



SESSION DESCRIPTION

E1 Designing and financing resilient transport infrastructure: The case of Ho Chi Minh City

Panel discussion

Date: Friday, 30 May, 2014

Time: 14:30-16:00

Rooms: S25-26

Language: English

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Organized by: Siemens and Arup

OBJECTIVE

Investing in city infrastructure resilience is broadly comparable to taking out an insurance policy, one that will help to mitigate the future effects, and costs, of climate risk. As with any insurance policy, the payback in the event of a disaster can be significant. But unlike a pure insurance policy, investing in resilience can deliver significant benefits even in the absence of a disaster, by creating a more efficient and sustainable city.

To verify this, Siemens partnered with Arup and the Regional Plan Association to conduct a study. It explored the role of technology and the enabling framework required to enhance the resilience of New York City's electricity grid and the cost and benefits of such actions. The investments would be significant at about \$3 billion. However, it would not only cut future losses by \$2 billion, but also generate a net gain of \$3 billion through enhanced grid capacity, stability and increased energy efficiency.

The session will build upon the work presented last year and explore how new technology combined with new ways of designing can help cities manage essential infrastructure under more challenging conditions. What role does "smart" technologies play in making cities more resilient? What are examples of implemented technologies in the world's leading and developing cities?

The focus of the session will be a review of Ho Chi Minh City's transport sectors existing challenges against a backdrop of rapid urbanization, increase risk of flooding and massive congestion. What are the current plans for developing the transport system in the city and what technologies could enhance the resilience the system?

A major challenge for many developing cities is how to finance the necessary investment in infrastructure systems, as special focus will be on solutions that can increase the revenue collected from the beneficiaries of the infrastructure and cover a greater share of the operational cost, plus what tools and programs that currently exist that can increase cities like HCMC access to international financing.



OUTCOMES

Participants will gain a better understanding of:

- How IT technology can increase the resilience of transport infrastructure assets;
- How could relevant technologies be applied to Ho Chi Minh City; and
- What are the options for financing such technologies and transportation infrastructure.

METHODOLOGY

- The session aims to actively involve the audience by presenting initial findings and the questions that have emerged from work to the audience and facilitate a structured discussion.
- The facilitator will open the session with a short introduction of himself and each speaker. **(5 minutes)**
- Each speaker will be given time to describe their work, showing maps or other illustrations as needed. **(3 x 15 minutes)**
- The remainder of the session will be organized around the guiding questions, with each panelist given time to respond to individual questions, and to respond to comments made by other panelists. **(10 minutes)**
- The facilitator will facilitate a discussion with the audience. **(25 minutes)**
- The facilitator will conclude with closing remarks. **(5 minutes)**

Guiding questions:

- 1) Are cities like Ho Chi Minh ready to “leap frog” to a higher technology model of infrastructure management/operation? What are the challenges/opportunities?
- 2) How effectively are long-term resilience benefits integrated into the decision-making frameworks of cities and financial institutions? How could they be improved?
- 3) Which financing/revenue capture mechanisms could work to support resilience investments in a city like Ho Chi Minh?

CONTRIBUTORS

Panelist *Stephen Cook, Associate Director, Ove Arup and Partners Ltd, London, UK*

Panelist *Michael Stevens, Partnership Manager, Siemens Global Center of Competence Cities, London, UK*

Panelist *Laura Frost, Senior Consultant Energy & Climate Change, Ove Arup and Partners Ltd, London, UK*

Further recommended reading

Toolkit for Resilient Cities:

www.siemens.com/urban-resilience
