

MountEE - Energy efficient and sustainable building
in European municipalities in mountain regions

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GOOD PRACTICE SUSTAINABLE BUILDINGS

CUBATURE BONUS
AUTONOMOUS PROVINCE OF BOLZANO - BOZEN

CATEGORY: SUCCESSFUL FINANCING INSTRUMENTS

Region / local area considered: Alps/Italy	Good practice submitted by CIPRA
<p>1) Short description of the action/strategy/project</p> <p>“Bonus cubature” of the Autonomous Province of Bolzano - Bozen</p> <p>The aim of this instrument is to promote the building's energy efficiency through a cubature bonus. The revenue that comes from the added cubature is used to pay the energy retrofitting of the building.</p>	
<p>2) Background/targets</p> <p>The action is part of a complex strategy to reach the "energy autarchy" in South Tyrol in 2050.</p> <p>On the one hand, the increasing demand of houses in the Bolzano Province leads to an increasing of prices of rents and houses. On the other hand, the province wants to encourage renovate of existing houses and buildings. In South Tyrol, 70% of the buildings are older than 25 years and need a lot of energy. This measure applies on buildings build before 2005, on private and social housing.</p> <p>The cubature bonus will help energy retrofitting of existing buildings and provide new houses to the market reducing the prices and making houses more affordable. Furthermore, this measure aims to simplify administrative procedures in renovation and boost the economy of renovation.</p> <p>This measure has been adopted by the provincial government in 2009.</p>	
<p>3) Detailed project/program description</p> <p>The objective is to obtain houses with a primary energy consumption of 70 Kwh/m²/year for each house and building renovated. At average it could mean 0.03T/CO₂/m²/year not emitted.</p> <p>The main stakeholders involved are: citizens, administrators of buildings, constructors.</p> <p>The principle is to give the possibility to expand the volume of a building to the owners who decide to invest in the energy renovation of their building. Who retrofits his building on Klimahaus C standard (70 KWh/m²/year) is allowed to expand the volume of that building up to 200 m³. This must be demonstrated by a climate house calculation, which should be controlled by an authorized technician. The authorization for retrofit and expansion needs a certificate of the Klimahaus agency.</p> <p>The cubature bonus has been introduced in Bolzano´s Province since July 2009. The program has been extended in 2010, removing the previous expiring date decided on 31/12/2010. The bonus in the first step was intended as an action for the environment and</p>	

for the building sector, mainly to promote the energy renovation of old buildings. In 2011 the program has been modified, but only for the Bolzano city area. The cubature bonus will be extended from 200 m³ to the 20 % of the total volume of the building. This extension answers the increasing demand of housing space in Bolzano and shall include in the program also the urban building typologies (condominiums). It means, that an extra floor can be built, if 5 floors are being renovated. Experience has shown that a 200 m³-cubature bonus is most viable for smaller buildings. As the modification towards 20% of building volume has not been adopted yet, the experience in the public-building sector is still few.

4) Funding/financing/costs

Costs for the owner: renovation + construction + costs of the calculation and certification Klimahaus. Notarial discount for the construction (25% of the fees). State subsidies or tax deduction sometimes possible (case to case).

Costs for the province: considerably low: it is just a normal administrative task for the building authority to decide on the construction concessions.

5) Main results

The website <http://www.klimaland.bz.it/energie/energieeffizienz/baumassenbonus/> talks about a survey of the province's Department of Regional Development on the cubature bonus from 2nd Semester 2009 until 1st Semester of 2011.

In these two years the cubature bonus was used about **1,600 times**; most in the 2nd semester of validity, and then there was a slight decrease. Estimating 200 m³ per engagement, they estimate that a total of 315,400 m³ additional mass has been built (1,577 x 200) within 2 years in the framework of the cubature bonus.

In 2010, 204,400 m³ have been built within the cubature bonus. Compared to the total of collected permits for 2010 including new buildings for a total of 1,672,108 m³, they can estimate that at least **12.2% of buildings in 2010 come from the cubature bonus**.

6) Analysis – lessons learnt and success factors

First considerations from the building administrators are not very positive. They think that to convince all the dwellers of a condominium to build another floor will be very difficult. Therefore the City of Bozen will take the leadership with buildings in their own.

Critics did also come from architects, who expect a decrease in attractiveness of the building structure

7) Time frame

Start in 2009, extension of the timeframe in 2010 (now it is unlimited). Redesign of the bonus (20% more volume instead of 200m²) planned.

8) Contact project owner

The promotion of this action is by Province of Bolzano and Municipality of Bolzano.

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More information <http://www.klimaland.bz.it/energie/energieeffizienz/baumassenbonus/>