

Advancing the Smart, Sustainable and Resilient Nexus

Thursday March 26th, 2020

Welcome we will get started at 10 am



Agenda

- Gabriella Kalapos, Workshop Goals and Introductions and Clean Air Partnership's Efforts to Understand and Advance the Smart/Sustainable/Resilient Nexus
- Maciej Podoski and Bill MacGowan, Cisco's Efforts to Advance the Smart/Sustainable/Resilient Nexus
- Mark Luckhardt, Sidewalk Labs' Efforts to Advance the Smart/Sustainable/Resilient Nexus
- Juan Sotes, Carbon & Co-Benefits Quantification Manager at The Atmospheric Fund (TAF), The Case for Regional Carbon Emissions Inventories



Webinar Instructions

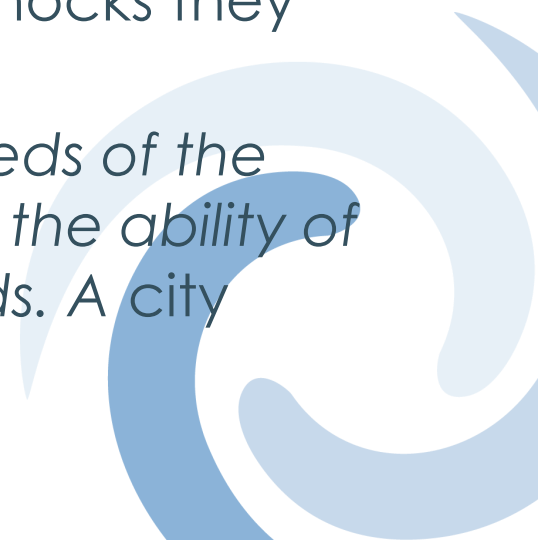
- Lines will be muted to reduce background noise, but please don't be shy about asking questions.
- We will be using menti to try and foster dialogue after each of the presentations
- You can also use the chat/question function on the webinar to ask any questions that occur to you during presentations and we will have time after each presentation for Q & A
- If you would like to be unmuted to ask your question just raise your hand or just let me know via the chat/question

Webinar Goals

- The smart/sustainable/resilient cities concepts are bandied around a lot
- BUT sometimes they get used in a way that assumes they are the same or interchangeable
- What do each of the above actually mean?
- How do they differ in theory and practice?
- How do they align? How do they conflict?
- How can we explore each of these concepts to improve their synergies/alignment?
- What questions/goals come to your mind?

Definitions

- **Resilient City:** A City where the capacity of individuals, communities, institutions, businesses, and systems within the city are able to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.
- **Sustainable City:** A City that *meets the needs of the present generation without compromising the ability of future generations to meet their own needs*. A city whose development targets all the SDGs.



SDG Goals



Smart City

- A City that utilizes the Internet of Things technology to effectively manage the city's assets and resources (energy, transportation, water, waste management and so much more)
- The objective should be to improve the quality of life for the City's citizens from an economic, social and environmental level.
- Is that really how it get applied? Can its applications towards those objectives be improved upon and if so HOW?

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Smart/Sustainable/Resilient City Nexus

- These terms can sometimes be used interchangeably and that isn't always accurate
- Technology can provide us with the data to design and implement solutions
- Can interconnect our systems (economic, environmental, health, governance, infrastructure, wellbeing) and help us overcome siloes
- With new connections there are also challenges and vulnerabilities.
- What are those challenges and vulnerabilities?
- How can municipalities and technology companies work together to identify and address those challenges and vulnerabilities?

Examples of Smart City Efforts That Advance the Nexus

- Town of Bridgewater: Energy Poverty Reduction Program to lift 20% of residents out of energy poverty
- Advance an energy efficiency and renewable energy program
- Use data and connected technology to drive energy savings to create financial returns for households and property owners
- Using data to ensure savings and financial return
- Increasing energy benchmarking and transparency

City of Yellowknife

- Using lampposts to advance social and environmental well-being
- Smart lighting that can be managed centrally
- EV charging stations
- Wi-Fi hot spots
- Tourism/community/neighbourhood information



Town of The Pas, Opaskwayak Cree Nation, Rural Municipality of Kelsey, Manitoba

- Using LED Smart Farm technology to grow healthy food and promote food security
- Reduce diabetes
- create a smart phone distribution system (app)
- Use EVs and drones for delivery
- consumption of healthy foods will be monitored through data collection via wearable technology

City of Côte Saint-Luc, Quebec

- Using technology to help seniors age in place (at home)
- Person to person contact with seniors to identify their needs. Home assessment of ways to reduce falls and improve connectedness
- Helping seniors understand technologies and programs to address the above
- Education and training for technology



City of Richmond, BC: using Smart Technology to Advance Emergency Preparedness

- Climate Change impacts
- Real-time incident notifications and faster response times by emergency crews
- Safer streets with reduction of traffic incident, congestion and commute times
- Greater community resiliency for 72 hours post-disaster
- Early incident detection of flooding, earthquakes and spills

Goals of this Webinar

- How are others trying to wrap their heads around identifying, addressing and acting on the conflicts and synergies across our smart/sustainable/resilient city goals and hoped for outcomes?
- Suggestions for how and what would help municipalities need and want to help them do the above?
- We will come back to this at the end of the presentations but keep those questions in mind.

Thank You

- To all our presenters
- To you for joining
- Stay healthy and happy!

