Energy-safe Cities - East Asia Program Expert Symposium
28-29 October 2014, Beijing, China

Exploring ways towards low-carbon, low-risk, resilient urban energy systems.

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“Today’s knowledge suggests that urban energy systems could be transformed to become low-carbon, low-risk and resilient by the year 2030, and this with currently available technologies. A city based on 100% renewable energy sources is not an illusion but a vision that can become true. What we need is vision, courage and the will to explore how this energy transformation can be organized and what it takes to achieve it. ICLEI has invited a cluster of cities from East Asian countries to explore strategies to make the change happen with advice from internationally renowned experts.”

Konrad Otto-Zimmermann, Founding Director, ICLEI East Asia Secretariat; Chairman, ICLEI Urban Agendas

A kick-off symposium for ICLEI’s ambitious regional program on urban energy transformation

As the inaugural symposium kicking off ICLEI’s regional program on energy-safe cities in East Asia, the expert symposium convened 11 local governments from four East Asian countries to meet with international experts to explore how these local governments can turn their urban energy systems to 100% renewable by 2030.

Eleven local governments from four East Asian countries

More than 70 participants, including energy experts, cities’ officials and business representatives from Asia, Australia, Europe and North America attended the symposium. Participating local governments include:

• China: Baoding, Yixing, Zhenjiang
• Japan: Kyoto, Tokyo, Yokohama
• Mongolia: Ulaanbaatar
• South Korea: Cheongju, Inje, Jeonju and Samcheok

Adrian Stokes, General Manager, City Planning and Design, Adelaide City

“It was great to share Adelaide’s learnings, and to receive a snapshot of exciting developments globally and in East Asia.”

Tae Kun Kim, Team Leader, Green Technology Center-Korea

“Green Technology Center-Korea, sponsoring this event as a co-host organisation, is very happy to have joined in this program and met with the participating experts and city representatives. We are hoping to take this first step further and cooperate with East Asian cities and transition our communities and towns to more sustainable and eco-friendly energy systems.”
Achieving Goal 2030

The Expert Symposium marks the first stage of the Energy-safe Cities - East Asia Program designed by ICLEI, in partnership with the Wuppertal Institute for Climate, Environment and Energy. The aim is to aid ambitious local governments in East Asia to attain the goal of a low-carbon, low-risk and resilient urban energy system – to become 100% based on renewable sources – by the year 2030.

By providing a meeting place of ideas and solutions, the symposium allowed participating cities and experts to share the current status of energy transformation in cities, and explore how they can move towards the goal of becoming renewable and resilient with the currently available technologies.

Goal 2030
Transforming urban energy systems to become low-carbon, low-risk, resilient and 100% renewable with currently available technologies by the year 2030.

Multistakeholder dialogue on energy-safe solutions

The Expert Symposium was where local challenges and conditions met global expertise and solutions. Held from 28 to 29 October 2014, and consisting of 13 sessions with over 22 speakers, the symposium featured inspiring speeches and dialogues on various aspects of urban energy transformation:

- **Cities’ experience:** 11 East Asian cities from China, Japan, South Korea and Mongolia shared their challenges and current efforts in addressing urban energy transformation.

- **Experts’ analyses:** Experts from China, Japan, South Korea, Germany and the United States provided an overview of the current status of urban energy systems in East Asia and presented the potential of demand-side management, energy efficiency measures and renewable energy technologies. They discussed issues related to eco-development, sustainable policies and financial tools, and integrated urban design.

- **Successful case studies:** The cities of Adelaide, Freiburg and Stockholm shared their strategies in implementing local energy and climate strategies, and their innovative initiatives in moving towards the goal of becoming 100% renewable.

- **Introduction to the world’s latest renewable energy technology options:** Experts from professional associations and the industry introduced the latest renewable energy and energy efficiency options available and tested by the market, including solar, wind, geothermal, bioenergy, cogeneration, smart grid, integrated power management and district heating.

- **Local actions and city-based projects:** Representatives from the industry and international non-government organizations shared their city-based programs on energy saving measures, energy-efficient infrastructure and sustainable urban development.

- **Networking:** The symposium provided opportunities for cities to network with various stakeholders, to exchange information with regional and international experts, share needs and challenges, and foster partnership and cooperation.
Aixing Han, Vice Director of the Building Energy Saving and Technology Division, Ministry of Housing and Urban-Rural Development, People’s Republic of China

“In the past years, China has been cooperating with Western countries, but regional cooperation is lacking and is much needed. Indeed, there are a lot of things we can learn from the East. The Chinese traditional belief in the harmonious unity of man and nature is not only a slogan, it is a reality.”

Claudia Schweizer, Manager, World Business Council for Sustainable Development

“The symposium has been an excellent opportunity to foster exchange and to learn how cities and local governments can become more sustainable and energy-safe by applying various renewable energy options. We've seen many good examples of cities with strong sustainability aspiration that have reduced their carbon emissions.”

Ming Huang, Founder, Chairman & CEO of China-Himin Solar Energy Group; 2011 Right Livelihood Award Laureate; Vice President, International Solar Energy Society

“The responsibilities of the renewable energy sector – like the IT industry - are to work out a series of products, whether common daily goods or business models. If all of the people in the world would love renewables like they love their smart phones and all the governments treat renewables like they treat their election campaigns, what a brilliant future it will be!”

Sha Chen, Professor, Beijing University of Technology

“It was a great opportunity to share and learn about the advanced techniques and experiences of other cities in sustainable development. In the context of China, I believe that waste-to-energy and bioenergy are increasingly important solutions for building efficient, sustainable, and environmentally friendly cities.”

Jonas Tolf, Head of Energy and Climate Unit, City of Stockholm Environment and Health Administration

“The potential to reduce energy consumption and CO2 emissions in cities is enormous. By reducing energy use in buildings and using smart technology solutions in well-built city infrastructures for public transport and energy supply, cities can be an important part of the solution. Today we see more and more cities taking the lead in piloting a sustainable energy future.”

Klaus Hoppe, Director, Klaus Hoppe Consulting, and Former Head of Energy Department, City of Freiburg

“Time and again, as experience shows, good will is not enough and established structures or individuals may cause projects to fail. This does not have to be the case. Involving stakeholders early – first the municipality itself - helps shake out old structures, get people working together and spot obstacles in time to do something about them. This “double strategy” – inspired stakeholders and new ways of cooperation - will lead to a successful future.”
The Next Step: 
Stage II - Local Scenario Exercise

The Expert Symposium marks the first stage of ICLEI’s Energy-safe Cities East Asia Program. With its successful conclusion, the symposium leads to the second stage of the program – Local Scenario Exercise. The local scenario exercise will be conducted in each participating local government. It will be facilitated by ICLEI, in technical partnership with Wuppertal Institute and the support of the Green Technology Center-Korea.

This exercise, using a back-casting approach, will aid the participating local governments to explore the scenario for Goal 2030 with currently available technologies, and the short-term and long-term strategies to attain this goal.

Manfred Fischedick, Executive Director of the Wuppertal Institute

“Cities cover only 1% of the Earth’s surface, but they are home of about 50% of the Earth’s population (soon 60%), they use about three quarters of all energy and emit 80% of the global greenhouse gases. On the other hand they are strongly affected by climate change and have intrinsic interest to limit the impact of climate change. In addition they are the brains of our economies and centers of creativity and power. Cities, therefore are not only the origin of GHG emissions, but also the place where substantial solutions have to come from. Blueprints for a sustainable urban infrastructure and 100% renewable energy cities are necessary to pave the way.”

Jusen Asuka, Professor, Tohoku University

“The nuclear power accident in Fukushima resulted in the introduction of the Feed-in Tariff (FIT) for renewable energy in Japan. FIT has been successful in the sense that the percentage of the renewable energy in the total electricity supply has increased significantly.”

Andrew Lang, Vice President, World Bioenergy Association

“As their populations grow, cities contribute an ever-growing fraction of the global emissions of greenhouse gases, and the problems forecast to result from resulting global warming will particularly impact on residents of cities. The managers of the world’s cities have the potential to greatly reduce city GHG emissions by improving energy efficiency, and by moving to renewable sources of energy. Many cities are already doing this, including by producing significant amounts of their heat, electricity and transport biofuels needs from municipal waste streams.”
Qi Zhai, Executive Secretary General, China Business Council for Sustainable Development
Former Head of Safety & Environment Bureau of Sinopec
“Green infrastructure is the key for cities to enhance their energy efficiency, reduce emissions, and make themselves more competitive. We hope to provide green and low-carbon solutions to cities of different characteristics and conditions, so as to reduce China’s total emissions and increase our ratio in renewable energy use.”

Monica Oliphant, Immediate Past President of the International Solar Energy Society
“How to reach 100% renewable energy in cities for a cleaner, healthier, and energy-safe future is one of the great challenges for the first half of the 21st Century. Nowhere is this challenge greater than in the densely populated cities of East Asia. The ICLEI Energy-safe Cities East Asia program seeks to provide templates for achieving these goals through practical exchanges between city leaders and expert practitioners.”

Xulong Yin, Vice Director, Baoding Development and Reform Committee, Baoding City.
“Knowledge and experience exchange is the first step to realize Goal 2030. The Energy-safe Cities East Asia Expert Symposium has provided a great platform for dialogues and exchange.”

Convener & organizer: ICLEI – Local Governments for Sustainability
Co-host organization: Green Technology Center, Korea
Technical Partner: Wuppertal Institute for Climate, Environment and Energy
ICLEI East Asia Secretariat is generously supported by: Seoul Metropolitan Government

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is the world’s leading association of 12 mega-cities, 100 super-cities and urban regions, 450 large cities as well as 450 medium-sized cities and towns in 86 countries dedicated to sustainable development.

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