness raising activities is to share knowledge on advantages of biomass use for heating, measures for clean burning of biomass and potential negative effects of incorrect biomass burning on air quality, human health and climate change. Awareness raising activities are supported by citizen experiments in Italy, Austria and France where individual micro-sensors to measure the air quality have been given to volunteers. People have an opportunity to become active part in environmental monitoring.



- 5 MEETINGS
- 12 TRAINING SESSIONS
- 3 WORKSHOPS
- 3 CITIZEN EXPERIMENTS
- MORE THAN 500 CITIZENS INVOLVED

### Discover more about BB-CLEAN!



[HTTPS://WWW.ALPINE-SPACE.EU/PROJECTS/BB-CLEAN/EN/HOME](https://www.alpine-space.eu/projects/bb-clean/en/home)



[HTTPS://WWW.FACEBOOK.COM/BBCLEAN.AS/](https://www.facebook.com/bbclean.as/)



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### AWARENESS RAISING AREAS

- SAINT MARCEL MUNICIPALITY, VALLE D'AOSTA REGION - ITALY
- AOSTA MUNICIPALITY, VALLE D'AOSTA REGION - ITALY
- THÖRL MUNICIPALITY, STYRIA – AUSTRIA
- COMMUNITY OF COMMUNES IN THE MONT BLANC COUNTRIES, AUVERGNE-RHÔNE-ALPES REGION - FRANCE



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