



CIB NEWS ARTICLE

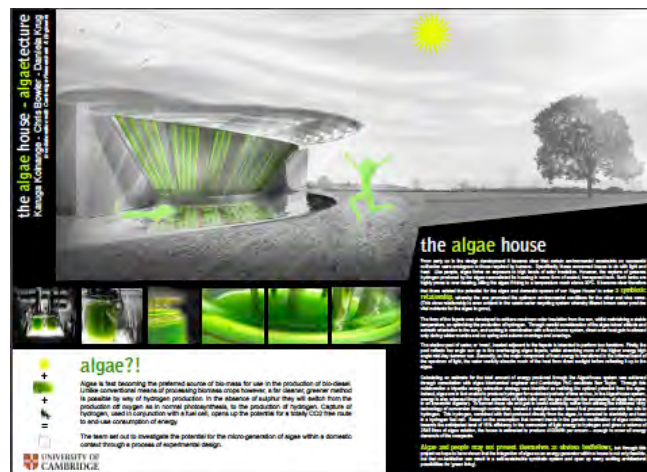
International Council for Research and Innovation
in Building and Construction

Providing a global network for international exchange and cooperation in research and innovation in building and construction, in support of an improved building process and of improved performance of the built environment.

July 2009

CIB Endorsed Student Chapters

CIB Student Competition at SASBE2009



Twenty seven teams and individual students from various countries submitted entries for the CIB Student Competition. The competition was designed to attract the very best student ideas on a sustainability challenge so that they could be presented at SASBE2009 as part of the conference.

The challenge was to propose a concept for a living area or single home that produces sustainable energy equivalent to its energy consumption. This includes energy for mobility, operation of buildings, product and food production, and so on.

Solutions for sustainable living beyond energy neutrality were proposed from component scale to complete city scale, including a number of interesting concepts for single households.

From these entries the best five were selected for further development (assisted by a small financial contribution per team from CIB) and final presentations at SASB2009. The free attendance of the finalists at SASBE and their opportunity to present in person, were assisted by part of CIB's contribution to the competition.

The five finalists were:

- "Edible terraces" by Anthony Campbell and James West (Manchester Metropolitan

University) presented a concept for a single household that is self-supporting in energy and food and also dealt with waste and water.

- "360+1 Post-Oil City" by Julia Hidalgo Casanueva, Nels Olaf Nelson and Chris-Marije Westerink (Wageningen University) showed an ingenious design of an energy-neutral city using geothermal energy in a cascade where high-caloric energy is used first by industry followed by lower-caloric energy in greenhouses and homes. Solutions for mobility, water and sanitation were proposed as well.
- "Green living Algae inhabitation" by Chris Bowler, Karuga Koinangeand Daniela Krug (Cambridge University) showed a high-tech dwelling with a half-round algae façade producing hydrogen as an energy source for the house and for mobility.
- "Green Points" by Pieter Stoutjesdijk (Delft University of Technology) gave a solution for existing Dutch housing that are upgraded to self-supporting units.
- "Polder Invasion" by Federico Curiel (Polytecnico di Milano) created sustainable solutions on different levels in the energy demand, where all energy is produced by micro-algae.



The judging panel, which included Crown Prince of the Netherlands Willem-Alexander of Orange, who took a particular interest in the competition and talked to the finalists, unanimously selected the team of three students from Cambridge University as the winner. The team's energy-producing algae dwelling ("algaetecture") was judged to be the best in a very strong field of finalists. The illustrations in this paper are all about this winning submission.

The winning team received its award on the closing day of the conference. In presenting the Award (worth 2000 Euros), Dr Bill Porteous, Assistant Secretary General of CIB, commented on the way the finalists had acknowledged in their presentations what they had learned from each others' entries. He felt they had demonstrated the very best spirit of collaboration and information-sharing that fosters innovative thought.

Presentation

The presentations in poster format of the five finalist are included in the SASBE2009 Proceedings, about which a separate News article can be found [here](#).

Additional Information

For further information please contact:
 Dr. W. Porteous
 Assistant Secretary General
 Email: bill.porteous@cibworld.nl

