Side Event
Trends & Challenges in Smart City Development: Experiences from Vienna

Timing and Venue

Wednesday, 10 May 2017, 09:30 – 11:00

Room C1, Vienna International Centre

Background

More than half of the world's population lives in urban settings and cities will therefore play an integral role in the sustainable development agenda. The Sustainable Development Goal (SDG) 11 recognizes the critical role of urbanization in sustainable development, but also urges actors to make cities and human settlements inclusive, safe, resilient and sustainable. This trend offers increasing opportunities for actors at local, regional, national and international levels to work together to develop more inclusive and integrated pathways to city and urban planning development. Cities around the world are coming up with innovative solutions to integrate urban land use, transport, energy, and housing policies, to improve the lives of their citizens.

The City of Vienna is internationally renowned not only for its high standard of living, but also for being a very livable "smart" city. The Smart City Wien, a long-term initiative by the City of Vienna, is a strategic and overarching effort to improve the design and development of Austria's capital. As a result of the rapid growth of the city, Vienna constantly has to face the challenge of balancing rising demand for energy, affordable housing and public transportation options, while reducing greenhouse gas emissions. Experts from the City of Vienna have extensive experience related to smart urban planning and can help identify specific challenges and opportunities of cities in developing countries, which are now aiming to become smart cities.

The side event, organized by the Global Forum on Sustainable Energy (GFSE) together with Energy Center Wien/TINA Vienna, aimed to encourage vivid exchanges between city representatives and experts from all over the world on how to make cities smart, sustainable and livable for their inhabitants. This event looked at the concept of a smart city from various perspectives and contexts to discuss common challenges. The example of the City of Vienna, from city strategy and policy as well as infrastructure planning to concrete examples and technological solutions, was showcased during this side event. Through this dialogue, good practices and lessons learned for various smart and sustainable cities around the world, especially in developing countries, were identified. The side event contributed to the debate of Panel III "Sustainable Cities and Communities".

Key Questions

What is Smart City Vienna? How does a smart city, such as Vienna, approach and pursue decarbonisation? What does this mean for long-term infrastructure planning? What does this mean for concrete development projects? What technological and service options can be offered? What are some challenges that developers from the City of Vienna experienced during the planning of a smart city? What are the specific challenges and opportunities of cities in developing countries, and how can they evolve to become smart cities? How does the concept of smart cities differ in various contexts (small cities, mega cities, industrial countries, developing countries and emerging countries)? What lessons from the City of Vienna can be applied to the development of other smart cities around the world?

Key Messages

- Cities present a unique opportunity transitioning toward a low-carbon sustainable future, as they are responsible for approximately 75% of global emissions and consume approximately 80% of annual energy consumption. There is a sizeable urban poor population in developing and emerging countries living in low-cost housing areas or informal settlements with little or no infrastructure and services. Cities are therefore well positioned to undertake climate protection actions and it is important that decisions made today pave the way for low-carbon, climate-resilient urban infrastructures that are accessible to all citizens.
- Multiple actors have a role to play in bringing about a smart city and strong collaboration and coordination between policy, industry, and society is required. Particularly in the urban space, there is a strong interdependence between different technologies and the development of various infrastructures. Actors from various fields need to work together to address these interdependences to maximize existing potentials.
- Coordinated investments in different areas of cities, including mobility, infrastructure, housing and quality of life, are critical. Not only technological, but also social innovation is needed to develop locally-appropriate smart city concepts. Monitoring and evaluation is also necessary to learn from action undertaken and to share experiences not only with the cities' citizens and actors, but also with partner cities around the world.
- The Smart City Framework Strategy of the City of Vienna showed that collaboration, cooperation and coordination between various actors working in diverse sectors (infrastructure, energy, climate, housing, etc.) is becoming increasingly critical for long-term success. In order for smart city concepts to be successful, citizens have to be at the heart of the strategy. A comprehensive stakeholder participation process is needed to engage all citizens for a sustainable future and to understand the true needs of a city.
- In addition, political commitment is absolutely necessary to move forward a sound Smart City strategy. A political champion can provide substantial support and facilitate coordinated efforts.
- Public-Private-Partnerships (PPPs) can be useful for the development and implementation of Smart City strategies, allowing for an effective use of public and private financial resources, fostering innovation and facilitating risk management. However, the suitability of PPPs must be examined carefully taking into account the needs of the city and its citizens.
- Renewable energy and energy efficiency are a key element in making cities climate-resilient and can also have multiple benefits in different areas such as poverty reduction, improvement in air pollution and sanitation.

- Increasing mobility requirements in rapidly growing cities create a substantial challenge. Conventional approaches have significant impacts on the environment, energy consumption, health and productivity. More efficient and affordable mobility solutions are possible through a combination of new technologies and business models and social innovations. For a proper functioning, adequate regulations must be in place regarding safety, quality standards, speed limits and public spaces allocated to different transport modes, including pedestrians, among others. For this purpose, sound coordination between service providers and city administrations is necessary.
- Governance systems need to facilitate the coordination between municipal administrations and regional and national authorities such that policies and programmes at these different levels reinforce one another.
- There is a clear need to address gender aspects in the coordination, designing, planning and implementation of smart city strategies. When it comes to energy access, the access to clean energy services plays a crucial role in women's economic empowerment.

Moderator

Ms. Irene Giner-Reichl, Austrian Ambassador to the People´s Republic of China and Mongolia, President of GFSE and Vice-Chair of REN21

Panelists

Ms. Ina Homeier, Smart City Coordination MA 18, City of Vienna
Mr. Edison Masereka, Kampala Capital City Authority
Mr. Lukas Lang, wien3420
Mr. Carel Snyman, South African National Energy Development Institute (SANEDI)
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