

## ENERGY EFFICIENCY & RENEWABLE ENERGIES IN THE BUILDING SECTOR

### Problem – Challenge

The Alpine Space represents an attractive space for living, working and recreation in Europe. However, due to its geographic and economic framework, certain disadvantages occur in comparison to other European regions.

At high elevations, the climate becomes colder as a result of the angle the sun heats the surface of the Earth. This is of importance for building, since the annual energy consumption of a building is influenced by the external climate.

In alpine valleys, SMEs in the building sector are great employers. New developments and changes concerning building techniques of energy saving and producing buildings require cross-sectoral networks and collaborations of SMEs. Because of the increasing complexity in this field there is the need for customers, especially public builders, to have a better basis for decision-making.



### Solution

Several energy saving buildings were analysed and energy standards compared. Furthermore, chances for local energy production were evaluated, innovative pilot projects supported, and knowledge transfer facilitated. The «ENERBUILD Tool» was developed, evaluated and pilot-tested on 46 energy efficient public buildings. The spectrum of the comparative results shows interesting correspondences between buildings and countries/ regions. Key factors identified by the transnational consortium relate to vocational training, to additional research on user behaviour, to role models in public construction, to financing of energy-producing plants on buildings, and to the placement of sample planning processes around energy-efficient building..

