BUSINESS DEVELOPMENT
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Report on 16+1 Forestry: Workgroup on Nearly Zero Energy Wooden building

Time: 11:00-14:30, May 25
Avenue: Crowne Plaza Tianjin Meijiang
Moderator: Matija Tomc (Remty-R d.o.o.)

CEEC Delegates:

1. Jure Tomc, JT Business Development,
2. Kramar Marko,Slovenia, Kramar Marko Architects, CEO
3. Erklavec Miha, Slovenia, SILON d.o.o., CEO
4. Roženičnik Korošec Mojca, Slovenia, Faculty of Civil Engineering, Transportation Engineering and Architecture, BIM consultant
5. Tomc Stane, Slovenia, Remty-R d.o.o., Director
6. Tomc Matija, Slovenia, Remty-R d.o.o., Business Development Manager
7. Luminita Maria Brenci, Assistant proffessor, Universitatea "Transilvania" Brașov
8. Henn Korjus, professor of Estonian University of Life Sciences
9. Matthew Schwarzkopf, Assistant Professor at University of Primorska, Andrej Marušič Institute (Slovenia)
10. Matevž Vrhovnik, Slovenia, Alfa Natura d.o.o., Director
11. Jan Ruzicka, Chech, Czech Technical University in Prague, Faculty of Civil Engineering, Assistant professor, Researcher

Chinese delegates:

1. He Jianqing, PhD in Architecture / Professor, CTO, China National Engineering Research Center for Human Settlements
2. Li Jie, Researcher, Coordinator of International Cooperation project, China National Engineering Research Center for Human Settlements
3. Cao Ying, Senior Engineer on HVAC, Director of Information Model & Digital Resource Research Department, China National Engineering Research Center for Human Settlements
4. Ju Xiaolei, Senior Architect, Director of Solar building technics research Department, China National Engineering Research Center for Human Settlements
5. Lu wenming, director,International Cooperation Department of China Academy of Forestry
6. Wang Zishan, Officer of International Cooperation Project, China Academy of Forestry
7. Lei Jingpin, Doctor, Sustainable development research center, China Academy of Forestry

8. Ma Chunyan, Director, Beijing Scientific and Cooperation Centre
9. Liu Lingzhi, Researcher, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences
10. Lv Penghui, Chairman of the board, Tianjin Kerida incubator
11. Wang Xin, Director, Hebei University of Technology
12. Liu Li, Chief Engineer, Tianjin Hitech Environment Co., Ltd.
13. Zhu Li, Director, APEC Sustainable Energy Center
14. Yan Zhexing, PhD, APEC Sustainable Energy Center
15. Aleassandra casu, APEC Sustainable Energy Center
16. Han Rong, China Passive Building Alliance
17. Wang Jiali, China Passive Building Alliance
18. Wang Lingling, School of Architecture, Tianjin University
19. Gong Xiaolei, School of Architecture, Tianjin University
20. Zhang Mu, School of Architecture, Tianjin University
21. Wang Jianting, Vice-principal, Tianjin Chengjian University
22. Yu Hongbing, Professor of Nankai University
23. Zhou Zhihua, Professor of Nankai University

Primary objective:

Connect partners in the fields of architecture, engineering, production, design and construction of smart one or multi-storey/high rise buildings and structures with focus on nearly zero energy (nZEB) or plus energy designs all according with EPBD-Recast (2010/31/EU) with state-of-the-art supporting HVAC systems (heating, ventilation, air condition) and BMS - building management systems (shading, lighting,etc.), low-ex technologies (free cooling, free heating, weather predicted operations) etc.

Build pilot projects in China with the latest technologies and know-how, build up skills to support further implementation and development of such projects, build platforms for investors and interested parties to exchange projects, technologies and information, research the similarities and differences between CEE and China regulations governing nZEB development and construction.

Activities:

1) organisation and building of pilot and demonstration nearly zero or plus energy wooden buildings in various regions and climatic conditions including advanced monitoring systems

2) designing platforms for education, trainings, mobility, on-side skill development for wooden nearly zero or plus energy buildings engineering and construction including design for possible disassembly

3) joint R&D, design and engineering projects for high rise wooden buildings

4) technology exchange in 16+1 for wooden buildings design and production

5) organisation of joint promotional and demonstration events, showcasing of good practices, promotion of project achievements, presentation of 16+1 partners, industrial solutions and products

6) preparing a design guidance for promoting human health with interior wood use, natural illumination, improved indoor air quality including control and filtration of PM2.5 and PM10, ergonomic and adaptable comfortable interiors

7) organizing innovative ways for faster gathering and development of ideas, cross-country exchange of experts, their knowledge, connections between industry/market issues and possible solutions providers, fast-forwarding innovative ideas from idea to implementation

Workgroup on wooden nZEB talks:

- 11:00-11:05 Opening remarks by Jure Tomc, JTBD, representative of Republic of Slovenija in the 16+1 Forestry nZEB workgroup
- 11:05-11:20 Development of nZEB in China by Dr. Yan Zhexing, APEC Sustainable Energy Center
- 11:20-11:35 Presentation of 16+1 Framework by Lu Wenming, director of International Cooperation Department of China Academy of Forestry
- 11:35-11:55 EU good practices in developing nZEB frameworks and support systems by Stane Tomc, director and owner of Remty-R Ltd.
- 12:10-12:25 Forestry cooperation between China, Baltic and Nordic countries by Henn Korjus, Professor of Forest Management and Forest Policy, Estonian University of Life Sciences, Tartu, Estonia
- 12:25-12:40 Presentation of InnoRenew CoE-reserch, development, and innovation in renewable materials use, with a focus on supporting the circular economy and providing positive health benefits in buildings by Matthew Schwarzkopf, Assistant Professor at University of Primorska

13:10-14:30 Workgroup roundtable discussion on nZEB:

Proposed issues:
- Chinese knowledge on nZEB (current status, the development so far, good practices…);
They already built several pilot Passive houses and later nZEB in asociation with Dr. Feist of PHI. Conclusion: There is a potential to build more pilot nZEB and wooden nZEB projects.

- How familiar are Chinese experts with EU nZEB legislation? - What is the current legislation regarding nZEB and any future developments of it?
Chinese experts are well familiar with EU nZEB legislation. There is no unified position between Chinese nZEB experts on which practices or materials to use in nZEB. There are no unified guidelines. Conclusion: Create expert focus groups among 16+1 on this subject.

- Are there any subsidies available and if yes, how do they work? Who is responsible for creating subsidy programmes? **- Are there any financial support systems for energy restoration of existing buildings?**
There are many subsidies available. We do not know which ones exactly and who is responsible for creating the programmes. Chinese investors are not using goverment nZEB subsidies. Chinese delegates didn't have an unified position on what is creating the bottle neck in this field. Conclusion: Create expert focus groups on this subject.

- How do local provinces see wood as a construction material?

China has some problems regarding using wood as construction material. Some provinces are more in favor of using wood than the others. Conclusion: Find out which provinces are in favour of using wood as construction material.

- What are the obstacles for further development of nZEB buildings in China?

Investors are not using goverment nZEB incentives. There is no unified expert position on nZEB technology. Life span of nZEB is a major concern(100 years building warranty). Conclusion: Create expert focus groups on this subject.

- Are they looking at good practices?

Chinese are looking for good nZEB practices abroad, especialy multiple story wooden nZEB. Conclusion: Invite Chinese experts and investors to Slovenija. Create pilot wooden nZEB highrise project in Slovenija.

- How do local universities train their students in new technologies connected with nZEB?

Haven't touched the subject.

- Are there any pilot projects and if we can get access to it?

There are more than 50 pilot nZEB project in China. We visited one of them in Beijing. We are not aware if there are any wooden pilot nZEB project built jet.

- How can China and Europe cooperate in this fields?

Proposed by CNERC:

1. R&D on Technologies, tools & products
   Research the wooden building system, and list green technologies
   Research and Develop products, including interior and envelope
   BIM application in the whole procedure
   Build up Joint laboratory, living lab etc.

2. Assessment and certification
   Standard comparison and compilation
   Database platform creation, including calculation of carbon emission

3. Demonstration
   Individual and integrated technologies, construction projects

4. Capacity building
   Capacity building to both China and CEE sides

5. Business model creation
   Traditional trade and carbon trade, etc.