

BAU Campus Lab MEISTER

Mooving on!

Part II: Smart City – The Network City Winter Semester 2015/16

In the year 2050 more than two thirds of the world population will live in cities, according to the latest study of the UN.

The management of these megacities will require a maximum of networking on all levels: the supply of energy, infrastructure, mobility, healthcare, security, administration – briefly: the task is to provide a sustainable organisation of all areas of life for the 'Smart City' - the 'intelligent' cities of the future.

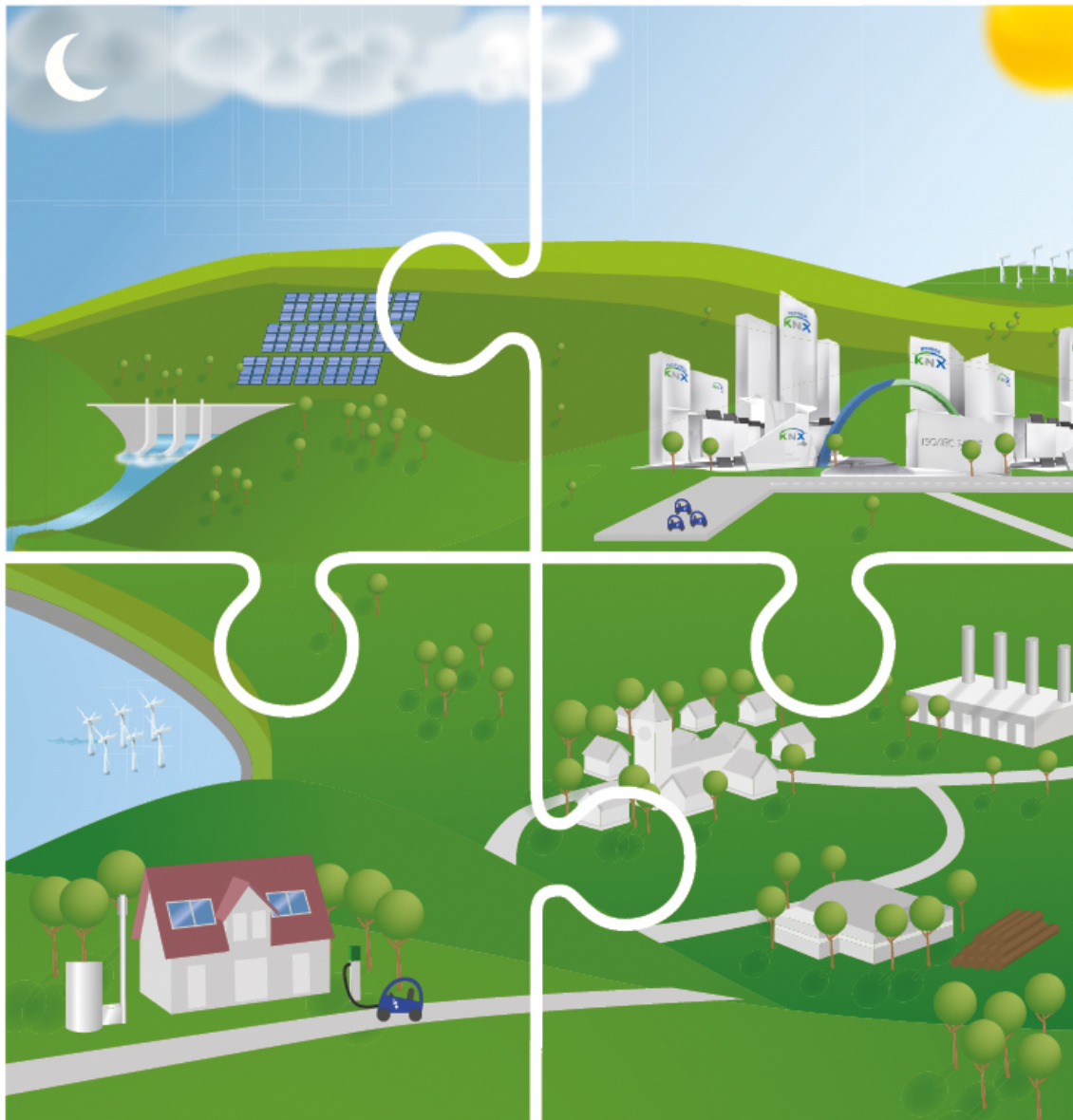
Baumeister '**CampusLab**' announces a competition for students, to create visions for an intelligent network of people, the city, architecture and technology.

The Subject

The systemic approach to a sustainable city

Urbanisation, shortage of resources and climate change are a huge challenge for our cities in the upcoming years. The centers of population are already responsible for two thirds of energy consumption today, 60% of water consumption and 70% of the greenhouse gas emission. And above all, the urbanization is going on continually. More than 50% of the world population lives today already in cities or urban zones. As mentioned above the outlook is that this percentage will rise up to 70% until 2050. So the battle against climate change and the destruction of our environment starts from the cities.

The sustainable development of our cities is the most important challenge of the near future. An essential precondition for the 'sustainability' of our cities are buildings, which are efficient, as they are still responsible for more than 40% of the worldwide energy consumption and therefore for 21% of the air pollution. In order to guarantee the sustainability of buildings, we need boundary transcending solutions, which combine buildings, mobility, supply of energy and infrastructure – as visualized in the following illustration.



Production of Energy

How will we produce the energy we need in the future? Of course, this should be predominantly renewable energy provided by natural sources like sun, water or wind.

Buildings

What does the building of the future look like? It is or should be energy-efficient and communicates with its surrounding (smart grid).

Mobility

How do we get from position A to B in the future? Of course, with vehicles or public transport which get their energy exclusively from renewable energy providers.

Infrastructure

How do we succeed in managing the energy supply of urban quarters or whole cities? Of course, by building spanning energy-management.

The Task

Please develop a vision for a 'smart' city in the not so far future and how it is going to look like. Our cities today are probably only cross-linked to one percent. How will all players' interact, when all the possibilities of networking are utilized? Which unexpected possibilities are maybe hidden in this challenge?

You will find some information to the 'state of the art' of present technology in two brochures, provided by KNX (www.knx.org), the global operating association of producers of house- and indoor-installation. This material can be used as inspiration or reference – but should not limit your ideas.

Requested Documentation

We expect a short film of maximum length of 3 minutes, which presents your ideas. The end-titles should include the title of the competition '**Mooving on! 2' – Baumeister CampusLab**, and the name of your university and department. For the making of the film, you can use every thinkable scope for design: video-clip, CAD-programms, animated storyboards, animated drawn sketches, even foto-series etc. – which film language you ever invent. The film should be uploaded on Vimeo or Youtube, to avoid problems with different data types. In addition we need a version of the original films as DVD or as USB-stick.

Participation and Awards

From the start of the winter-semester 2015/2016, assistant lecturers, professors and chairs in the field of architectural education are invited to register for participation. Please send the attached entry form to: c.haberlik@callwey.de. The deadline for application is October 31. Please note that the participation is only possible in combination with a mentoring chair. Only three results can be submitted per chair (either developed by single persons or teams).

The jury session will take place in February 2016. A total of three prizes and appreciations of 2.500 € (1. Prize: 1.400 €, 2. Prize 700 € and 3. Prize 400 €) will be assigned. In addition every participant will get a subscription for one year of the magazin Baumeister.

The awarded work will be published on the website of ‚Baumeister‘. The participants agree to the usage for advertising measures of the results by KNX and/or ‚Baumeister‘.

Entry deadline (Link, DVD or USB-Stick) January 7, 2016. The envelope must carry the date. Please send it to: Callwey Verlag, Redaktion Baumeister, Kennwort 'Mooving on!', Projektmanagement Christina Haberlik, Streitfeldstrasse 35, D – 81673 München.

We wish you good luck and pleasure too for your project 'Smart City'!