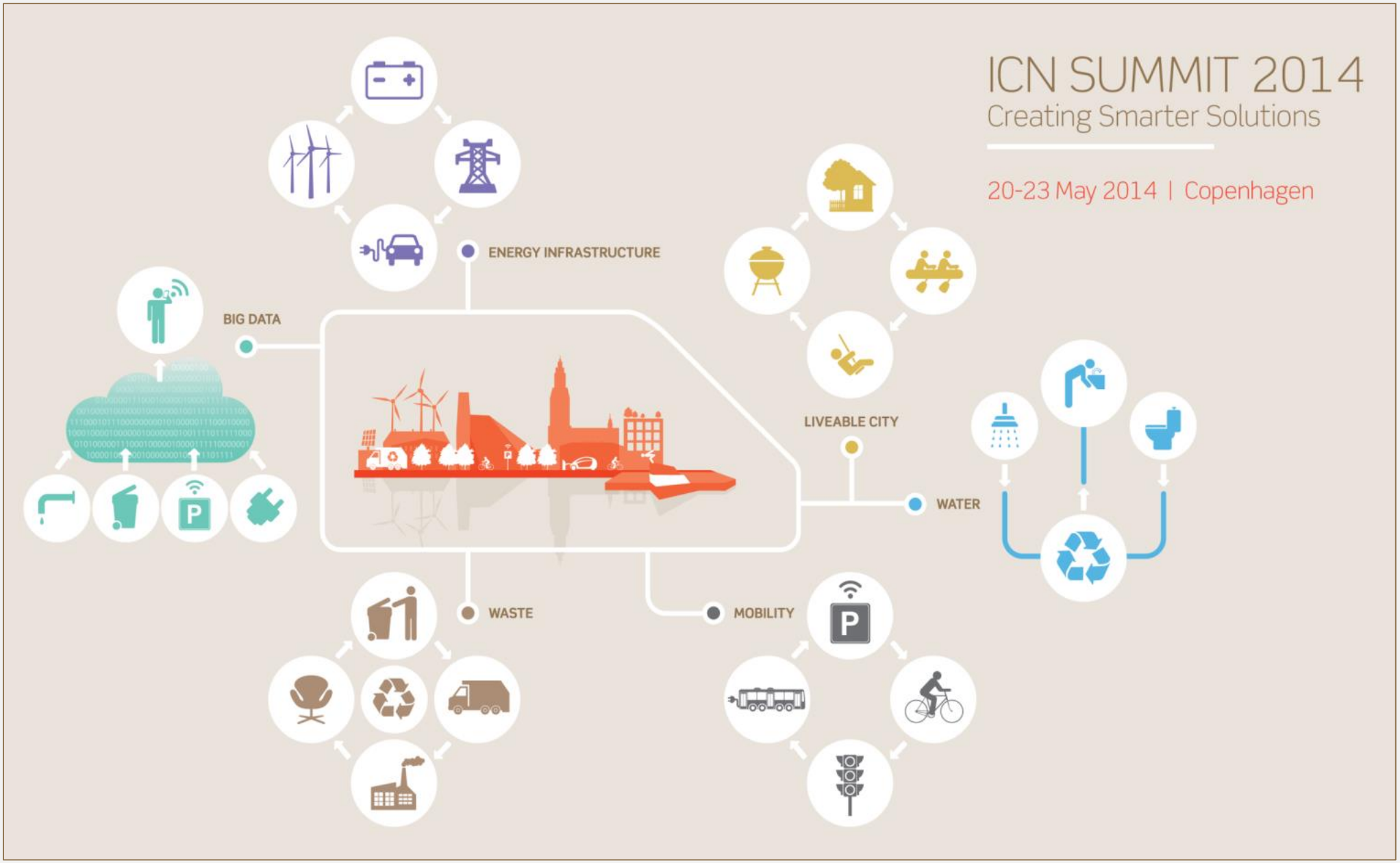
ICN SUMMIT 2014
Creating Smarter Solutions
20-23 May 2014 | Copenhagen
ENERGY INFRASTRUCTURE
BIG DATA
LIVEABLE CITY
WATER
WASTE
MOBILITY

COPENHAGEN

How can the city administration, their partners and stakeholders secure that the climate adaptation plan is implemented during the next 5 to 10 years and beyond?

In 2011 a massive cloudburst showed the vulnerability of the city to the future climate. Massive traffic disruption with closed roads, power cuts at hospitals, and flooded basements all over the city demonstrated the urgency for action. The cloudburst in 2011 was a game changer both on a local and a national level, and showed the need for a cloud burst plan. In 2014 the City Council must decide on how the implementation should take place.

"I enjoyed the conference – and really got some ideas to bring back home."

Lykke Leonardsen,
Head of Climate Unit
City of Copenhagen

Recommendations from the Copenhagen City Session:

- Make a measurement instrument in order to monitor and evaluate milestones, successes and visibility
- Establish a steering committee to support and coordinate the monitoring process
- Create new business models e.g. partnerships with insurance companies and cooperatives
- Communicate the initiatives directly to the citizens by using signs e.g. located at the green bike roads
  Empower kids as ambassadors, e.g. engage school children through competitions

Engage with the City of Copenhagen by contacting the local ICN cluster CLEAN: http://www.cphcleantech.com/

BARCELONA

How can Barcelona use public management tools to improve odor control?

The odors from sewers have become an increasing problem for the City of Barcelona and have since been high on the agenda of the citizens' concern. The complaints may though have different origin, e.g. solid waste, emissions or sewers. In the last few years citizens' sensibility to this problem has increased, especially in the case of sewer smell. The solution should be a general approach that public managers can use. Especially sensor technologies and self-cleaning drains are of interest here.

Recommendations from the Barcelona City Session:

- Increase the public responsibility and create public awareness of hot spots in order to make it a common problem
- Focus on cleaning and flushing of pipes
- Encourage entrepreneurs to make money on collecting fat before it enters the waste steam

Contact the City of Barcelona: Maria José Chesa Marro, Director of Planning & Innovation: mjchesam@bcn.cat

MILAN

How can increased Urban Mobility make Milan greener and smarter?

Milan's key challenge is the traffic congestion in the city. Air and noise pollution exceed the critical values set by the EU and the high level of car ownership adds to the problem. The second largest city of Italy, which is home to 1,3 Million people remains the country's main industrial engine. Milan is working strategically to smarten the city within six areas: Smart Economy, Smart Living, Smart Environment, Smart Mobility, Smart People and Smart Governance.

"At the ICN Summit I have experienced the opportunity to share Milano Mobility challenges… I received useful feedbacks that I bring back, to strength or refine Milano plans and projects."

Maria Berrini, President and Managing Director, City of Milan

Recommendations from the Milan City Session:

- Create a social innovation community
- Identify needs in order to create a strategy and communicate the strategy to citizens
- Create economic incentives, e.g. by increasing toll tax and parking prices, give tax supported benefits and redistribute big freight transport
- Promote cycling through changes in infrastructure behavior, investment in public transport and the use of tram lanes

Engage with the City of Milan by contacting the local ICN cluster Lombardy Energy Cluster: http://www.energycluster.it/

GRENOBLE

How can technological systems and information be used to influence consumer behavior and energy consumption?

Thermal performance of new housing is improving quickly thanks to new building solutions. However, it leads to a set of challenges which are related to the issue of intelligent energy use and management: low temperature heating systems, the share of energy load linked with individual behavior becomes predominant and consumer behavior thus becomes a challenge. The city wants to learn how to influence consumer behavior towards energy consumption, especially if technological systems exist.

"I was positively surprised by the debate. The companies did not just relied on technical solutions, but we had a really good discussion about the approach."

Xavier Normand, Project Manager,
"Sustainable Cities" Coordinator,
City of Grenoble

Recommendations from the Grenoble City Session:

- Make smart meter information fun, undeniable, relevant and usable
- Invest in consumer awareness
- Make statistical data available
- Initiate a user study in order to understand the consumption patterns in domestic and tertiary sectors
- Benchmark with same size cities with similar climate

Engage with the City of Grenoble by contacting the local ICN cluster Tenerrdis:
http://www.tenerrdis.fr/en/

OSAKA

How can new technology improve thermal grid systems?

The second largest economy in Japan Osaka is exchanging nuclear power with green energy and has started to test smart home technology in 2011. 'Sakishima Smart Community', located in the Osaka Bay area outlines their challenge as: energy network along the railway, mutual use of boiler and chiller in buildings, biogas from sewage plants supplying DHP and energy to the district. In more concrete terms, Osaka wants to improve their thermal grid system by low-cost piping technology and products and low-cost biogas co-generation systems. They are looking for smart and unknown technologies that can be applied to the project.

"I really appreciate participating in this splendid conference. Now we're proceeding concrete contract and partnership with the ICN cleantech clusters"

Hideo ISOZAKI,
Technical Director
Sakishima-Asia Smart Community Alliance

Recommendations from the Osaka City Session:

- Keep it simple and forget big data, else it would become too academic
- Define the business case and the value including costs, investments, noise, reliability and efficiency
- Make the communication clear
- Think long term! It should be scalable and it should identify free heat

Engage with the City of Osaka by contacting the local ICN partner Sakishima-Asia Smart Community Alliance: http://sakishima-smart.jp/top_en.html

GRAZ

How can Graz build a smart, pulsating urban quarter with zero emission, low use of resources, sustainable energy forms and sustainable mobility?

The Austrian Smart City flagship project “Smart City Graz” plans to transform a former industrial area into a future oriented and intelligent city quarter with attractive public spaces and a high quality of life, where sustainable urban mobility including e-mobility plays a vital role. Important questions further remain the issue of financing the necessary investments, increasing the visibility and strengthening the general public’s awareness of and enthusiasm for smart cities. Graz is looking for a concrete approach to “smart energy technologies” such as smart grids for heat and electricity, the coupling of isolated technological solutions to form one urban system emphasizing renewable energy and the development of smart mobility solutions.

Recommendations from the Graz City Session:

- Take a step back and ask “WHY” this project is necessary and important
- Create a city policy in order to support and enforce the project
- The strategic development should be complementary with an Energy Strategy for Austria

Engage with the City of Graz by contacting the local ICN cluster ECO WORLD STYRIA: http://www.eco.at/cms/223/

SANT CUGAT DEL VALLÈS

How can data improve waste management and increase the quality of life?

Waste collection has decreased the quality of life of the residents living in the pedestrian zones: streets full of containers, dirt, and noise when collecting the waste. The city is now looking for new data technology to implement a waste management system that ensures the best ratio between costs, quality and service to citizens. The Strategic Plan 2011- 2020 sets ambitious targets for sustainability and the liveable city.

"It was a pleasure to participate in the ICN Summit, I had a great experience….the work session was useful and we've got some ideas to implement in Sant Cugat in order to solve our challenge"

Victor Martinez del Rey,
Director of Territorial Management and Urban Quality Department, City of Sant Cugat del Vallès

Recommendations from the Sant Cugat del Vallès session:

- Make a "clean sheet" and use it! First identify the preferred opportunities and then second choose the technology
- Waste as a resource and income – make it happen
- Do not punish but make proud through a local point system
- Make a communication plan and teach the school children/students, as well as utilizing signs by the containers
- Create an app which can communicate to waste handling company about delivery

Contact the City of Sant Cugat del Vallès: Victor Martinez del Rey
victormartinez@santcugat.cat

PERTH

How can Perth make a well-informed decision on whether or not to develop Northbridge West into a low cost sustainable village?

The economic and social vitality of downtown Perth largely depends on retail and service industries. However, increasing real estate prices and living expenses make it expensive for employees to live in the city. The City of Perth is now considering to change the under developed Northbridge West area into a low cost sustainable urban village, applying smart solutions such as inclusion of environmental enhancement systems. The city is looking for a predictive economic modelling in order to decide whether or not to develop the city area. The solution should include low impact integrated transport and choices in mobility.

"I have gotten so many ideas here that I need extra bagage allowance on my return trip"

Doug Forster,
Director of City Infrastructure and Enterprises,
City of Perth

Recommendations from the Perth City Session:

- Make value-based planning through system dynamic modelling (not static planning) – the city development should be never-ending!
- Create diverse types of housing by making different kinds of ownerships and price scales
- Re-branding the area and create an identity
- Activate public spaces before developing the area completely – if the area is known before housing starts it will be more attractive

Contact the City of Perth: Doug Forster, Director of City Infrastructure and Enterprises
Doug.Forster@cityofperth.wa.gov.au

ROTTERDAM

How can Rotterdam transform the former port areas in a sustainable urban development process that aims at connecting city and port?

The City of Rotterdam faces the challenge of how smart/clean technologies can be integrated within energy, building, water and waste in order to create a liveable city in the Merwe Vierhaverns area. The aim is to connect city and port by developing former port areas. Stadshavens Rotterdam (e.g. Merwe Vierhavens Area) will become home of sustainable innovations, directly linked to education and the regional labour market in order to create an attractive business climate for (international) companies.
For the period 2014-2025, room will be provided for economic and (light) industrial use. This development should be organized in such a way that after 2025 it's possible to realize housing within environmental guidelines.

Recommendations from the Rotterdam City Session:

- Create specific economic zones in order to boost the short term development
- Invest in public spaces and make event days
- Select organizations and companies based on profile, commitment and "fit"
- Create a focused vision with a concrete scope
- Create a knowledge sharing value chain

Engage with the City of Rotterdam by contacting the local ICN partner Cleantech Delta: http://www.cleantechdelta.nl/?lang=en

BOULDER, FORT COLLINS & LOVELAND

How can three Colorado cities jointly push for EV/PV adaptation at scale for daily in-commuters?

Employee commuting results in significant monthly gas costs and accounts for a significant portion of communities' greenhouse gas inventories. The cities are looking for innovative ideas, human behavior change and the business models to bring EV/PV to scale.

"The conference was very well organized and the information received during the City Challenge portion with respect to the Electric Vehicle/Photovoltaic challenge was very helpful. My biggest takeaway was in the need to sell the sizzle in marketing the program to the communities."

Bruce Hendee, Chief Sustainability Officer, City of Fort Collins

Recommendations from the City Session:

- Engage communities and get their support
- The municipalities could "rent-out" their own EVs to citizens in order to "educate" them
- Create demonstration programs with carrier services such as taxies and busses
- Consider whether there are other technologies/ solutions that are more sustainable
- Create incentives to provide chargers at work places
- Measure the sustainability effects

Engage with the cities of Boulder, Fort Collins & Loveland by contacting the local ICN cluster Colorado Clean Energy Cluster (CCEC): http://www.coloradocleanenergy.com/

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