



Visitors to Marischal College are welcomed by a Build with CaRe plaque over the reception desk.

From historic to environmentally sustainable

Aberdeen, UK

When Aberdeen City Council needed new corporate headquarters, the eye fell on Marischal College – a 105-year-old building left unoccupied for 12 years.

Some two-thirds of the world's second largest granite building has been leased from the University of Aberdeen for 175 years for just £4.7 million (€ 5.5 million) to create the new offices. Retention works began in 2008 and the City Council administration is now settled in 16 200 m² of modern, open-plan, efficient and sustainable office space.

The pale high-quality Kemnay granite façade was restored to its original glory by scrubbing off 100 years of grime to leave the building looking much as it would have done when it was opened by King Edward VII in 1906. In accordance with high environmental ambitions, a total of 90% of 4 900 tonnes of construction materials have been recycled.

The building has been officially rated “excellent” for its environmental sustainability, with a biomass boiler providing a quarter of its heating, the widespread use of natural light, and a ‘smart’ lighting system which senses movement and switches on in response. The building also

features cycle racks, changing rooms and showers in the lower ground floor to encourage staff to use sustainable forms of transport to work – and Marischal College could be linked up in future to the City Council's energy-efficient district heat and power system.

The transformation of the historic building, which has involved 565 000 man-hours of work, has been completed on schedule and under budget. The original budget was set in 2006 at £80.4 million (€ 95 million) but now looks likely to involve capital expenditure of around £65 million (€ 76 million).



Advocating energy efficient development



In the important process of making energy efficient buildings the norm in Europe, Build with CaRe is supported by three Members of the European Parliament. We are proud of having MEPs Jean Lambert (UK), Andrew Duff (UK) and Olle Ludvigsson (SE) as official ambassadors for Build with CaRe.

The aim is to integrate experiences from the project into the political debate, something that is much needed when targets of the up-coming Directive on energy efficiency are being threatened.

– It is an honour to be asked to serve as ambassador on such a progressive, innovative and important project as Build with CaRe, says Mrs Jean Lambert.

Ambassadors Olle Ludvigsson, Jean Lambert and Andrew Duff at BwC event during the EU Sustainable Energy week.

First green museum in the making

SOUTHEND-ON-SEA, UK

Construction works at Prittlewell Priory began recently and will be finalized mid-2012. Prittlewell Priory has a fascinating history stretching back to the 12th century when it was built as a medieval monastery and will now become the host of the UK's first green museum.

Follow the progress at <http://prittlewellpriory.com/> where you can also sponsor a brick in the restoration.

Making an impact in the East of England



Britta Stein from the Technical University of Hamburg-Harburg visiting the Norwich area

Transnational learning facilitated through Build with CaRe is having very real and important outcomes, helping to accelerate low-carbon construction in the UK.

Engaging with innovative enterprises in the East of England (Hastoe Housing and Broadland Housing in particular), University of East Anglia has brokered contact and facilitated learning about passive house developments in other partner regions. As a result, innovation and projects were

stimulated in the UK that would very likely not otherwise have happened to such low carbon standards: for example nearly 300 homes are now planned to be built to passivhaus standard in Norwich.

– Design, costs and quality of new low-energy projects have been transformed in just a few months, says Bruce Tofield, project manager of Build with CaRe at UEA's Low Carbon Innovation Centre.

Algae moving into the walls?

HAMBURG, GERMANY

The annual conference of Build with CaRe was held in Hamburg, Germany 3–4 November. Most partner organizations were represented and strategies for the following six months were laid out.

As part of the program participants made a study visit to partner organization IBA's exhibition centre where highly innovative energy saving concepts were presented.

How about sun curtains storing heat? Roof covering made of intelligent textile with integrated solar cells imitating plant movements? Or green algae acting as a built-in bio power plant in the façade? These projects are to be realized in Hamburg in the near future.



Happy participants at Build with CaRe study visit.

News in short



A bright, draught-free home with low electrical bills.

BUILDING ON EXISTING EXPERIENCE

The first passive houses in Sweden were built in 2001. Build with CaRe has been involved in evaluating these houses 10 years later.

The results show that the occupants are very satisfied in general and that the houses have aged well. The indoor climate is pleasant, though more easily controlled heating units were asked for as well as training opportunities. There are always lessons to be learned, and in order to make sure that an initially low energy use does not increase in the future, evaluation of existing buildings are key to finding strengths and weaknesses.

NORTHERN GERMAN PASSIVE HOUSE CONFERENCE A SUCCESS

The 3rd Northern German Passive House Conference which took place on 31 August in Hamburg, had more than 280 participants from all five Northern German Federal States: Schleswig-Holstein, Hamburg, Bremen, Lower Saxony and Mecklenburg-West Pomerania.

The national pilot project for Plus Energy Houses was presented and participants discussed best practice examples as well as refurbishments, technical innovations, marketing and urban development strategies.

OPEN DOORS BECOMING A TRADITION

The Passive House Days are held all over the world with open doors to private homes as well as public buildings. Several Build with CaRe partners have adopted the concept and now organize Passive House Days yearly – and intend to keep on doing so. This year the Passive House Days were held 11–13 November.

AWARD NOMINATION FOR CARE

The Build with CaRe publication CARE magazine was among five finalists nominated for the 2011 Swedish Publishing prize for info magazines.

CARE Magazine presents best practice examples of energy efficient buildings and has been published in English, Dutch, German and Swedish and is available at the Build with Care website.



NEW STAFF MEMBER

The newest addition to the Lead Beneficiary staff at Region Västra Götaland is Project Manager Hanna Katarina Nyroos. She started working for Build with CaRe in September.



Build with CaRe is a project partly funded by European Regional Development Fund. Investing in the future by working together for a sustainable and competitive region.

www.buildwithcare.eu



Build with CaRe is a project partly funded by European Regional Development Fund. Investing in the future by working together for a sustainable and competitive region.

www.buildwithcare.eu



Region Västra Götaland, Sweden
Hanna Katarina Nyroos
hanna.nyroos@vgregion.se
Marketing and Publicity

Aberdeen City Council, UK
Amy Smith
AmySmith@aberdeencity.gov.uk
Planning and Policy

Dundee College, UK
Fiona Jurk
f.jurk@dundeecollege.ac.uk

Southend, UK
Amy Roberts
AmyRoberts@southend.gov.uk

University of East Anglia, UK
Bruce Tofield
b.tofield@uea.ac.uk
Evidence base incl. life cycle analysis

West Suffolk College, UK
Elizabeth Bray
elizabeth.bray@wsc.ac.uk

Oost Vlaanderen, Belgium
Mia Versijpt
Mia.versijpt@oost-vlaanderen.be

Gemeente Groningen, Netherlands
Janneke Sikkema
sikkema@pau.nl

Provincie Groningen, Netherlands
Brigitte Melberger
B.Melberger@provinciegroningen.nl

Noord Beveland, Netherlands
Tom Vermin
t.vermin@noord-beveland.nl

Innovationsstiftung Schleswig-Holstein, Germany
Winfried Dittmann
dittmann@i-sh.org

AZB, Ausbildungszentrum Bau in Hamburg GmbH, Germany
Jens Schwarz
Jens.schwarz@azb-hamburg.de
Education and Training

Technische Universität Hamburg-Harburg, Germany
Ing. Habil H-J Holle
h-j.holle@tuhh.de

Staatliche Gewerbeschule für Bautechnik (G19), Germany
Ernst Lund
Ernst.lund@bbs.hamburg.de

Internationale Bauausstellung Hamburg GmbH (IBA), Germany
Caroline König
caroline.koenig@iba-hamburg.de

ZEBAU Zentrum für Energie, Bauen, Architektur und Umwelt, Germany
Jan Gerbitz
Jan.gerbitz@zebau.de

Bremer Energie Konsens GmbH, Germany
Sonja Kurtze
kurtze@energiekonsens.de

Stadt Oldenburg, Germany
Roland Hentschel
Roland.hentschel@stadt-oldenburg.de

EVENTS

10 – 13 Nov	International Passive House Days	Europe
11 – 12 Jan	Build with CaRe meeting: Demonstration workshop of e-learning tool for house construction (preliminary dates)	Dundee/Aberdeen, GB
End of February	Build with CaRe Final Conference	Brussels, BE
1 – 2 March	World Sustainable Energy Days	Wels, AT
4 – 5 May	16th International Passive House Conference 2011	Hannover, DE
18 – 22 June	European Sustainable Energy Week	Brussels, BE

NEWS

Visit our website www.buildwithcare.eu for more news on energy efficient buildings.



Build with CaRe is a project partly funded by European Regional Development Fund.
Investing in the future by working together for a sustainable and competitive region.

www.buildwithcare.eu