



Business from technology

Eco Efficient Solutions for China's Urbanization 2010-2013 (EESCU)

中国城市化进程中的生态解决方案（2010-2013）

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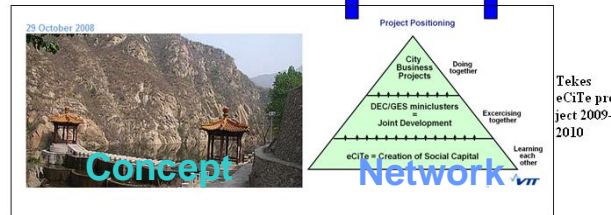
15.02.2011

What is missing between Finland – China regarding EcoCity development discussed by Finnish president Halonen and Chinese president Jintao Hu?

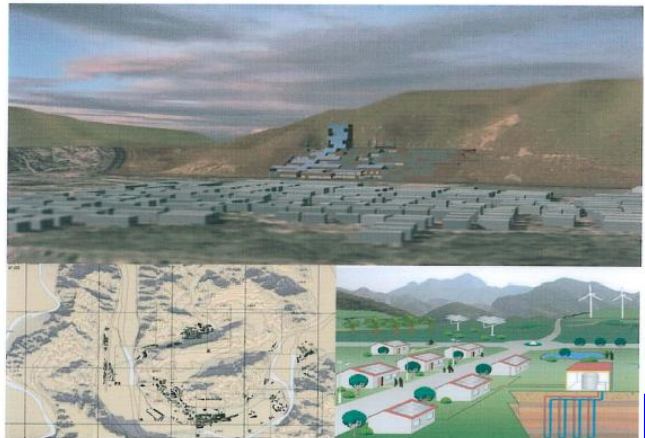
It is real research.

VTT TIEDOTTEITA – RESEARCH NOTES

Background (Why EESCU?)



Theoretically and practically, EESCU is backing up Finnish president and filling the gap between Finland – China regarding EcoCity development!



Miaofeng Mountain Town EcoCity

- Jyri Nieminen, Pekka Lahti, Antti Nikkanen, Ulla-Maija Mroueh, Tuija Tukiaainen, Jari Shemeikka, Pekka Huovila, Sakari Pulakka, Cao Guangyu
- Sun Nan
- Kimmo Lylykangas
- Liu Ning, Wu Dan, Sun Yong

VTT Spearhead: EcoCity Concept

Concept for national leaders toward potential cooperation and development

2006 DUT-VTT MoU (in Dalian)
 2006-2007 Very low energy building DEMO
 2007 VTT High-Tech EcoCity@ concept for China
 2007 Beijing EcoCity project launched
 2008 VTT-Tongji Addendum to MoU
 2009 Eco Research cooperated with Tongji

2009 eCiTe project funded by Tekes
 2009 VTT-Tongji Framework agreement
 2010 Tongji delegation visited VTT
 2010 VTT-Tongji Framework Agreement on Eco Neighbourhood
 2010 Beijing delegation visited VTT
 2010 Finnish EcoCity delegation visit China

- The president of Finland met the president of China at ASEM 2008: EcoCities
- The prime minister of Finland met the prime minister of China August 2008: EcoCities
- The minister of Foreign Trade and Development of Finland met the minister of Commerce of China January 2008: EcoCities
- Vice president of China met both Finnish president and prime minister mid April, 2009
- Latest high level governmental meetings in March, 2010

Positive political wind for business, research and development

Figure 1 Background of EESCU research project



MoUs of EU - China and Finland - China



**Cooperation Framework on Energy Performance and Quality in the
Construction Sector**

between

**the Directorate-General for Enterprise and Industry and the
Directorate-General for Energy and Transport of the European
Commission**

and

**the Ministry of Housing and Urban-Rural Development of the People's
Republic of China**

(November 2009)

**Memorandum of Understanding
for Cooperation on Ecological Zones
between**

**the Ministry of Commerce of the People's Republic of China
and**

**the Ministry of Employment and the Economy of the
Republic of Finland**

Considering that China and Finland share a common concern for the
environment and their citizens' well-being,

Emphasizing that combining ecological concepts and technologies,
and planning cities, economic and industrial zones in a new way can
significantly reduce the emissions and environmental damage
caused.

June 2009

eCiTe network 2009-2010

Finnish participants

- 1) Tekes Beijing – the Finnish Funding Agency for Technology and Innovation (http://www.tekes.fi/en/community/Contact_us/345/Personnel_search/1656?sortBy=name&sortDirection=asc&searchString=&ou=OSVE+ULVE+PEKI&subjectArea=all)
- 2) Tekes Shanghai – the Finnish Funding Agency for Technology and Innovation (<http://www.tekes.fi/en/community/Contact%20us/345/Personnel%20search/1656?sortBy=name&sortDirection=asc&searchString=&ou=OSVE+ULVE+SHAN&subjectArea=all>)
- 3) VTT, Technical Research Centre of Finland (<http://www.vtt.fi/>)
- 4) Aalto University Sino-Finnish Centre (www.aalto.fi)
- 5) Terveysilma Oy (<http://www.terveysilma.fi>)
- 6) Fidelix Oy (<http://www.fidelix.fi/>)
- 7) FläktWoods Oy (<http://www.flaktwoods.com/>)
- 8) Uponor Oy (<http://www.uponor.fi/>)
- 9) Halton Oy (<http://www.halton.com/>)
- 10) Rettig ICC Oy (<http://www.rettigicc.com/>)

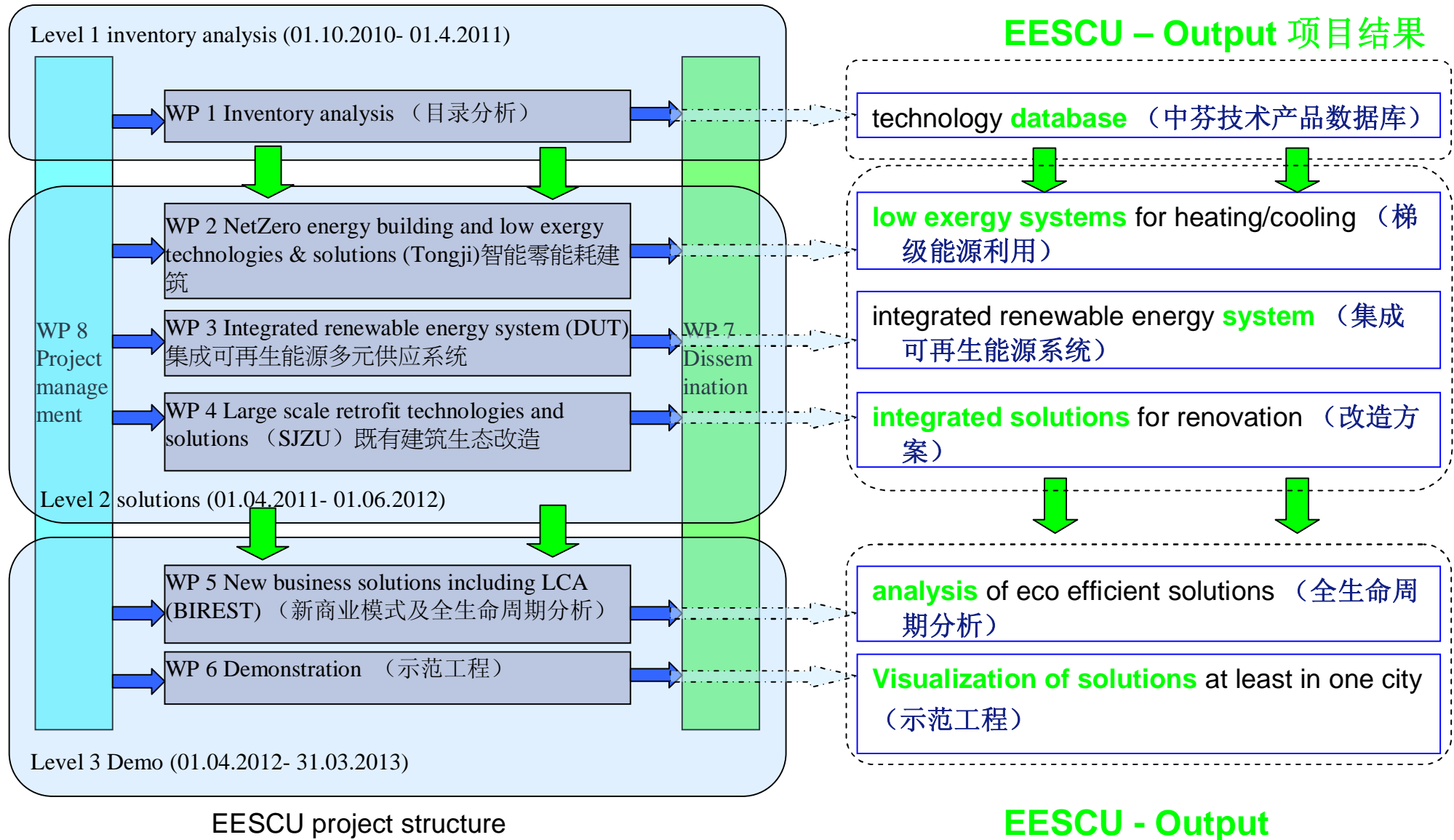
Chinese participants

- 1) **Dalian University of Technology (host in Dalian)** (<http://www.dlut.edu.cn>)
- 2) Dalian High-Tech Zone Investment Promotion Bureau (**Local government**) (<http://www.dlhitech.com>)
- 3) Building Energy Management Office in Dalian (**Local government**) (http://www.js.dl.gov.cn/bszn/dept_info.asp?dept_id=15)
- 4) Major Project construct Office of Dalian Economic & Technical Development Area (**Local government**)
- 5) Administrative committee of Wolong Bay International Business District Dalian Jinzhou New Area (**Local government**)
- 6) Dalian Rightway Real Estate Development Co.,Ltd (<http://www.rightwaygroup.com>)
- 7) Dalian Anda ST. Island Real Estate Group Co., Ltd (<http://www.adsdgroup.com>)
- 8) Jiangsu River&Sea New Energy Co., Ltd. (Energy Contract Management) (<http://www.hehaixny.net>)
- 9) Dalian Shengding Industrial Equipment Co., Ltd. (Heating Devices) (<http://www.dlshengding.com>)
- 10) Dalian Daxian Group Datongyuan Electric Co., Ltd. (Solar) (<http://www.daxian.cn>)
- 11) Dalian Sievert Testing Equipment Co., Ltd (<http://svt-ndt.com>)
- 12) Dalian Science & Technology Town Development Co. Ltd. (<http://www.yidagroup.com>)
- 13) Shenyang Weiyuan International Energy Technology Co., Ltd. (Boiler&Burner)
- 14) **Tongji University (host in Shanghai)** (<http://www.tongji.edu.cn/>)
- 15) Huaqiao Economic Development Zone Programme Building Bureau (**Local government**) (<http://www.hqcbd.com>)
- 16) Architectural Design & Research Institute of Tongji University (Group) Co.,Ltd.
- 17) Greenland Real Estate Co.,Ltd.
- 18) Landsea Real Estate Co.,Ltd. (<http://www.landsea.cn>)
- 19) Nanjing Fullshare Energy Co. Ltd (<http://www.fseet.com>)
- 20) Green Building Research Center and Low-Carbon Technology Institute
- 21) Shanghai Branch of China Academy of Urban Planning and Design

EESCU project- present (How EESCU?) 课题目标

- This project aims at building theoretical and practical foundations for effective eco efficient solutions to support the implementation of the Finnish concept of High-Tech EcoCity. Sub-objectives of the project are:
- EESCU项目旨在通过整合芬兰及欧洲最先进的最成熟的技术和产品，针对中国的气候特征和实际国情提出并实现一套适合中国具体地区的建筑节能解决方案和整体策略。
- to develop effective eco efficient solutions in different areas in China
- to develop EcoCity/Village projects in accordance with the framework agreement with Tongji University, Dalian University of Technology and Shengyang Jianzhu University
- to identify and analyze the applicability of Finnish technologies meeting the Chinese market needs and specifications of the solutions for the fast urbanization in China

EESCU project structure 项目结构框架和预期结果

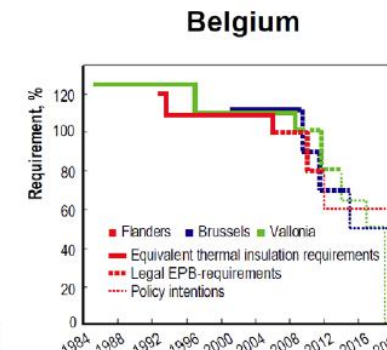
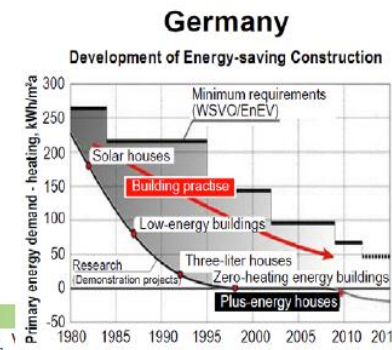
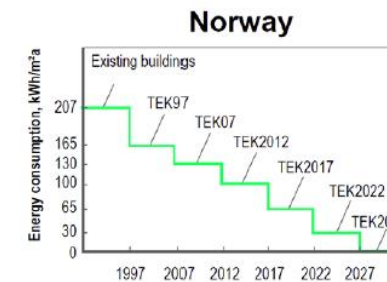
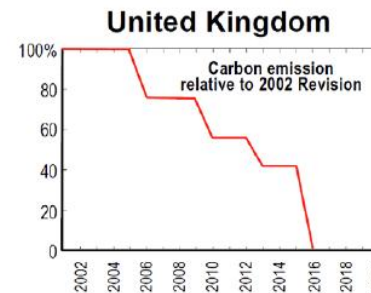
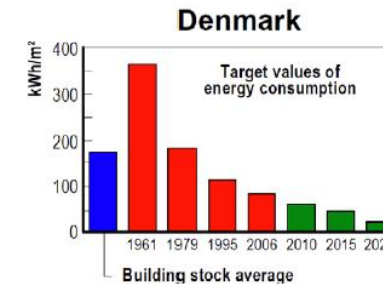
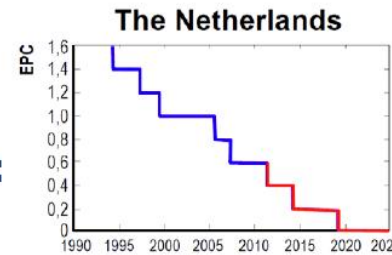


WP 2 NetZero energy building and low exergy technologies & solutions (Tongji) 同济大学

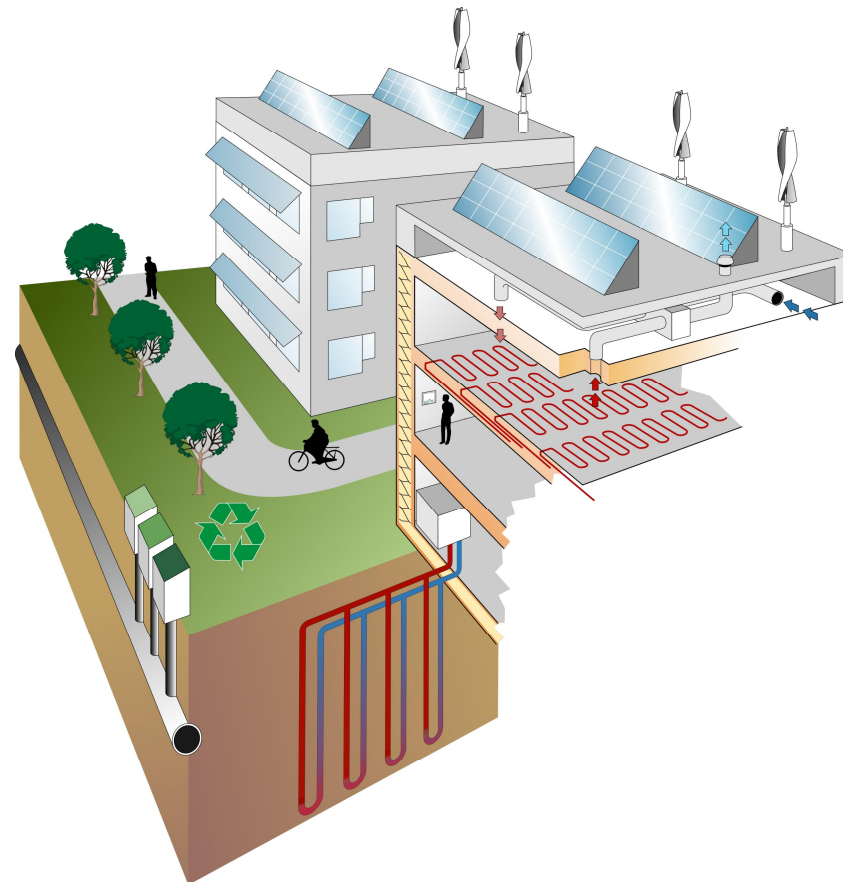
智能零能耗建筑

REHVA benchmarking:

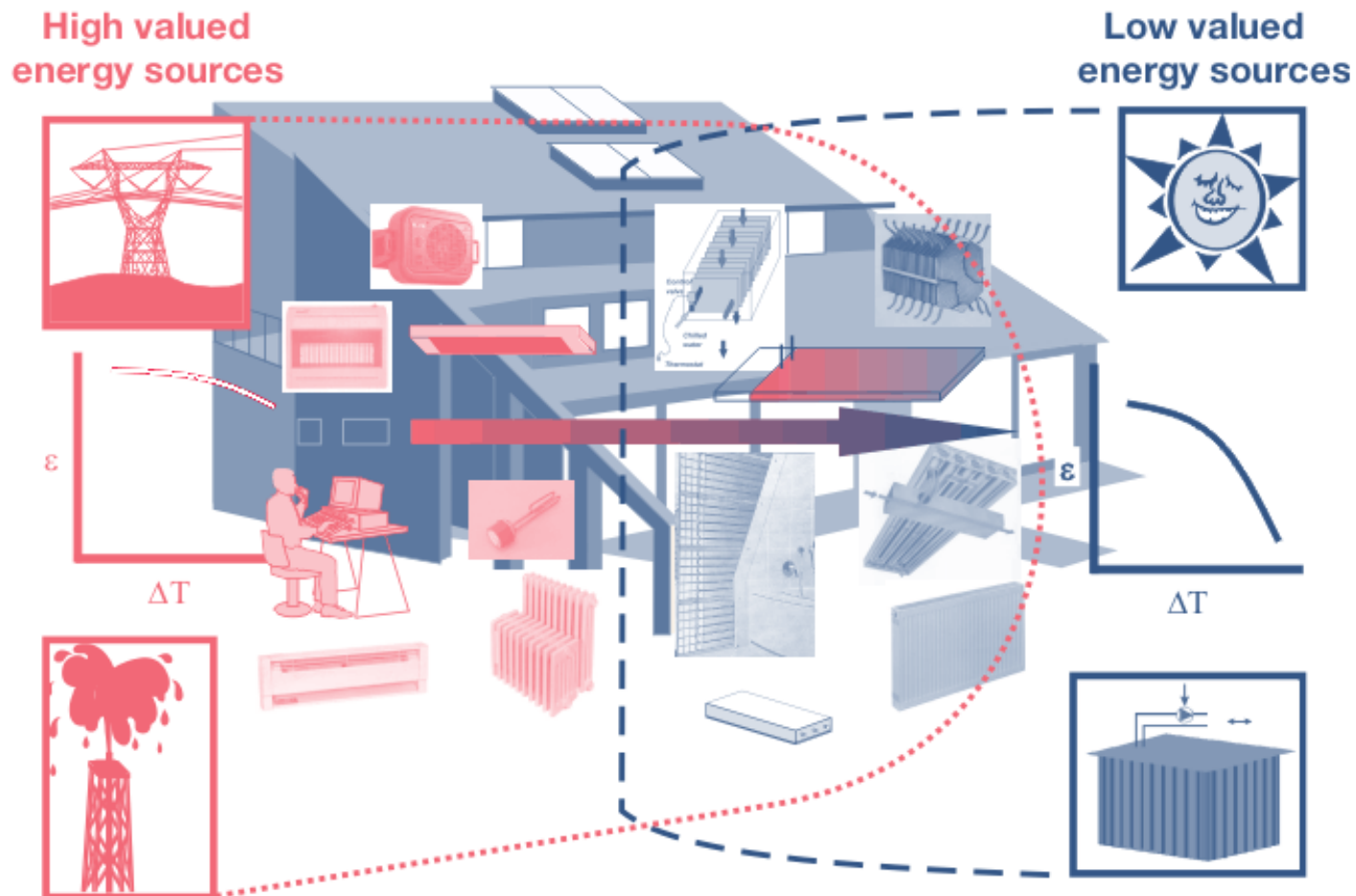
- Roadmap of some countries towards nearly zero energy buildings to improve energy performance of new buildings
- Many countries have prepared long term roadmaps with detailed targets
- Helps industry to prepare/commit to the targets



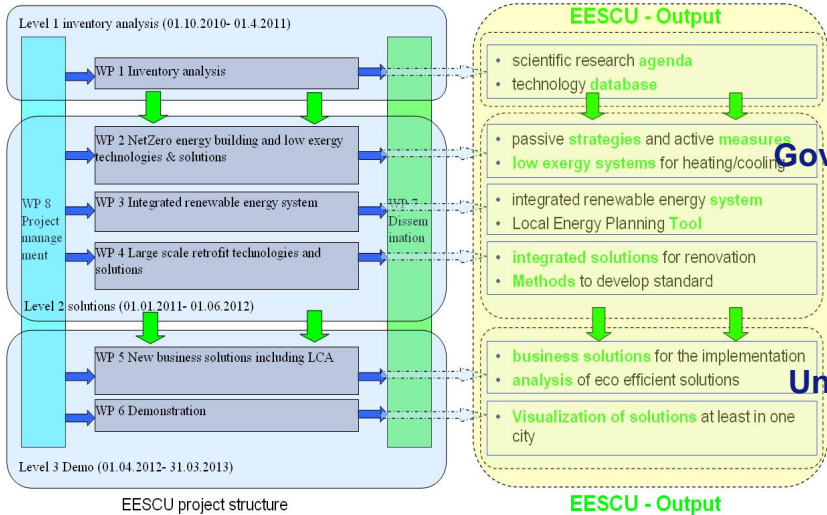
WP 3 Integrated renewable energy system (DUT) 大连理工大学 集成可再生能源多元供应系统



WP 4 Large scale retrofit technologies and solutions (沈阳建筑大学) 既有建筑生态改造



Preparation for Demonstration 示范工程的多层次准备



Governmental level

University level

Industry level

Support from Government (14.9.2010 in Dalian):

- VTT-DUT help local government to develop local building regulations

Support from Tongji (16.9.2010):

- Tongji-VTT give technical support or service for the planning, design phase and demonstration

Support from Chinese companies:



Support from Finnish companies:

- Confirmed till 20.10.2010:**
- Fatman Oy
 - FinnEnerco Oy
 - Global Eco Solutions Oy
 - Culminatum Innovation Oy Ltd
 - Terveysilma Oy
 - Reponen Oy
 - Fidelix Oy
 - Finninstall Pipe Oy
 - Feedstock Optimum Oy
 - Bayes IT Oy
 - SuLvi Ry
 - One1

- In negotiation:**
- Rettig Oy
 - Lonix Oy
 - R-Group Oy
 - Thermofloc Oy
 - Linterm Oy
 - Ramboll Oy
 -

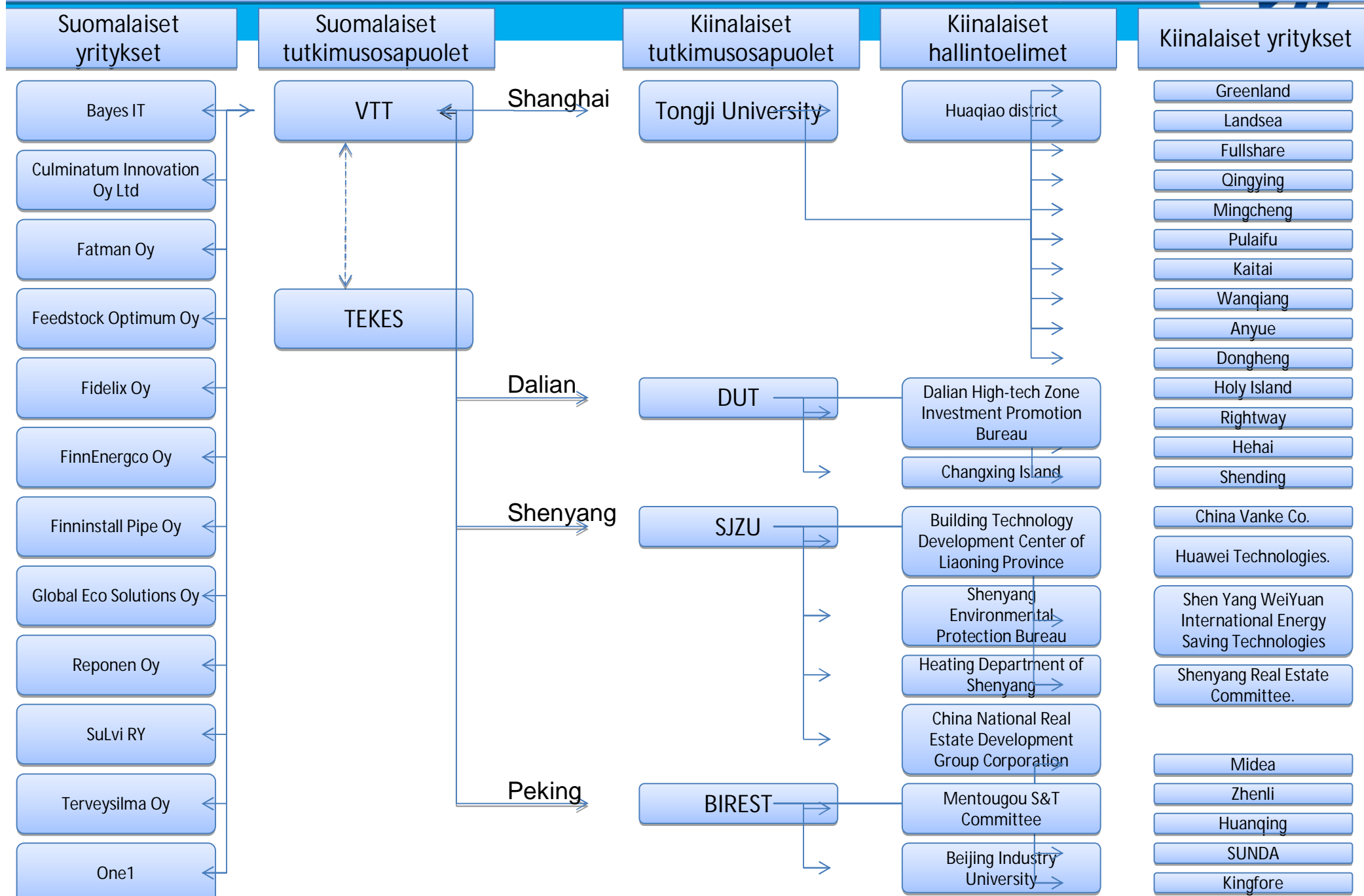


Demonstration – Visualized EESCU

EESCU network 2010-2013

- | | |
|--|--|
| <ol style="list-style-type: none"> 1) Tongji University (host in Shanghai)
(http://www.tongji.edu.cn/) 2) Huaqiao Economic Development Zone Programme Building Bureau (Local government)
(http://www.hqcbd.com) 3) Architectural Design & Research Institute of Tongji University (Group) Co.,Ltd. 4) Greenland Real Estate Co.,Ltd. 5) Landsea Real Estate Co.,Ltd. (http://www.landsea.cn) 6) Nanjing Fullshare Energy Co. Ltd
(http://www.fseet.com) 7) Green Building Research Center and Low-Carbon Technology Institute 8) Shanghai Branch of China Academy of Urban Planning and Design 1) Dalian University of Technology (host in Dalian) (http://www.dlut.edu.cn) 2) Dalian High-Tech Zone Investment Promotion Bureau (Local government)
(http://www.dlhitech.com) 3) Building Energy Management Office in Dalian (Local government)
http://www.js.dl.gov.cn/bszn/dept_info.asp?dept_id=15 4) Major Project construct Office of Dalian Economic & Technical Development Area Administrative committee of Wolong Bay International Business District Dalian Jinzhou New Area (Local government) 5) Dalian Rightway Real Estate Development Co.,Ltd (http://www.rightwaygroup.com) 6) Dalian Anda ST. Island Real Estate Group Co., Ltd (http://www.adsdgroup.com) 7) Jiangsu River&Sea New Energy Co., Ltd. (Energy Contract Management)
(http://www.hehaixny.net) 8) Dalian Shengding Industrial Equipment Co., Ltd. (Heating Devices)
(http://www.dlshengding.com) 9) Dalian Daxian Group Datongyuan Electric Co., Ltd. (Solar) (http://www.daxian.cn) 10) Dalian Sievert Testing Equipment Co., Ltd (http://svt-ndt.com) 11) Dalian Science & Technology Town Development Co. Ltd. (http://www.yidagroup.com) | <ol style="list-style-type: none"> 1) Shenyang Jianzhu University 2) Liaoning Science and Technology Commission 3) Science and Technology Bureau of Shenyang 4) Shenyang Huitian Heat and Electricity Co., Ltd 5) Shenyang Vanke Corporate (Real estate company, low energy building in residential building) 6) Shenyang Weiyan International Energy Company.
<ol style="list-style-type: none"> 1) Beijing Institute for Real Estate Science and Technology 2) Beijing Municipal Commission of Housing and Urban-Rural Development 3) Beijing Gold House HVAC Energy Technology Co., Ltd. (Energy Management Contract) 4) Beijing Building Technology Development Co., Ltd. (contract energy management, energy-saving technology) 5) Beijing Huaqing Geothermal Development Co., Ltd. (ground-source heat pump applications) 6) Beijing Solar Energy Research Institute Co., Ltd. (solar energy technology) 7) Tsinghua University (Seismic, central air conditioning system) 8) Beijing University of Technology (solar applications, energy consumption statistics of civil construction) 9) Beijing Jiaotong University (Seismic Research) 10) Vanke Group, Beijing China Vanke Co., Ltd. (Seismic) 11) Jiayi Energy Technology Co., Ltd. Beijing swan (renewable energy) 12) Beijing Century Tong Technology Development Co., Ltd. established Century (building energy-related detection technology development) 13) Beijing Institute of Architectural Design (Architectural Design) 14) Beijing Jing Xiang Technology Co., Ltd. (construction shade) 15) Honeywell (China) Investment Co., Ltd. (Ventilation) 16) Beijing Building Energy Testing Center (Building Energy detection) 17) Beijing New Building Materials Co., Ltd. (building materials) 18) Midea Electric Appliances Co., Ltd. Beijing Branch (air conditioning technology) |
|--|--|

EESCU yhteistyöverkosto





Chinese-Finnish Entrepreneurs match

Chinese-Finnish entrepreneurs match

Table 1 Entrepreneurs match between China and Finland (E-match)

Finnish technologies	ICT 建筑智能/信息系统	EcoEfficient solutions 生态解决方案	Clear air 空气净化	Ventilation 建筑通风系统	Low energy building	Building automation 楼宇自动化	Piping 建筑区域管道系统	Renewable energy 可再生能源	HVAC	Biomass 生物质能供热	Building envelope 围护结构	Energy management system 能源合同管理	Building services 建筑服务	Solar energy 太阳能	Ground source heat pump	Hot water and sanitary	Lighting and shading
In Shanghai 13 companies	x		x		x	x	e.g. n.n. Oy is interested in Finnish building automation tech/companies		x		x		x				
	x				x	x		x	x	x		x	x	x	x		
			x		x				x			x	x				
	x				x				x			x	x				x
	x									x							x
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		x			x				x			x	x				
	x				x												
In Dalian 5 companies	x		x	x	x	x		x	x	x	x			x		x	
			x				x	x	x	x		x		x	x		
								x		x				x	x	x	
					x			x				x		x	x	x	
In Shenyang 8 companies	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
		x						x									
					x				x								
					x												
					x							x	x				
					x				x								
				x		x			x								
In Beijing 5 companies								x	x								
	x	x			x		x	x			x				x		
								x	x			x		x		x	
	x	x	x			x	x		x			x				x	

MoUs between VTT – Chinese partners



Signature:

Place: Dalian
Date: 13.09.2010
VTT

Markku J. Virtanen
Dr. Professor Technology manager

Guangyu Cao
Dr. Senior Research Scientist

Place: Dalian
Date: 13.09.2010
DUT

Lin Duanmu
Dr. Professor, Dean

Building Energy Management Office
in Dalian

Changbin Li
Director



Signature:

Place: Shanghai
Date: 17.09.2010
VTT

Markku J. Virtanen
Dr. Professor Technology manager

Guangyu Cao
Dr. Senior Research Scientist

Place: Shanghai
Date: 17.09.2010
Tongji University

Xu Zhang
Dr. Professor, Dean

Greenland Group Co. Ltd.

Wei Kun
Director of Green Building and construction parts

In Dalian, 13.09.2010

In Shanghai, 17.09.2010

Project partners in China



- Harbin Institute of Technology
- Tianjin University
- Shenyang Jianzhu University
- Dalian University of Technology
- Tsinghua University
- Beijing University
- Beijing Institute for Real Estate Science and Technology
- Tongji University
- Xi'an University of Architecture and Technology
- Chongqing University

Who's EESCU Chinese partners - Tongji University

- Tongji University is one of the leading universities directly under the State Ministry of Education in China. The university is famous for its accomplishments in the architecture, urban planning, civil engineering research field, etc. The university now registers over 50,000 students at all levels from certificate and diploma courses to Bachelors Degrees, Masters, PhD programs and post doctoral attachments. There are over 4200 academic staff for teaching and/or research, among whom there are 6 Members of Chinese Academy of Science, 7 Members of Chinese Academy of Engineering, over 710 professors and 1500 associate professors.

Dalian University of Technology (DUT)

- Dalian University of Technology (DUT) is one of the key universities under the direct leadership of the State Ministry of Education, China. DUT plays an extreme important role in the filed of building energy saving in northern China. DUT ranked No. 12 in the engineering field and No.24 in integrated rank by Chinese Academy of Management Science. DUT enjoys a good reputation for its building energy efficiency technology in China.

Shenyang Jianzhu University (SJZU)

- Shenyang Jianzhu University (the original Shenyang Architectural and Civil Engineering Institute) (<http://www.sjzu.edu.cn/>), established in 1948, is a comprehensive university with its priority given to Civil Engineering and Architecture as well as multi-disciplinary education overlapping among engineering science, industry, literature, administration, nature science, agronomy and law in China. The university has 15 subordinate schools and 1560 faculty members are working at SJZU currently, including more than 102 professors and 210 associate professors and 14 subject experts.

Beijing Institute for Real Estate Science and Technology (BIREST)

- Beijing Institute for Real Estate Science and Technology was established in 1978, which is directly led by Beijing Housing and Urban Construction Commission. Beijing Institute for Real Estate Science and Technology is the only public research institute in the field of real estate. In the institute, the major researches are focusing on the construction quality, housing safety assessment, energy-saving technology, boiler heating and air conditioning energy conservation, new building materials.

Finnish partners

- Fatman Oy (ICT and Building automation)
- FinnEnerco Oy (Energy)
- Global Eco Solutions Oy (Eco solution)
- Culminatium Innovation Oy Ltd (Clear air)
- Terveysilma Oy (Ventilation)
- Reponen Oy (Very low energy building)
- Fidelix Oy (Building automation)
- Finninstall Pipe Oy (Pipe)
- Fewedstock Optimum Oy (Biomass)
- Bayes IT Oy (IT)
- SuLvi Ry (HVAC)
- One1 Oy (Renewable Energy)
- Rettig Oy
- Varkaus –
- GES bring more company into EESCU GY
- PolarSo –
- Tampere companies -
- ShiXing -
- 生态解决方案,
- 建筑智能/信息系统,
- 楼宇自动化,
- 可再生能源,
- 建筑区域管道系统,
- 生物质能供热,
- 建筑通风系统,
- 供热通风与空调工程,
- 空气净化,
- 和超低能耗建筑的建造

Match of EESCU and Finnish participants

The expectation of Finnish companies can be summarized here:

- To find suitable partners regarding technology and marketing issues, e.g. distributors, manufactory
- To identify the cut in point of Chinese markets
- To establish long term cooperation with Chinese research institute, like with VTT in Finland
- To be aware of economical status, market volume and competitors of specific fields in each city
- To be involved into those demonstrations in different cities
- To test their products in the demonstration projects and see the performance of the Finnish products in Chinese buildings
- To learn the end users' habits and consumers' favorite
- To know the governmental polices and local regulations with respect of selling and producing

What EESCU project can offer:

- to access to VTT cooperation platform (including Tongji University, Dalian University of Technology, Shengyang Jianzhu University and Beijing Institute for Real Estate Science and Technology) and project alliances aiming at feasible and bankable High-Tech EcoCity projects
- to find suitable business partners with the social and technical support of Chinese Universities
- to be aware of available technologies, models and services for High-Tech EcoCity in Chinese market
- to be familiar to specified needs for product development for local business environment, and links and contacts to Chinese companies, research organizations and authorities.
- Lowered risk to penetrate Chinese market

EESCU Budget (2010-2013)

This **two and half years project** started on 01.10.2010 and will end by 31.03.2013 with a budget of 600 000€ (Tekes 360 000 €, VTT 120 000 € and companies 120 000 €). Tentative company participation fee: 1000-4000 €/year.

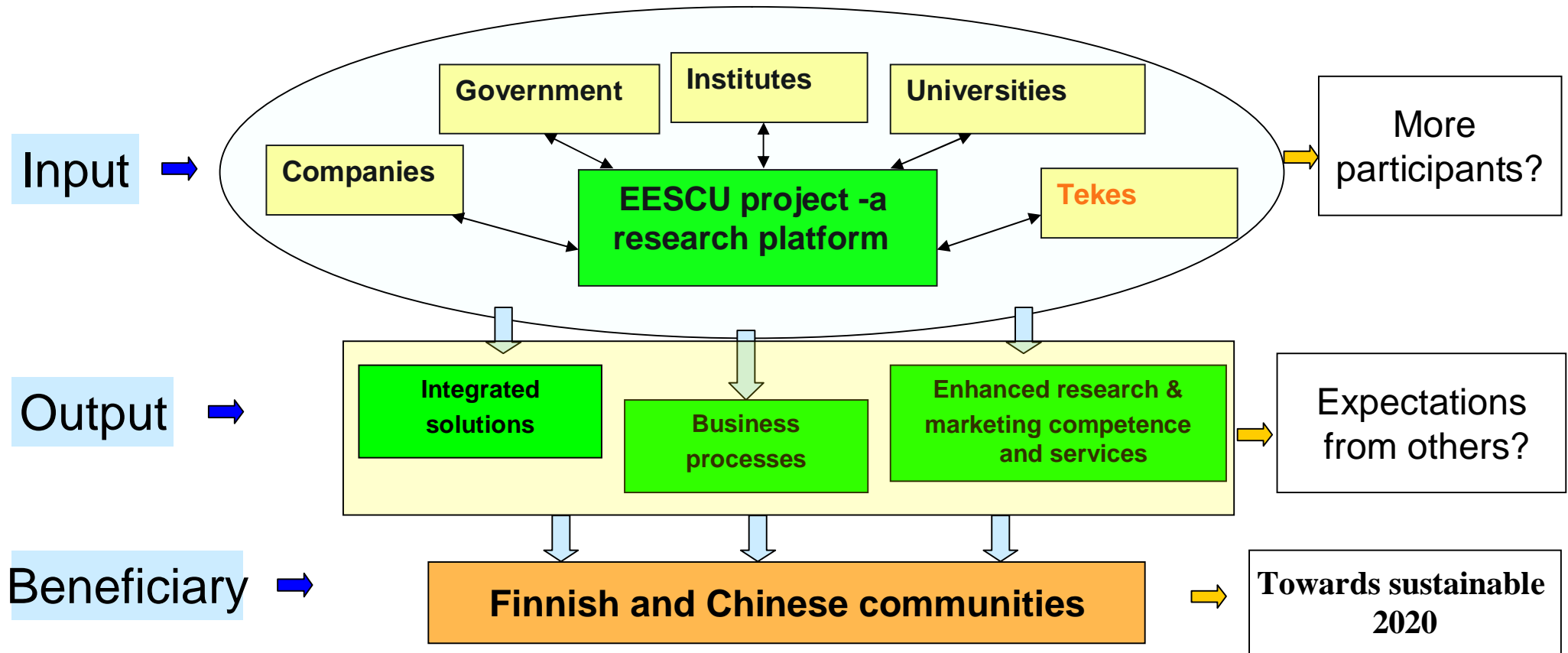
Now 12 companies confirmed the participation!

It is assumed that around 30 companies will join the EESCU project. The participation fee for companies will be tentatively about 1000-4000 €/year.

EESCU's input and output

- Research collaboration is needed in order to create both sided trust
- Accelerates the industry collaboration between the both countries

EESCU 将成为一个包括‘政、产、学、研’的
国际多元化合作平台



Significance of EESCU

- Moreover, that it is the best time to help China to mitigate the Global warming by increasing Green House Gas emission, since we could not neglect **the facts** in China:
 - the existing building area of 40 billion m²
 - new construction annually 2 billion m² (In Finland, 1990-2010*, 0.2 billion m²)
 - by year 2015, half of the world's new building construction

***SuomiTilastokeskus 25.11.2010**

VTT - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.vtt.fi/sites/eescu/index.jsp

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Business from technology

Suomeksi | På svenska | In English

Feedback

SEARCH

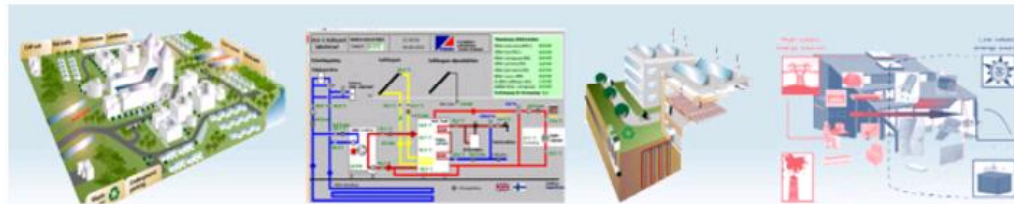
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EESCU 2010-2013

VTT

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Eco Efficient Solutions for China's Urbanization



VTT EESCU project is the extension of the Beijing EcoCity project (2008-2009) and the eCiTe project (2009-2010) regarding the development of High-Tech EcoCity in China.

The integration strategy of EESCU project will benefit both Finnish and Chinese Building & Environmental sectors. In this project, the package of Finnish High-Tech system solutions will be developed by integrating Finnish-Chinese resources, novel concepts, system solutions and technologies. The goal of this project is to build theoretical and practical foundations for eco efficient solutions to support the implementation of the Finnish concept of High-Tech EcoCity in China. VTT EESCU project presents the road map for Finnish-Chinese research collaboration in the domain of eco efficient solutions for China's fast urbanization.

VTT invites Finnish companies to participate the EESCU project to mitigate the global increasing CO₂ /green-house-gas emission and environmental degradation and to support the China's sustainable development.

VTT is inviting Finnish companies to join EESCU project and the door of EESCU project will be opened till 31.3.2011. Welcome to EESCU!

Site index

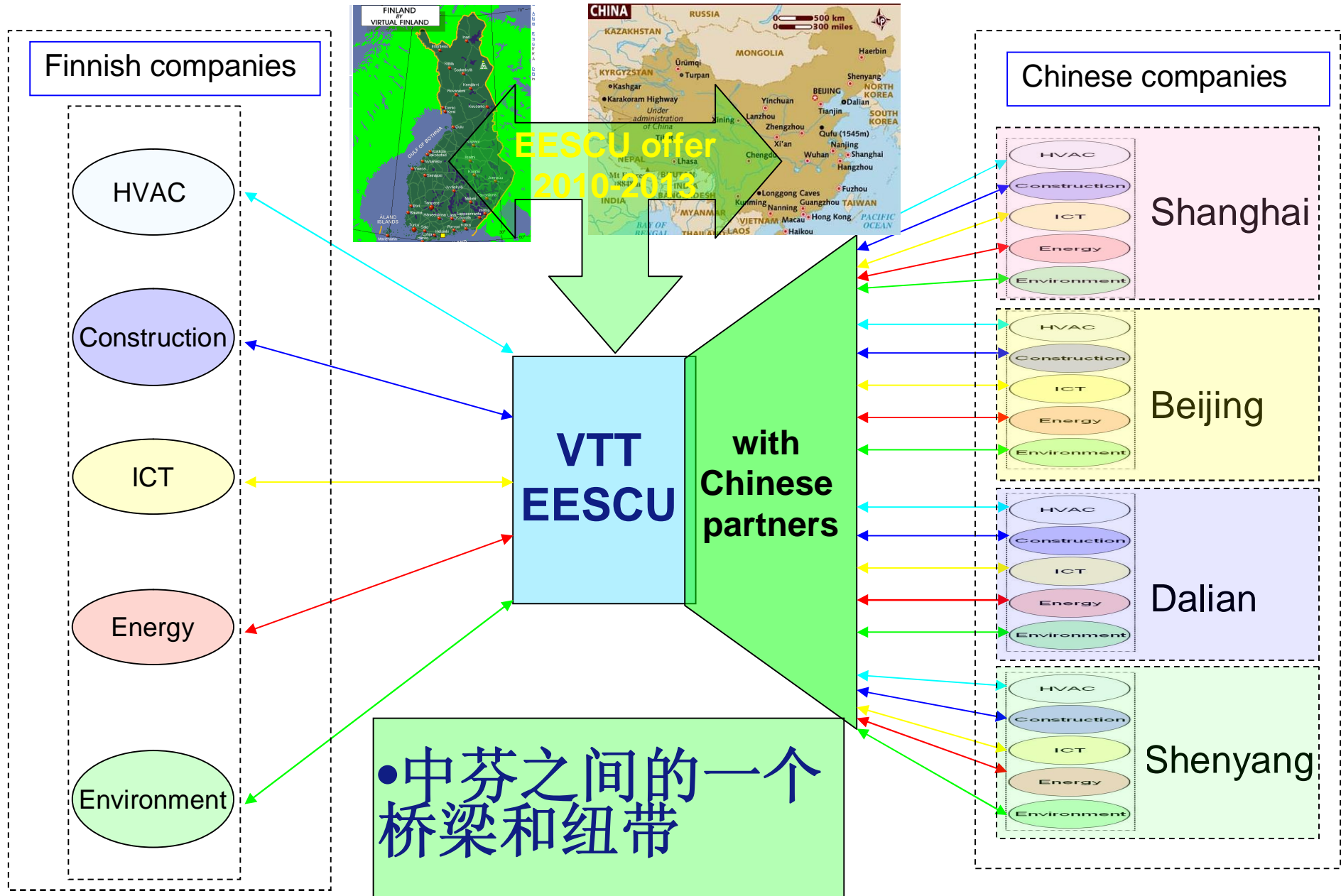
- Homepage
- Background
- Objective
- Impact
- Workpackages
- Research consortium
- Partners
- Funding resources
- 中文(Chinese)

Additional information

Guangyu Cao
Senior Research Scientist
+358 20 722 6582

Look more

- What's new?
- Presentation of EESCU
- Newsletters
- Preliminary publications
- Deliverables of EESCU
- FAQ



Research results of EESCU for EcoCity projects in China



■ Gongqing

<http://www.ramboll.fi/projects/viewproject.aspx?projectId=E7421D61-36C9-409D-AB32-869FEAAC0D20>



■ Danyang

<http://english.cri.cn/811/2006/05/07/301@85444.htm>



■ Mentougou

http://www.energy-enviro.fi/index.php?PAGE=2181&NO_DE_ID=2181&LANG=1



■ Chongming Island

http://www.som.com/resources/category/5/0/3/7/4/8/images/001_21594479.jpg



■ Tianjin

http://www.rootiz.com/upfile/rootiz_board/rootiz_board200908170.jpg

Project information channel 项目的宣传

- 项目网站 /EESCU homepage:
<http://www.vtt.fi/sites/eescu/?lang=en>
- Newsletter: <http://www.vtt.fi/news/2010/110310.jsp>
- Living business webpage (click EcoCity at right side):
<http://www.livingbusiness.fi/portal/>
- SuLvi network: <http://sulvinet.ning.com/>

EESCU 2011 roadmap

课题2011路线图

- February-March. 2011 VTT with Finnish companies visit Shanghai regarding demonstration project development (芬兰企业访问团)
- May 2011 Finland EESCU seminar (第二届中芬可持续建筑技术论坛)
- May 2011 EU: Towards net zero energy buildings (欧洲向着接近零能耗建筑国际会议)
- November ISHVAC 6-9.11.2011 Tongji University – Workshop of EESCU (国际建筑技术大会)

Latest good news of EESCU project

- Three EESCU ‘hubs’ will be available for Finnish partners in EESCU project, in Beijing, Dalian and Shenyang, where Finnish partners of EESCU can organize meetings without payment according to the agreement of VTT and BIREST-DUT-SJZU.

Summary of EESCU Space in Shanghai:

- 1000 m2 of creative, transformable space bringing together students, research, industry & society with functions:
- a visualized communication platform in Shanghai where present Finnish technologies and knowledge;
- A space to perform our EESCU activities.
- For our Finnish industry partners, the platform can work for business/research & development.
- provide students opportunities to participate EESCU public seminars and workshop;
- usage of video conference equipment for Finnish and Chinese partners
- EESCU industrial projects come first, and other extended projects are open to further discuss in SFC

Summary of EESCU 'hubs'

EESCU 'hub' in Beijing:

- Local host: Beijing Institute for Real Estate Science and Technology
- The meeting room can be used by EESCU partner without charge.
- The facilities only include the air conditioning.
- If BIREST will participate the meeting, projector can be provided.
- The meeting room can contain about 20 people.

EESCU 'hub' in Dalian:

- Local host: Dalian University of Technology
- Two- three meeting rooms can be used by EESCU partner without charge. Beforehand booking is necessary to check if they are available at a certain time.
- The big meeting room can hold about 25 people, the other two can provide space for about 10 people.
- The meeting rooms can be used by EESCU partner without charge.

EESCU 'hub' in Shenyang:

- Local host: Shenyang Jianzhu University
- Two - three meeting rooms can be used by EESCU partner without charge. Beforehand booking is necessary to check if they are available at a certain time.
- The big meeting room can hold about 30 people, the other two can provide space for about 10 people.
- The meeting rooms can be used by EESCU partner without charge.



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**VTT creates business from
technology**