innovations for sustainability and humanity in the built environment

Press Release

London / Dornbirn, 23 September 2014

Zumtobel Group Award 2014 goes to Arup of Germany, Studio Tamassociati of Italy and Elemental of Chile

London / Dornbirn — The international expert jury for the Zumtobel Group Award 2014 has selected projects from Arup of Germany, Studio Tamassociati of Italy and Elemental of Chile as the winners in their respective categories. The results were announced by the chairman of the jury Winy Maas and jury member Kunlé Adeyemi at a press conference last night. To promote innovations for sustainability and humanity in the built environment, the Austrian lighting group had invited submissions for the award in three categories: APPLIED INNOVATIONS, BUILDINGS and URBAN DEVELOPMENTS & INITIATIVES. The jury had initially selected 15 projects as nominees from among the 356 submissions for the fourth Zumtobel Group Award, which was again curated by Aedes Architecture Forum in Berlin.

The winning projects are marked by their innovative and ground-breaking character: "The voting to find the number one project was very close in all three categories, because in each case we were able to choose from among a large number of heterogeneous projects of high quality," said the chairman of the jury, Winy Maas. "One key criterion for the jury this year was the innovation factor, both in a technical sense and with a view to planning and participation processes as well as ecological and social challenges."

Winner in the APPLIED INNOVATIONS category: SolarLeaf with Arup Deutschland GmbH

In the APPLIED INNOVATIONS category, the jury awarded first prize to the SolarLeaf façade codeveloped by Arup Deutschland GmbH. The SolarLeaf façade is a building-integrated system that absorbs CO₂ emissions and produces biomass and heat. The generation of these renewable energy resources is based on the biochemical process of photosynthesis and the cultivation of microalgae in flat-panel photo bioreactors which require no additional space and are largely immune to the weather conditions. The façade system was developed by Arup Deutschland in collaboration with SSC Strategic Science Consult GmbH and Colt International GmbH, with subsidies from the federal research initiative ZukunftBau. The system was first installed in a four-storey residential building that was designed by SPLITTERWERK architects for the 2013 International Building Exhibition (IBA) in Hamburg. The *SolarLeaf* façade can play an important part in establishing zero-carbon building clusters that generate surplus energy.

Explaining the reasons for their choice, the jury said: "In the future we need to develop buildings which don't just offer shelter and minimise energy consumption but also try to deliver answers to how we provide the urban environment with energy, water and better air quality. The SolarLeaf façade is an outstanding example here in that it generates energy without taking up additional space. This project is especially valuable because for the first time we have an application that actually works in an existing building."

Winner in the BUILDINGS category:

Port Sudan Paediatric Centre by Studio Tamassociati, Italy

The winner of the Zumtobel Group Award 2014 in the BUILDINGS category is the Studio Tamassociati architectural practice from Venice. They were commissioned by the Italian NGO "Emergency", which provides free medical treatment to civilian victims of war, landmines and poverty, to build a children's hospital in Sudan. Located in the strategically important city of Port Sudan, the clinic is one of the few facilities to provide free care for children in the region. In the prevailing extreme conditions – the hot desert climate and the political instability of the country – simplicity was the overriding design principle. Relying on the use of new and old technologies, the architects developed a system for cooling, air treatment, recycling, reallocation of local materials, landscape design and energy saving. The need to

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purify waste water from the centre presented an opportunity to build public gardens, which are the only public spaces around. These gardens represent an important part of the healing process for patients.

Explaining their choice of the Port Sudan Paediatric Centre, the jury said: "In this project you can see right away that it responds to a social agenda. It makes a valuable contribution to the medical and social care of the local people and its holistic design process is very much in the spirit of the Zumtobel Group Award. The outcome is an ambitious design that is focused primarily on its practical purpose, without neglecting architectural, sustainability and aesthetic considerations."

Winner in the URBAN DEVELOPMENTS & INITIATIVES category: PRES Constitución by Elemental, Chile

First prize in the category URBAN DEVELOPMENTS & INITIATIVES in the Zumtobel Group Award 2014 goes to the architectural practice Elemental for its master plan for the sustainable reconstruction of the city of Constitución in Chile. In 2010, Chile was hit by an earthquake followed by a tsunami. Constitución was destroyed by waves up to 12 metres high. Elemental was given just 100 days to come up with a master plan for the reconstruction of the city, which would also provide protection against future natural disasters – not only tsunamis but also seasonal flooding. In their concept, Elemental delivered a natural solution: planting a forest that would protect the city from future floods. In addition to the empirical evidence from the most recent tsunami, the architects relied on mathematical models and laboratory trials. Implementing their master plan proved very challenging both politically and socially, because it required the city to expropriate private land along the riverbank. Elemental's successful approach was to rely on participatory design to define the citizens' needs and engage them in the planning process. Today, four years after the earthquake, the individual projects from the master plan are being implemented.

"In Constitución the population has managed to apply the necessary innovation to ensure its protection against future flooding. By adopting a bottom-up approach, in a very constructive way a joint decision has been reached regarding what the city should look like in the future. This exemplary concept is not restricted to Constitución, but could also apply in many geographies around the world that have been destroyed by natural disasters," said the jury, commenting on their selection in the URBAN DE-VELOPMENTS & INITIATIVES category.

The selection process for the Zumtobel Group Award 2014 comprised several stages. Early this year, from among all 356 submissions a pre-jury selected 15 projects from each category which were then presented to the main jury in May. The jury then nominated five projects per category. One winner was selected from the five nominated projects in each category. Each first prize carries a purse of €50,000.



Capture: The winners of the Zumtobel Group Award 2014

were announced at a press conference in the Serpentine Gallery in London last night.

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The results of the Zumtobel Group Award 2014 at a glance

The new **APPLIED INNOVATIONS** category, sponsored by the Tridonic brand, rewards innovations and technological solutions that make a trailblazing contribution to the realisation of a more sustainable built environment. In this category the award addresses technical universities, research institutions, individual engineers and firms of consulting engineers, as well as technology start-ups. Submissions could include innovations already proven in a prototype, test series or application in an actual project. From among 50 submissions in this category, the jury commended the following projects:

- 1. **SolarLeaf** in Hamburg (DE) a photo-bioreactor façade system: Arup Deutschland GmbH in cooperation with SSC Strategic Science Consult GmbH and Colt International GmbH, with subsidies from the federal research initiative ZukunftBau
- 2. **Bamboo Reinforced Concrete** an innovative renewable building material: Chair of Architecture and Construction Dirk E. Hebel Future Cities Laboratory, Singapore / ETH Zurich (CH)
- 3. **Re-Innovation of Rammed Earth by Prefabrication** use of rammed earth as a building material: Martin Rauch, LehmTon Erde Baukunst GmbH, Schlins (A)
- 4. **KONE UltraRope** elevator hoisting technology: KONE, Espoo (FN)
- 5. **The Lowline,** N.Y. (USA) use of fibre-optic technology to capture and distribute sunlight below ground: James Ramsey, New York City

In the **BUILDINGS** category, sponsored by the Zumtobel brand, submissions could include outstanding building projects that have been completed within the last two years (30 November 2011 - 30 November 2013). The winning project should meet the highest aesthetic standards and also feature innovative solutions that permit the more efficient use of resources, enhanced environmental protection and the creation of better living conditions. From among 146 submissions in this category, the jury commended the following projects (with three equal third places):

- Port Sudan Paediatric Centre a children's hospital in Port Sudan: Studio Tamassociati, Venice (IT)
- 2. **Vertical Gymnasium Santa Cruz Del Este**, Caracas (VE) a sport and community centre for urban redevelopment: **Urban-Think Tank**, Zurich (CH)
- 3. Corporate Office for Infrastructure Company, Hyderabad (IN) an office building with a double outer skin: Rahul Mehrotra Architects, Mumbai (IN) / Boston (USA)
- 3. **Housing Transformation**, Saint-Nazaire (FR) a renovation and transformation project in the social housing sector: Lacaton & Vassal Architectes, Paris (FR)
- 5. **House for all Seasons**, Shija Village (CN) a residential building in rural China: Rural Urban Framework, Hong Kong (CN)

The focus in the **URBAN DEVELOPMENTS & INITIATIVES** category, sponsored by the Thorn brand, is on projects and initiatives in an urban context: city development/planning strategies, master plans, public space projects and ongoing research projects and social initiatives. Entries could concern projects concluded within the last two years as well as ongoing projects and initiatives. The winning project from among 160 submissions will make a pioneering contribution to greater sustainability and quality of life, as well as presenting innovative potential solutions to the core issues facing urban development. In this category the jury commended the following projects:

- 1. **PRES Constitución** a master plan for the sustainable reconstruction of the city following the tsunami: Elemental, Santiago (Chile)
- 2. **ArchiAid: Architect Network to Support Reconstruction** a network supporting the rebuilding process after the tsunami in Japan: General Incorporated Association ArchiAid (JP)
- 3. **Megacity Skeleton**, Jakarta (ID) a housing prototype for high density residential areas: UNITYDESIGN / Chiba University / Research Institute for Humanity and Nature (JP) / University of Indonesia (RI)

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- 4. **Qunli Stormwater Park**, Qunli New Town (CN) a green sponge for a water-resilient city: Turenscape, Beijing (CN)
- 5. **Madrid Río**, Madrid (ES) locating the ring road underground and redesigning the urban landscape: Burgos & Garrido Arquitectos, Porras La Casta, Rubio & Á._Sala, West 8

Initiator

The Zumtobel Group with the Zumtobel, Thorn and Tridonic brands

Curators

Kristin Feireiss and Hans-Jürgen Commerell, Aedes Architecture Forum, Berlin

Jury

Kunlé Adeyemi Architect, NLÉ Shaping the Architecture of Developing Cities, Amsterdam (NL)

member of the Award jury in 2012, 2014

Yung Ho Chang Architect, Atelier FCJZ, Beijing (CN)

member of the Award jury in 2007, 2010, 2012, 2014

Brian Cody Chair of the Institute of Buildings and Energy, Graz University of Technology (AT)

member of the Award jury in 2010, 2012, 2014

Sejima Kazuyo Architect / SANAA, Tokyo (JP)

member of the Award jury in 2007, 2012, 2014

Winy Maas Architect / MVRDV, Rotterdam (NL)

member of the Award jury in 2012; chair of the jury in 2014

Ulrich Schumacher CEO Zumtobel Group, Dornbirn (AT)

new member of the Award jury in 2014

Rainer Walz Head of Competence Center Sustainability and Infrastructure Systems, Fraunhofer ISI

Karlsruhe (DE); new member of the Award jury in 2014

Downloads:

A catalogue with detailed descriptions of the 15 projects nominated for the Zumtobel Group Award 2014 has been published as part of the Aedes series. Please find the PDF attached to the press release: http://www.zumtobel-group-award.com/en/press.asp

Further information on the winning projects (including portraits and presentations of the winners):

Applied Innovations: http://www.zumtobel-group-award.com/en/856.htm

Buildings: http://www.zumtobel-group-award.com/en/848.htm

Urban Developments & Initiatives: http://www.zumtobel-group-award.com/en/849.htm

High resolution pictures of the winning projects, the winning teams, the jury and the nominated projects: http://www.zumtobel-group-award.com/en/downloadcenter.asp

Find the videos of the jury statements about the winning projects attached to the press release: http://www.zumtobel-group-award.com/en/press.asp

More information:

http://www.zumtobel-group-award.com

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