The global urban population is currently estimated to be approximately 3.5 billion and is projected to reach 8.5 billion by 2030. Cities are one of the biggest consumers of energy in the world, representing almost two-thirds of global primary energy demand, and nowadays accounting for 70 per cent of greenhouse gas emissions in the energy sector. Many cities are choosing to reduce energy use and emissions beyond what is being pledged by national governments to deliver the array of multiple benefits on offer to its citizens. A growing number of cities are joining partnerships and networks, in an effort to become more efficient, sustainable and low emitting. A growing number of cities are leading by example and setting the pace and scale of action that is required to put the climate on a safe pathway.

The concept of Smart Sustainable Cities is a combination of solution-oriented and integrated approaches based on technological innovations to address the current and future challenges of cities to improve the way cities function.

The event is also the first day of the international seminar “Towards Smart Sustainable Cities – Integrated Approaches” which will continue at Nazarbayev University, Qabanbay batyr. 53 in Astana, Kazakhstan from 15 to 16 June 2017

Guiding questions:

- What are the integrated approaches and their potential benefits to facilitate the transition into smarter and more sustainable cities?
- What is the role and how technologies can be used to realize smarter and more sustainable cities worldwide?
- How standards and indicator can support cities to become smarter and more sustainable?
- Which are the current innovative solutions including implementation models and finance opportunities, and how they can be identified, to energy challenges for cities?
- What specific examples exist to showcase city-level solutions and innovations relating to energy efficiency that provide inspiration and replication models for other aspirational cities?

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<thead>
<tr>
<th>Time</th>
<th>Session 1: The Role and Use of Technologies and Indicators to Achieve Smarter and More Sustainable Cities</th>
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<tr>
<td>9:00 – 9:20</td>
<td>Opening remarks</td>
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<td></td>
<td>Urs Schmid, Ambassador of Switzerland to Kazakhstan</td>
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<td>Ivonne Higuero, Director, Forests, Land and Housing Division, UNECE</td>
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<tr>
<td>9:20 – 10:30</td>
<td>Session 1: The Role and Use of Technologies and Indicators to Achieve Smarter and More Sustainable Cities</td>
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<td>– This session addresses the role of technologies and innovation for urban development and the role of standards and indicators to monitor the transition into smarter and more sustainable cities.</td>
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<td>Moderator: Domenica Carriero, Associate Economic Affairs Officer, Housing and Land Management Unit, UNECE</td>
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<td>Panelists:</td>
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<td>George Abulashvili, Director, Energy Efficiency Center, Georgia</td>
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<td>Aleksandar Dukovski, Director, Energy Agency, Former Yugoslav Republic of Macedonia</td>
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<td>Time</td>
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<td>10:30 - 11:00</td>
<td>Coffee break</td>
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</table>
| 11:00 – 12:30| **Session 2: Integrated Approaches of Energy and Transportation Infrastructures for Cities** – This session deals with good practices for integrated energy and transportation systems for a smarter and more sustainable urban development. | **Moderator:** Vicente Carabias-Hütter, Deputy Head ZHAW Institute of Sustainable Development, Coordinator Platform Smart Cities & Regions, ZHAW Zurich University of Applied Sciences  
**Panelists:**  
Uwe W Schulz, Lucerne School of Engineering and Architecture, Switzerland  
Merla Kubli, SCCER CREST Swiss Competence Center for Research in Energy, Society and Transition  
Roman Rudel, Head of Institute for Applied Sustainability to the Built Environment, SUPSI, Switzerland  
Alejandro Santis, BFH-CSEM Energy Storage Research Centre, Switzerland  
Hansjörg Dennig, ZHAW Centre for Product and Process Development, CH  
Yelena Yerzakovich, UNDP-GEF project, Kazakhstan  
René Itten, ZHAW Institute of Natural Resource Sciences, Switzerland  
Reiner Keller, University of Augsburg, Germany  
Peter Stücheli-Herlach, ZHAW Applied Linguistics, Switzerland |
| 12:30 – 14:00| Lunch break                                                            |                                                                                                                                          |
| 14:00 – 15:30| **Session 3: Unlocking Implementation Models and Finance for City Energy Efficiency** – This session will showcase city-level solutions, networks and innovations relating to energy efficiency that provide inspiration and replication models for other aspirational cities. | **Moderator:** Tim Farrell, Senior Advisor, Copenhagen Centre on Energy Efficiency  
**Panelists:**  
Yousef Baselaib, Executive Director for Sustainable Real Estate, Masdar City  
Ksenia Petrichenko, Researcher, Copenhagen Centre on Energy Efficiency  
Oleg Polumordvinov, Head of Administration, Astrakhan City, Russian Federation  
Natalia Jamburia, Energy Efficiency Expert, Ministry of Energy, Georgia  
Svetlana Radchenko, Associate Director - Senior Banker, European Bank for Reconstruction and Development  
Amitabh Metha, Director, Innovative Financing, Strategy, Corporate Partnerships & CSR, Indus Blue Consulting  
Christophe Frering, Team Leader, Covenant of Mayors East |
| Time     | Session 4: Designing Smart and Sustainable Urban Isles – This session promotes smart and sustainable urban isles as basic units of energy efficiency measures for cities, leading to a new way of urban planning, which will allow cities to grow in a smarter and sustainable way. Guidelines on sustainable management of smart areas, buildings, infrastructures and smart services will be presented.  
Moderator: Heinz J. Bernegger, CEO of the Swiss Sustainable Building Council and Lecturer for Life Cycle Management of Buildings at ZHAW Institute of Facility Management, ZHAW Zurich University of Applied Sciences, Switzerland  
Panelists:
Oleg Pavlov, Danfoss Sales Director, Kazakhstan  
Vicente Carabias, ZHAW Institute of Sustainable Development, Switzerland  
Andrey Dodonov, Project consultant at UNDP-GEF, Russian Federation  
Hanna Sotnikova, ZHAW Institute of Computational Physics, Switzerland  
Mehdi Bagheri, School of Engineering, NU, Kazakhstan  
Andreas Dreisiebner, Solar spar Association for Innovative PV Solutions, Switzerland  
Vladimir A. Sidorovich, Institute of Energy Efficient Building Technologies, Russian Federation |