



SESSION DESCRIPTION

Resilience Innovators Hour

Co-event

Date: Thursday, April 26, 2018

Time: 13:00-14:00

Rooms: S01-02

Language: English

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Organized by: ICLEI World Secretariat

OBJECTIVE

In the effort of building urban resilience while overcoming increasing shocks and stressors from climate change, disasters, human mobility, and socio-economic challenges, local governments are supported by innovative solutions pioneered by visionary institutions and the private sector. Resilient Cities 2018 brings these solution providers together with urban resilience practitioners and creates a platform for innovations to be presented, discussed, and weighted up against the needs of the cities.

OUTCOMES

Participants will gain a better understanding of new, innovative approaches to solving their challenges and enhancing their resilience. For example, they will be exposed to:

- using impactful investments for financing cities' adaptation and mitigation projects;
- technological advances that help cities prevent power failures and protect assets in critical situations;
- ways to "self-finance" district energy.

METHODOLOGY

- Introduction by facilitator **(5 minutes)**
- Innovators will hold a **10 minutes** presentation each to present their innovations **(30 minutes)**
- Innovators engage with the audience through Q&A. Questions left unanswered during this session are encouraged to be followed-up at the exhibition space **(20 minutes)**
- The facilitator will conclude with closing remarks. **(5 minutes)**



CONTRIBUTORS

Facilitator *Miriam Badino, Senior Officer, Low Carbon, ICLEI World Secretariat, Bonn, Germany*

Innovator(s) *Thomas Arnoldt, Senior Manager Structuring, Munich Re, Munich, Germany;*
Julian Wiegelmann, Manager Origination Capital Partners, Munich Re, Germany;
Karim Tarraf, CEO, Hawa Dawa GmbH, Munich, Germany

Mitigating financial risks of air quality improvement measures

Munich Re presents an impact bond concept to finance air pollution mitigating measurements, which depict usually a financial burden for the public sector – comprising e.g. public transportation systems improvements, electric mobility solutions or introduction of other tools to reduce air pollution. Testing, evaluating and visualizing the financing parameters needed to determine the success of air quality improvement measures requires environmental input data on a city-scale. The Munich-based company Hawa Dawa specializes in providing environmental data (air quality, noise and microclimate), if desired, in real-time, by combining machine-learning-enhanced sensor data from a sensor network with external information, such as weather and traffic. The resulting high resolution heat maps can be accessed via an easy-to-use Application Programming Interface (API). Munich Re's impact bond concepts may also be applicable for financing any kind of environmental risk mitigation measurement.

Innovator *Heiko Milk, Senior Manager, Business Development, Siemens AG, Nuremberg, Germany*

Keeping power grids resilient with a comprehensive transformer concept

What can be done to make urban power grids more resilient, protect them from extreme weather events and minimize economic losses following natural disasters / human attacks? This is the focus of Siemens AG's presentation, which highlights power transformers as the most critical assets located at the most critical nodes of modern power grids. Ultimately they save time, money and give cities peace of mind by keep the lights on at all times.

Innovator *George Barbari, CEO, DC PRO Engineering, Dubai, United Arab Emirates*

A structured and self-financed plan to reduce City Energy

Every country, city, town and factory should have a specific energy budget. That budget would not be set by politicians but by independent elected or appointed energy governors similar to a Central Bank Governor - which will be transcended to every home, commercial building, factory and transportation body. The 'Energy Budget' proposes to reward efficiency by providing lower rates and penalise inefficiency with higher rates, the author insists. He stresses that under his plan, this wouldn't be a revenue generator, but the whole population would benefit as the penalties would be used as a self-financing mechanism by each country or city to finance district energy in existing buildings and factories and fund research into the use of renewables, hydrogen and bio fuels.