



# **PassREg Newsletter**

30 June 2013

To all those interested in energy efficient construction and renewable energies,

Welcome to the first PassREg newsletter, presenting the experiences and findings gleaned through the EU-funded project, **Passive House Regions with Renewable Energies (PassREg).** PassREg aims to trigger the successful implementation of Nearly Zero Energy Buildings (NZEBs) throughout the EU, using Passive House supplied as much as possible by renewable energies as the foundation.

In this newsletter, you will find general information on the PassREg project along with an overview of the latest project outcomes and findings.

# **PassREg Background**

Several European municipalities/regions are already committed to energy efficient <u>Passive House</u> principles (dictating maximum heating and cooling



demands of 15 kWh/(m<sup>2</sup>a) each in new builds) and to covering the very low remaining energy demand in these buildings, to a significant extent and where logical, by energy

from renewable sources. Along with other best practice examples, the experiences from these front runner regions, or **PassREgs**, will help pave the way for other EU regions to achieve the targets set out in the EU's Energy Performance in Buildings Directive (EPBD) by 2020.

# PassREg Methodology

PassREg is based on European regions and municipalities that either are already making use of the Passive House Standard and renewable

energies on large scales (frontrunners) or that are striving to become frontrunners themselves (aspiring regions). In PassREg, lessons learned through the study of frontrunner successes will be made available to aspiring regions, where as frontrunner regions having already implemented successful, cost effective strategies will see those optimised and enriched.

# Success Guide

The PassREg project investigates the key factors that have lead to the successful implementation of Passive House and Renewable Energy concepts in the frontrunner regions of Hanover (Germany), Brussels (Belgium) and Tyrol (Austria). A comparative analysis has been carried out in order to identify trends and conditions in these regions and to communicate both achievements and failures on the road to success. Based on the conclusions, a "Success Guide" is being developed to encourage and assist other less experienced regions and municipalities, both part of the project and beyond, to follow the examples gathered on the path to becoming front runners themselves. <u>Read more</u>

# Set of Solutions

Within the PassREg project, successful approaches, methods and tools, already applied in different European regions, are being gathered and made accessible for regions and stakeholders throughout the EU and beyond in a <u>Set of Solutions</u>. Here, solutions, tools and methods that have proven useful in various contexts are being indexed with a description of their effects and application ranges as well as useful links to the solutions themselves.

A vast collection of key solutions and strategies from the frontrunner regions of Hanover, Brussels and Tyrol is already available. The solutions range from the Brussels Passive House magazine 'Be passive' to the Zero-e-Park in Hanover and a complete overview of funding opportunities for energy efficiency measures in Tyrol.

This pool of information will soon be expanded with solutions from the aspiring regions, both directly involved in the project or as well as across the EU.







In identifying missing links, the PassREg partners will also add to and further develop existing solutions to facilitate their large scale implementation and help European regions overcome obstacles on their way to becoming Nearly Zero Energy regions.

## Access the Set of Solutions

## **Beacon projects**

The Beacon Projects are distinguished best practice examples of Nearly Zero Energy Buildings implemented in PassREg regions, both frontrunner and aspiring, which make exemplary use of the PassREg strategy: an energy efficiency first approach through Passive House with the addition of renewables where feasible. These case studies will teach us much about the applicability and effectiveness of solutions for both the creation and optimisation of PassREg Success Guide (see above). Below, you will find a selection of beacon projects from some of the aspiring regions:

## Italy

#### Social Housing, Municipality of Cesena

The Municipality of Cesena together with the Fondazione Cassa dei Risparmi di Cesena (Cesena Savings Bank Foundation) is currently developing a social housing project building located at the south-western city limits, next to a hillside. The *Case Finali* is a multi-storey building with 25 apartments. Designed by Archefice studio, the building features a revisited *ballatoio* typology with access to the apartments from a long, semi-private balcony. <u>Project details</u>



Social Housing Case Finali / studio Archefice associate

#### Botticelli Passive House, Sicily

Sicily's very first Passive House stands as a shining example of the vast potential this construction method offers for the Mediterranean region. Designed by Carmelo Sapienza, this detached house is situated at the foot of Mount Etna. Sapienza and his family have occupied this beautiful home since December 2012. <u>Project details</u>



Sicily's first Passive House; photo: Passive House Institute

## Wales

#### New Welsh school development

Burry Port School (Carmarthenshire, Wales), currently in the early design stage, is planned to be built to the Passive House Standard. Motivated by other recently completed Passive House schools in the UK, Carmarthenshire Council (the Local Authority client) are now keen to demonstrate the applicability of the Standard to schools in Wales, with the aim of ensuring economical long-term running costs for the Local Authority and a healthy environment for pupils and teachers that promotes learning. <u>Project details</u>



Image: Carmarthenshire County Council Development of Renewable Energy







# Latvia

#### Tiskadi school and dormitories

In Tiskadi, a school and dormitory building were refurbished to Passive House Standard. In addition to meeting these stringent energy criteria, the project fulfils special school and dormitory requirements for children with special health and educational needs. <u>Project details</u>

#### Ergli Vocational Secondary School

The service hotel of Ergli's Vocational Secondary School was refurbished using Passive House components. This project stands as an example of excellent energy and ecology standards in refurbishments and illustrates the benefits of improved living quality. The development of this Ergli Vocational Secondary School has also helped improve the educational infrastructure for the entire Ergli region. <u>Project details</u>



Ergli Vocational Secondary School; source: www.passreg.eu

Additional beacon projects can be found on the <u>PassREg website</u>.

# Certified Passive House Tradesperson course material

High levels of workmanship and attention to detail are required to achieve Passive House in practice. To provide craftspeople with the skills needed to implement such high levels of energy efficiency, the <u>Passive House Institute</u> has developed a set of course materials to train and certify Passive House <u>Tradespeople</u>. Courses are offered in various countries worldwide. Within PassREg, the material, previously only available in German and English, is being translated into all partner languages and adapted to regional climatic conditions and building traditions. The Bulgarian and Latvian translations are already available; the Italian, Dutch, French and Croation versions will soon follow. In addition to the PassREg languages, the course material has been translated into Korean while the Spanish and Polish versions of the material are currently in the making. <u>Read more</u>

### 2014 Passive House Award



The race is on for the <u>2014 Passive House Award</u>, organised within PassREg to showcase leaders in the field of energy-efficient construction from around the world. Competition entries may include single buildings as well as entire districts or regions. An independent jury will evaluate the architectural design and urban planning aspects of the submitted projects with special attention given to the use of renewables in sustainable energy supply concepts. The submission deadline is **30 September 2013**. Winning projects will be awarded at the International Passive House Conference next April in Aachen, Germany. <u>Submit a project!</u>

www.passivehouse-award.eu

### Help desk and PassREg experts

All those looking for specific answers relating to PassREg themes such as renewable energy supply in Passive House neighbourhoods, quality assurance, policy models, funding schemes or communication strategies may turn to the <u>PassREg Help Desk</u>. Additional resources can be found through the growing network of currently over 60 PassREg experts. These experts, representing a wide range of professional backgrounds and languages, are







volunteering to offer individual advice in their respective fields of expertise. PassREg experts can be found via the Help Desk and the PassREg Network Search.

# Informational material

A series of informational materials, including project pamphlets, posters and presentations promoting regional Passive House solutions with renewable energies are now available in all partner languages (English, German, French Italian, Dutch, Croatian, Bulgarian and Latvian). The pamphlets are available in 7 different versions, providing tailored information for different stakeholder groups such as politicians, financiers, component manufacturers, architects and craftspeople. All materials are available for download on the <u>PassREg website</u>.

# **PassREg events**

# Project workshops, study tours and partner meetings

Regular project workshops, study tours and partner meetings are organised in different regions involved in the project. These meetings offer participants the chance to present key project activities, discuss the latest findings, visit beacon projects in the area and get a first hand impression of the models on which the project is based.

The kick-off meeting and first project workshop, held from 6 to 8 May 2012, took place in Hanover, Germany, one of the front runner regions featured in the PassREg project. The meeting was provided the necessary start to a project that aims to provide the impetus necessary to take Passive House with the integration of renewables mainstream across Europe.

From 2 to 4 October 2012, representatives of PassREg partner countries convened in Brussels, Belgium to learn from the Brussels experience. The Brussels Capital Region has seen a literal explosion of Passive House construction and legislation over the last few years leading up to a law stating that, by 2015, all buildings built in the Brussels Capital Region will have to be Passive House buildings.

The latest developments and project findings were discussed in the context of the 17th International Passive House Conference, held in a further frontrunner city of Frankfurt. Frankfurt's leading role in energy-efficient construction is evident: with effective policy support, more than 1600 apartments, as well as numerous schools, kindergartens and other nonresidential buildings have been built to the Passive House Standard so far. A series of study tours offered participants the opportunity to visit completed and ongoing construction and renovation projects in Frankfurt and Heidelberg. In Heidelberg, another frontrunner region investigated within the PassREg project located just 100km south of Frankfurt, an entire city district with an area of 116 hectares is currently being built in accordance with the Passive House Standard.



Participants of the PassREg Kick-off Meeting; photo: Passive House Institute

The next project workshop, study tours and partner meeting will take place in Innsbruck, Austria from 9 - 11 October 2013, offering an opportunity to learn about the front runner model of Tyrol.

Interested stakeholders are welcome to attend project workshops and study tours; politicians are expressly invited to do so. Please contact the PassREg Team, below, for more information.







## Train the Trainer course for future trainers of Certified Passive House Designers and Tradespeople

Qualified designers and craftspeople are key to the large scale implementation of Nearly Zero Energy Buildings. Within PassREg, existing courses for Passive House designers and tradespeople, previously developed by PHI, are being translated into various European languages and adapted to regional climatic conditions and building traditions. In order to ensure that these trainings will be rolled out on a large scale beyond the three year duration of the PassREg project, future course providers from different EU countries are being trained to hold these courses throughout Europe.



Future Passive House Designer and Tradesperson trainers in Cesena; photo: Passive House Institute

The first round of Train the Trainer courses was held in Antwerp (Belgium), Cesena (Italy) and Sofia (Bulgaria) between March and June 2013 where a total of 60 future trainers were trained. Such courses are typically structured as two-day events and consist of three parts: Passive House knowledge, course information and teaching techniques. All those interested in becoming accredited Passive House Designer and Tradesperson Trainers themselves are invited to contact the PassREg team (below) for more information.

## International Passive House Days

From 9 – 11 November 2012, owners and residents of Passive House buildings throughout the EU and worldwide opened their homes and offices to share their experiences and show what Passive House is all about. Within this context, visits to beacon projects were offered in all PassREg regions, and workshops and info sessions were held to inform on the experiences and findings gleaned through these projects.

The Passive House Days, taking place internationally during the second weekend in November every year, provides the perfect opportunity for anyone wishing to experience the benefits of highly energy efficient building first-hand.

The 2013 International Passive House Days will take place from 8 – 10 November 2013.

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## **Project partners:**

BRE | United Kingdom, Municipality of Burgas | Bulgaria, Municipality of Zagreb | Croatia, Municipality of Cesena | Italy, Dubonetwerk Foundation | Netherlands, Eneffect Group | Bulgaria, IG Passivhaus Tirol | Austria, Latvian Environmental Investment Fund (LEIF) | Latvia, NOBATEK | France, Passiefhuis-Platform vzw (PHP) | Belgium, Plateforme Maison Passive asbl (PMP) | Belgium, proKlima | Germany, end use Efficiency Research Group, Politecnico di Milano (eERG-PoliMI) | Italy.







www.passreg.eu

