

# Newsletter

Upscaling and mainstreaming  
sustainable building practices  
in western China



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## SusBuild Training for ESCOs and Construction SMEs

On the 12th-16th of June 2017, SusBuild project organized training workshops on the topics of “ESCO and building energy retrofit” and “green construction” in Chongqing and Kunming. The trainings were hosted by SusBuild local partners, with the support of the Ministry of Housing and Urban & Rural Development in China and housing authorities from both regions.

70 and 50 participants from ESCO companies and local building design institutes participated in the “ESCO and building energy retrofit” training in Chongqing and Kunming, respectively.



During both trainings, Professor Junwei Yan, vice chairman of China Association of Building Energy Efficiency (CABEE), presented the principles, different models, the procedure, and M&V of Energy Performance Contract (EPC) as well as EPC policies in China and illustrated the EPC model with several good practice projects, such as a university campus, governmental buildings, and large shopping malls. Besides, he also introduced the systematic approach of public and commercial building energy retrofit with a focus on HVAC. His lecture was followed by local experts' presentations. In Chongqing, Professor Ding Yong, vice chairman of Chongqing Association of Building Energy Efficiency (CQABEE), presented the



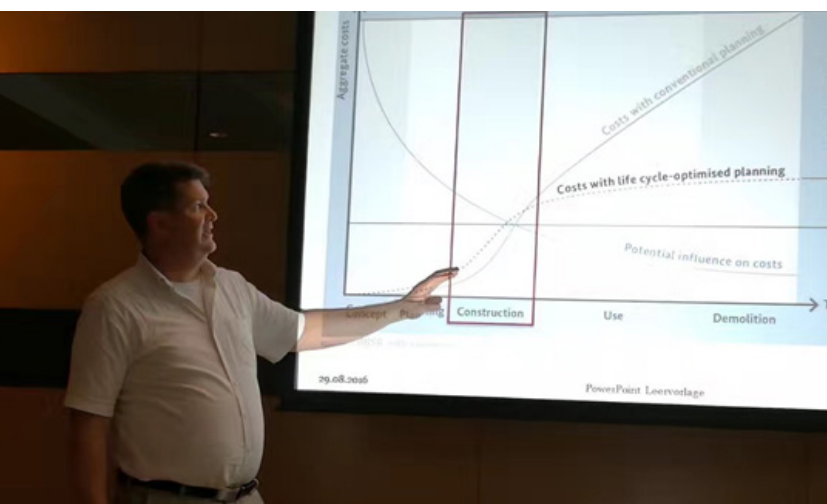
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systematic approach for building energy retrofit and project examples in Chongqing. He also highlighted the importance of green retrofitting to enhance indoor comfort. In Kunming, Prof. Ni Shijin, the deputy director of Kunming Medical University Hospital, shared his experience in energy retrofitting. The energy retrofitting project realized a 35% performance in energy intensity reduction, based on detailed energy use analysis and a combination of technologies, such as solar hot water, replacing oil boiler with gas boiler and soft measures, such as the establishment of an energy saving leader group, and various “carrot and stick” measures. Mr. Liu Zhen-rong, senior engineer from Yunnan building technology development center (YBTDC), presented building energy management practices for public and commercial buildings in Yunnan. He also introduced the progress of establishing an energy consumption monitoring platform in Yunnan. Next, Mr. Liu Shao Yong from YBTDC introduced an innovative web tool for energy consumption data monitoring, which will benefit building owners, energy efficiency professionals, and governmental agencies.

The “green construction” training brought together 50 participants in each training location, Chongqing and Kunming. The training embraced both European and Chinese experiences of green construction. In both Chongqing and Kunming, Mr. Sun Pengcheng, senior expert from China Building Technology Center, introduced the concept, development, and policies of green construction in China and its relation to other key policies in the building sector. He then presented some advanced technologies and their applications in good practice projects. Mr. Christopher Moore, senior researcher from Wuppertal Institute, shared policies and measures of

green construction in Europe, and illustrated green constructions with detailed examples and good practices in Europe. Both experts strengthened the importance of Building Information Modeling (BIM) and presented examples of BIM application and its advantages. In Kunming, Mr. Qing Shan from Kunming Science and Technology University, introduced a good practice project of Wanda in details.

Both ESCO development and green construction are essential for the sustainable building sector. These trainings have raised high interest from participating SMEs as well as governmental agencies and think tanks. All presentations (in Chinese) can be downloaded at <https://www.susbuild.eu/library/>. Two handbooks based on training content will be available later this year.



## SusBuild EU-China SME Dialogue on Building Energy Efficiency Technologies in Chongqing

In order to promote dialogues among SMEs from the target regions in China and Europe, on June 12th-13th 2017, SusBuild, in cooperation with its associate partner econet china, co-organized EU-China SME Dialogue on Building Energy Efficiency Technologies in Chongqing. In total, 40 representatives from European leading building technology companies, and local ESCOs and organizations participated in the event. Chongqing housing authority welcomed all European companies and encouraged the European and local SMEs dialogues.

During the dialogue session, SMEs from both Europe and Chongqing introduced their building energy efficiency solutions and shared their experience on building renovation projects. Both sides showed a strong interest in exploring future possible cooperations. Following the presentations and discussions on the first day, SusBuild's local partner, Chongqing Building Energy

Efficiency Association, organized a visit to a good practice example - Westin Hotel renovation project. The project was completed by a local ESCO company, Qinv technology Ltd, in 2016. It is estimated to achieve an annual energy reduction of 3.2 GWh and an annual CO<sub>2</sub> emission reduction of 2913 tons. During the visit, both European and local SMEs further discussed about technologies applied and improved understanding of each other.



## Financing sustainable building practice: match-making between SMEs and Banks



Three SusBuild local partners from Chongqing: Chongqing Association of Building Energy Efficiency (CQABEE), Chongqing Economic Promotional Centre for Building Material Industry (CEPCBM), and Bank of Chongqing (BCQ) jointly hosted four matchmaking events between local SMEs and BCQ. As a result of the dialogue, both BCQ and SMEs established mutual understanding of each other. Especially, BCQ obtained an insight on sustainable building development in Chongqing, from building materials manufacturing to building refurbishment and operation, which is essential for them to set up targeted financing products. BCQ mentioned they are willing to initiate pilots for sustainable building development based on constructive dialogues among ESCOs, building owners, and BCQ within the frame of SusBuild project. More matchmaking events and dialogues are planned in 2017.

## Local training on sustainable building materials/components and sustainable interior design

Based on the trainings on sustainable building materials/components, and sustainable interior design in 2016, SusBuild local partners hosted four further trainings for local SMEs in Chongqing and Yunnan Province. Chongqing Association of Building Energy Efficiency (CQABEE) organised two trainings in combination with networking and exhibition in Nan'an and Jiulongpo District at the end of 2016. The two trainings brought together about 600 participants from building materials manufacturers, construction companies, developers, designers, consumer organisations, and district housing authorities. In Yunnan, Yunnan Development Centre for Building Technology (YNBTDTC) and Yunnan Engineering Quality Supervision Management Centre (YNEQS) hosted two training and networking events in the first half of 2017. In total, 460 participants attended the events. The training materials can be downloaded at <https://www.susbuild.eu/library/>



# Monitoring energy consumption of public and commercial buildings in Yunnan



SusBuild team conducted a SWOT analysis of sustainable energy consumption in public and commercial buildings in 2016. Among others, lack of energy consumption data was identified as a key barrier.

Thus, Yunnan local partners of SusBuild, Yunnan Development Centre for Building Technology (YNBTDC) and Yunnan Engineering Quality Supervision Management Centre (YNEQS), developed an online monitoring tool for energy consumption of public and commercial buildings. The tool offers both wechat (the most popular social media in China) and a website channel to enable data inputs by building owners and facility managers. Data can be provided in various ways, for example, in form of photos of bills and meters, and QR-code. After the users input required data, the benchmark function of the tool gives a feedback about their building energy consumption against similar buildings in the province. Besides, this tool eases the collection and analysis process of building energy consumption data by governmental agencies, which is an essential basis for policy formulation and evaluation. Furthermore, the tool also informs building owners and facility managers about the relevant policies in the province and good practices in China and worldwide.

The tool is being tested in public buildings in Yunnan and has received a preliminary positive result. Yunnan province housing authority is interested in taking up this tool this year. The tool was also presented in the SusBuild training in Kunming in June.