



FIG WORKING WEEK 2012
May 6–10 2012
Rome, Italy

**Sustainable Housing in the Province of Bolzano Alto Adige
Italy - “ Thinking in Terms of a Co2 Neutral Climate ” -**

Mauro Catalano, Italy
TS 7K – Task Force on Surveyors and the Climate Change II-



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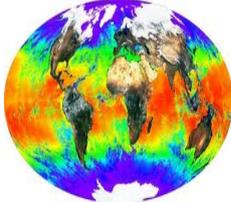
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Summit in Durban 2011:

- The agreement was also signed by China, India and the United States.
- The commitment was made to limit the average warming of the atmosphere to a maximum of 2° C.



COP17/CMP7
UNITED NATIONS
CLIMATE CHANGE CONFERENCE 2011
DURBAN, SOUTH AFRICA



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- The Autonomous Province of Bolzano in the region of Alto Adige is one of the areas of Italy where most attention has been paid to the question of climate and environment.
- The technologies for more energy-efficient buildings are available but are still not always applied today.






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Recent energy-saving regulations in the Province of Bolzano June 2011:

<p><small>Bolzano Ufficio s. 1104 del 10/02/2011 / Annotato N. 1104 del 10/02/2011</small></p> <p>DECRETO Dati: 1 del 29/09/2004</p> <p>Autore: Provincia Bolzano - Sindaco DECRETO DEL LANDESHAUPTMANN N. 34 del 29/09/2004</p> <p>Adozione del regolamento di attuazione alla Landbauordnung (Landbauordnungsgesetz, im Bereich E-Regelgebäude)</p>	<p><small>Bolzano Ufficio s. 1104 del 10/02/2011 / Annotato N. 1104 del 10/02/2011</small></p> <p>Art. 1 - Intestato</p> <p>Questo Decreto in 30 Tage nach seiner Veröffentlichung im Amtsblatt der Provinz in Kraft tritt und für jene Gebäude angewandt, deren Ansuchen vor Baubehörden noch keinen In-Arbeit-Termin angefordert wurde.</p> <p>Questo Decreto ist im Amtsblatt der Provinz bekanntzugeben. Jeder, dem es vorkommt, ist ein-</p>	<p><small>Bolzano Ufficio s. 1104 del 10/02/2011 / Annotato N. 1104 del 10/02/2011</small></p> <p>Art. 4 - Estratto in vigore</p> <p>Il presente decreto entra in vigore 30 giorni dopo la sua pubblicazione nel Bollettino Ufficiale della Provincia e si applica agli edifici per i quali la domanda di concessione edilizia è stata inoltrata dopo la sua entrata in vigore.</p> <p>Il presente decreto sarà pubblicato nel Bollettino Ufficiale della Provincia. È fatto sapere a</p>
<p>Anmerkungen zu Artikel 1:</p> <p>Der Text von Artikel 2 des Dekrets des Landeshauptmanns vom 29. September 2004, Nr. 34, in geltender Fassung, lautet wie folgt:</p> <p>Art. 2 (Gebäudekategorien)</p> <p><i>(1) Diese Verordnung gilt für alle Neubauten mit Ausnahme der landwirtschaftlichen Gebäude sowie der Industrie-, Handwerks- und Großhandels-Gebäude.</i></p> <p>Agentur ausgestellt.</p>	<p>Note all'articolo 1:</p> <p>Il testo dell'articolo 2 del Decreto del Presidente della Provincia 29 settembre 2004, n. 34, e successive modifiche, è il seguente:</p> <p>Art. 2 (Categorie degli edifici)</p> <p><i>(1) Il presente regolamento si applica a tutti gli edifici di nuova costruzione con esclusione degli edifici agricoli nonché degli edifici industriali, artigianali e per il commercio all'ingrosso.</i></p>	<p>ANMERKUNGEN</p> <p>Notizen</p> <p>Der Inhalt veröffentlichter Anmerkungen sind im Sinne von Artikel 29, Absatz 1 und 2 der Landesgesetz vom 29. Oktober 1962, Nr. 12, in geltender Fassung, zu dem originalen Zweck abgedruckt worden, das Handbuch der Rechtsvorschriften, welche abgedruckt werden oder auf welche sich der Verweis bezieht, zu ersetzen, zu ergänzen und abzumachen, der das</p> <p>NOTE</p> <p>Il testo delle note sul pubblicato di stato redatto ai sensi dell'articolo 29, comma 1 e 2, della legge provinciale 29 ottobre 1962, n. 12 e successive modifiche, è stato inserito al fine di facilitare la lettura delle disposizioni di legge risultate a tale quali e quanto il testo. Ripetere integrali il valore e l'efficacia degli atti legislativi qui trascritti.</p>
<p><small>Art. 3</small></p> <p>1. Artikel 4 Absatz 2 des Dekrets des Landeshauptmanns vom 29. September 2004, Nr. 34, ist aufgehoben.</p>	<p><small>Art. 3</small></p> <p>1. Il comma 2 dell'articolo 4 del decreto del presidente della provincia 29 settembre 2004, n. 34, è abrogato.</p>	<p><small>(1) Im Antrag auf Erteilung der Baubehörden müssen die für die Baubehörden und andere Programmstellen, dass in der gesamten Baubehörde, die im Artikel 1 gebildeten Fälle angegeben werden.</small></p> <p><small>(2) Unfassende alle domande di concessione edilizia che presentino una costruzione, senza indicazione e categoria progettata, dovranno a richiesta essere accettati il cui all'articolo 1, 2) sempre.</small></p>



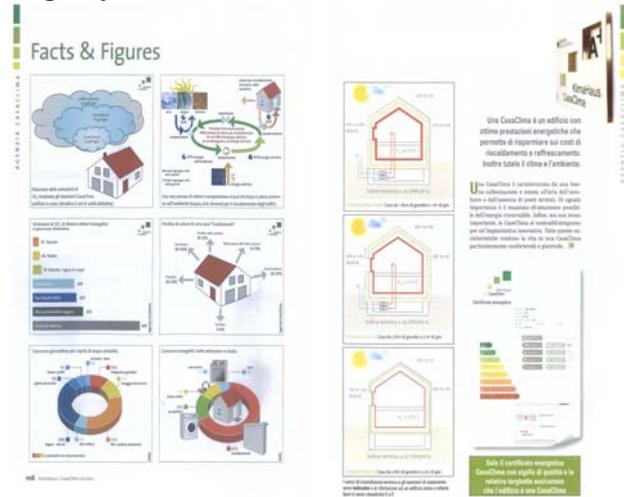
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Climate House Agency - Agenzia Casa Clima :

In the early 2000s, the Autonomous Province of Bolzano set up the Climate House Agency.

Inspired by the EU directive 91/2002 and with the Kyoto Protocol as a point of reference, the Climate House Agency aims to make new buildings more sustainable.



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CLIMATE HOUSE GOLD: Building with heating energy consumption below 10 kilowatt hours per square meter annually.

CLIMATE HOUSE A : Building with heating energy consumption below 30 kilowatt hours per square meter annually.

CLIMATE HOUSE B : Building with heating energy consumption below 50 kilowatt hours per square meter annually.

CLIMATE HOUSE C (minimum standard): Building with heating energy consumption below 70 kilowatt hours per square meter annually.

CLIMATE HOUSE D (standard for existing houses): Building with heating energy consumption below 90 kilowatt hours per square meter annually.

Climate House Categories:



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NEW SUSTAINABLE “Co2 NEUTRAL” DISTRICT IN BOLZANO:

- An ambitious new project for the building of an innovative Co2 – neutral district will soon start in Bolzano on a lot of 5 hectares.



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- 500 new flats, “ Climate House A “ instead of category B as required by law, will guarantee standards of excellence and reduce Co2 emissions.



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- The new district has been planned with the optimal orientation. It will have tall buildings well spaced out so they don't cast shade on each other.

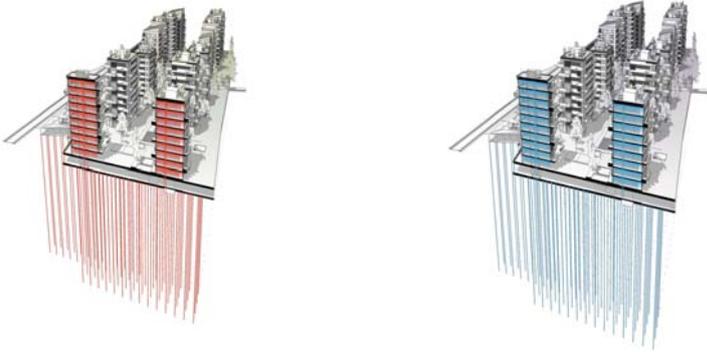


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- Innovative technical solutions will be applied for the reduction of energy consumption such as geothermal heat and cool pumps.
- The whole district will also be built with green roofs, solar and photovoltaic panels and other innovative features.



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- The buildings will be set in large green spaces with an internal network of cycle and pedestrian paths.

• At surface level there will be no roads for motor vehicles, these will have access to the various buildings by an underground garage.



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District Heating:

- An ambitious new thermal treatment plant will start in the spring of 2013.
- It will burn non-recyclable waste and produce heating and electricity to heat and cool public and private buildings.



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- The objective is to reduce Co2 emissions by shutting down 3,500 large and small boilers run on fossil fuels.
- This will make it possible to save on costs and reduce pollution.

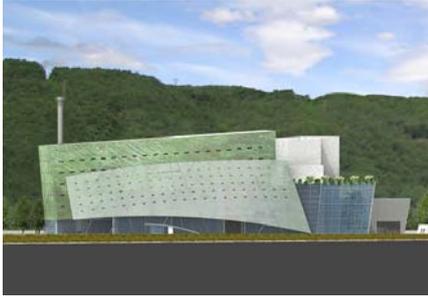



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- The attention given to the treatment of the fumes produced, will allow an improvement on current emission restriction values.



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- The thermal treatment plant will burn 130,000 tonnes of local non-recyclable waste and will pollute a tenth less than the limits laid down by law.
- In particular it will produce electricity for 3,000 families and heat for 5,500 flats.



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Conclusions:




In conclusion, while it is true that the threat posed by the greenhouse effect and global warming can only be averted through international agreements that oblige nations to considerably reduce Co2 emissions, the Province of Bolzano is a striking example of how also local authorities can take the initiative in fighting global warming by implementing policies in the housing sector based on the principles of sustainability and respect for the environment.

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Thank you for your attention

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