

CONFERENCE AND MATCHMAKING

THE FUTURE OF BUILDING - PROJECT VISITS IN VIENNA

Thursday, May, 18th 2017

TOUR 2 – INNOVATIVE BUILDINGS AND SOLUTIONS IN ASPERN SEESTADT



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www.seestadt-aspern.at/en

Aspern Seestadt, Vienna's Urban Lakeside, is Austria's largest construction site. In several phases over the next 20 years a city for the 21st century will take shape here in Vienna's 22nd municipal district on an area equivalent to 340 football pitches, accommodating high-quality living environment for approx. 20,000 people plus about the same number of workplaces.

In 2014, the first Urban Lakeside residents moved into their new homes. 2,600 housing units were built by 2016 for approx. 6,100 people, and the 50,000 sqm lake surrounded by the lakeside park, a shopping street, underground/metro links, the first wave of corporate residents and the neighbourhood management team office in the current Info Point premises was in place ready for their arrival.

Aspern Seestadt must fulfill the requirements of 21st-century lifestyles as well as meeting the City of Vienna's ambitious energy efficiency and climate protection goals. A responsible approach towards the environment is being given topmost priority throughout the entire project. Buildings at Aspern Seestadt have to "pass" the Total Quality Building (TQB) assessment of the Austrian Sustainable Building Council (ÖGNB) with a minimum score of 750 out of a possible 1,000 points. Besides criteria such as cost effectiveness, furnishings and appointments, health and comfort, the assessment also takes into account other factors such as: energy, utility installations, building materials and resource efficiency.

Tour 2 – Innovative Buildings and Solutions in Aspern Seestadt will provide you with the latest information on projects which are planned or already realized in Aspern Seestadt. These projects deserve a special mentioning due to their innovative, unique and or sustainable concept.

09.00 – 09.30 MEETINGPOINT U2 SEESTADT | EXIT DOWNSTAIRS

Welcome & Introduction

09.30 – 09.45 WALK TO HOHO TOWER

09.45 – 10.30 HOHO TOWER



Looking at HoHo Vienna from the outside, reminiscent of huge wooden blocks with tree bark as a facade; the naturalness and, above all, the visibility of the wooden surfaces in the interior, are part of the core idea for the additional noticeable improvements and new tangible experience of the element wood, in the world's tallest wood structure high-rise. The HoHo Vienna is not only visually appealing, it also proves creativity when it comes to the use of space. The modular office structure allows individuality, and it can be modified at any time, transforming it without a lot of effort. 24 floors and roughly 84 meters height, the requirements of efficient use, fire protection and structural planning are particularly sensitive to the plan. The deliberately simple construction system uses the stacking of four prefabricated serial components: columns, main beams, deck slabs and facade elements.

The base surface of wooden composite ceilings, which are based on wooden supports in the final facade layer are attached to the core load-bearing structure of reinforced concrete. The wooden supports, in turn, form a common mounting element with the prefabricated outer wall modules made of solid wood, as well as the isolated exterior panelling in "earthy tones". HoHo Vienna is being build according to the TQB (Total Quality Building) evaluation system of the ÖGNB. Thus the wooden structure quality is documented and certified in all stages from planning, through construction, to use.

Groundbreaking was in October 2016. The HoHo Tower is planned to be completed by spring 2018.

www.woschitzgroup.com; www.lainer.at/

10.30 – 10.35 WALK TO GREENHOUSE | Sonnenallee 41, 1220 Vienna

10.35 – 11.15 LECTURE WEATHERPARK AT GREENHOUSE

"Well-being in the city" - this is the mission of the meteorologists and technicians at *Weatherpark*. Their aim is to establish pleasant wind and human comfort conditions as well as a comfortable microclimate in cities and districts.

For the new urban district in Vienna's Urban Lakeside "Seestadt Aspern", *Weatherpark's* experts analysed the wind comfort conditions on pedestrian level and developed measures, not only around the tallest high-rise timber building of the world, the HolzHochhaus "HoHo Tower", but also for the master plan.

They also looked into the diagnosis of wind conditions along facades and on the roof of the Federal School in Aspern to find out which sun protection device would be suitable for the wind conditions along the facades.

Consulting services regarding choice of suitable sun blinds then followed.

www.weatherpark.com/en

11.15 – 12.00 GREENHOUSE | Sonnenallee 41, 1220 Vienna



For the first time, three holders' merge to realize a trendsetting project in a new district– the student dormitory GreenHouse, a high energy efficient passive house. The energy sources of the future– solar energy, wind energy and geothermal energy– are mirrored in three houses– Sun (OeAD), Air (WBV-GPA), Earth (ÖJAB). The linking element is water; here you will find common rooms and hallways. The student dormitory offers a sophisticated choice of various types of rooms– shared apartment rooms, single and double bedrooms. On each level you can find a common room for cooking or learning,

partly arranged with loggia. At the ground level there are music rooms, conference rooms, meditation area, fitness rooms, sauna and downstairs multi-purpose room, a launderette and a bicycle storage. The GreenHouse is conceived as a passive house with the goal to be the first zero-energy-dormitory worldwide– the attached monitoring will show whether the objective can be achieved.

<http://housing.oead.at>

12.00 – 12.15 WALK TO EDITH-PIAF-STRAÙE

12.15 – 12.45 PROJECT PRESENTATION | Vera Layr | City of Vienna

“VIENNESE MODEL FOR THE INFILTRATION OF ROAD WATER”

The "Viennese model" uses a dual system for dewatering the surface waters, whereby the chlorine-contaminated waters are discharged into the sewer and the slightly polluted streams are discharged into a percolation trap.

The model is being built in the Edith-Piaf-Strasse of Aspern as a pilot plant. An accompanying monitoring by BOKU (University of Natural Resources and Life Sciences, Vienna) is provided.

The preparation is almost finished. The project will start in summer 2017.

12.45 – 12.50 WALK TO SEESTADT KANTINE

12.50 – 13.50 LUNCH AT SEESTADT KANTINE | Sonnenallee 1, 1220 Vienna

13.50 – 14.00 WALK TO ASPERN IQ

14.00 – 14.45 LECTURE ASPERN SMART CITY RESEARCH | Aspern IQ

Aspern Smart City Research GmbH & Co KG (ASCR) is a joint venture between a network operator, an energy generation and supply company, a technology company and the City of Vienna. This cooperative partnership was established to develop some of the technical solutions that are required for the future energy environment and especially in a new real life urban district with active customers. This involves innovative approaches towards building automation systems and using the energy flexibility of buildings and the energy market in ways that enable residents to cooperate and accept the new systems. Furthermore, optimal methods are being developed to capture detailed network status data and also use it for network planning. All these solutions are based on comprehensive ICT, testing and developing convenient big data models, and suitable analytics.

www.ascr.at/en

14.45 – 15.45 PUBLIC TRANSPORT TO THE CITY

15.45 – 16.45 SMART CAMPUS | Erdbergstraße 236, 1110 Vienna



The Wiener Netze (Viennese electricity provider) built the Smart Campus according to the 'passive building' standard as its new corporate head office in Vienna's 11th municipal district. The building will also be certified according to the Austrian Green Building Council (ÖGNI). An office building with warehouses and workshops, as well as a garage for parking lorries with its own workshop and the company's own filling station, are erected on a developed site of about 35,000 sq. m.

The main building comprises a basement, the ground floor and four upper floors (1st to 4th floors). The operational function that includes the stores and workshops is housed in a two-storied plinth (ground floor and 1st floor). The administration (i.e., offices) is situated in the wings between the workshops, which have grassed rooftops (2nd to 4th floors).

The Smart Campus have a gross floor area of about 100,000 sq. m. and is the largest building in the world that is erected according to the 'passive building' standard, which complies with the relevant energy standards: this means that the building's primary consumption of energy is less than 120 kWh / sq. m. This building is intended to extract as much environmentally compatible energy as possible from the natural resources that exist on the site, such as the ground water and solar energy. About 60% of the demand for energy is covered by these alternative sources as a result; the remaining 40% is provided by economically utilizing electricity that is supplied from the mains.

www.porr.at

16.45 – 17.00 WALK TO UNDERGROUND STATION | END OF TOUR | individual departure