



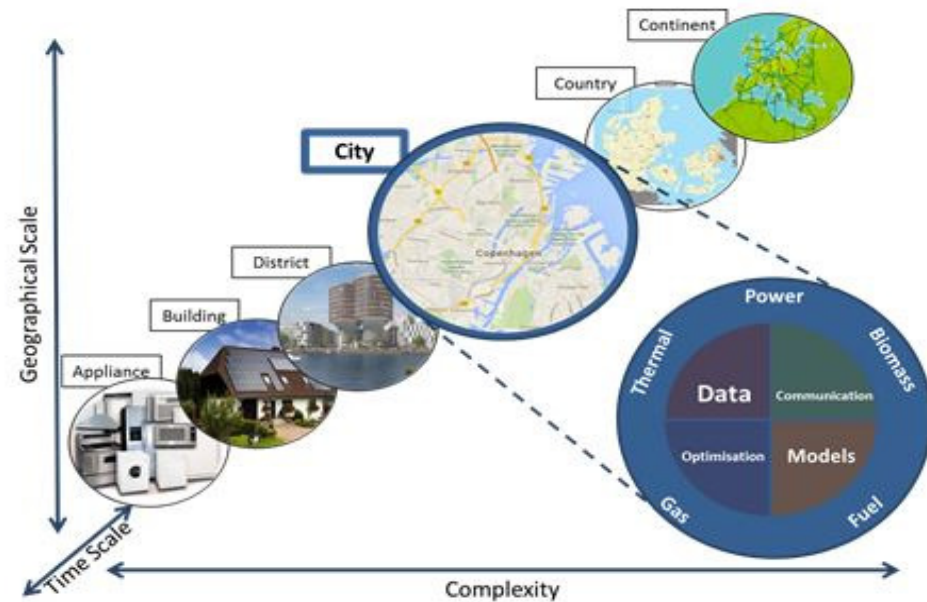
Nordic Cities workshop Introduction

Susanne Pedersen, Director

In collaboration with:



CITIES – Center for IT-Intelligent Energy Systems in Cities – is the largest research project related to Smart/Green Cities in Denmark. The goal is to establish methodologies and ICT solutions for design and operation of Integrated Energy Systems at all scales while zooming in on Cities.





Ea Energy Analyses



Danish Partners



KØBENHAVNS KOMMUNE



Brødstrup Fjernvarme





International Partners



Climate-KIC: what and where.....

Climate KIC:

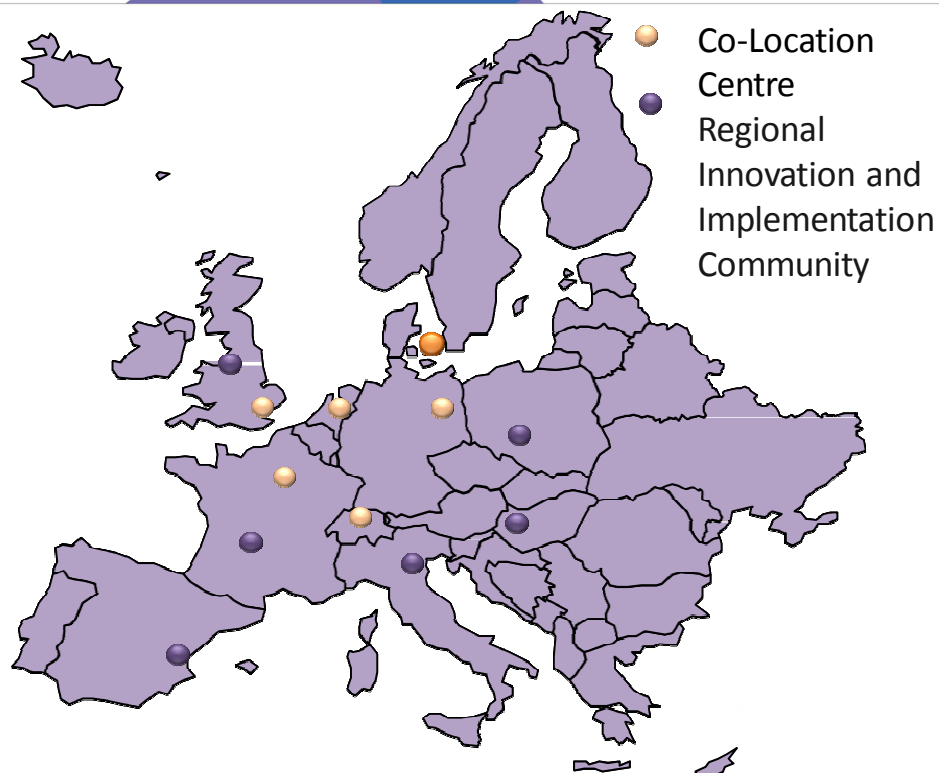
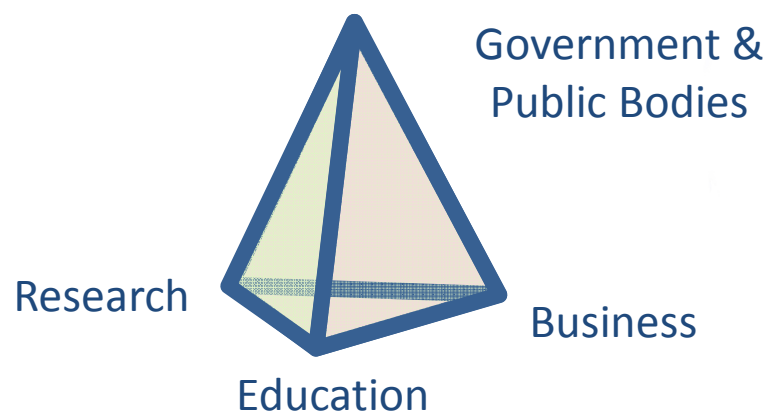
Europe's largest public/private partnership addressing climate change. Funded by



232 partners across Europe

- Business – 52%
- University and Research Institutes – 24%
- Public bodies, NGO and Not for Profit – 24%

Our knowledge triangle is a pyramid: We bring together all the actors of the innovation pyramid



Current hubs: 6 Co-location Centres; and 6 RIC Regions

Our activities cross boundaries: discipline, sector, geography

Nordic Co-location Centre (CLC)



Technical
University of
Denmark



CHALMERS
UNIVERSITY OF TECHNOLOGY



KØBENHAVNS KOMMUNE



Aalto University



LUND
UNIVERSITY

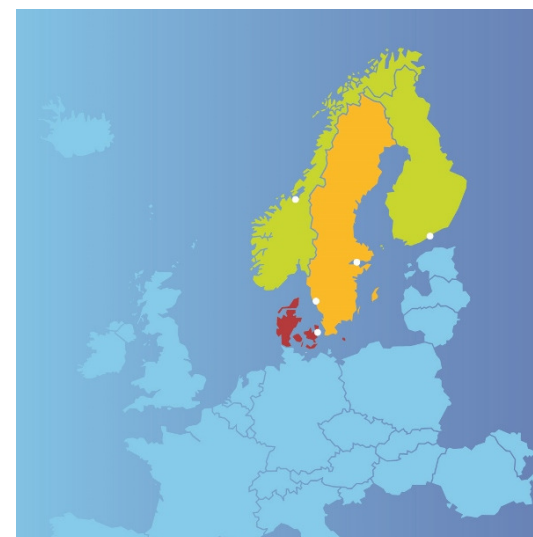


Johanneberg
Science Park



Scion DTU
Science and Technology Park

- Opened in April 2014
- Based at the Technical University of Denmark, DTU
- Hub for Climate-KIC activities in the Nordic countries



Our three pillars



Education

- **Labelling**
- **E-learning (MOOC)**
- **Executive Education**
- **Pioneers into Practice**
- **Summer schools**
 - The Journey
- **Master classes**
- **Innovation Building Blocks**

Entrepreneurship

- **Accelerator**
- **Climate Launchpad**
- **Open innovation**
- **Webinars**
- **Incubators**
 - Johanneberg
 - ScionDTU

Innovation

- **Projects on three levels:**
 - Pathfinder
 - Innovation
 - Flagship
- **Innovation Festival**

Nordic Innovation Portfolio 2015



Flagships

- Building Technology Accelerator (BTA) (Chalmers)
- enCO2re enabling CO2 re-utilization (Chalmers)
- Smart Sustainable Districts (SSD) (DTU, Chalmers)

Innovation Projects

- Novodot (Novozymes)
- Oasis+ (DTU)

Pathfinders

- 9 Nordic-led projects awarded for 2015 (DTUx4, Chalmersx1, JSPx1, Rockwoolx2, Velux x1)
- 3 other projects with Nordic involvement

Enabling the transition

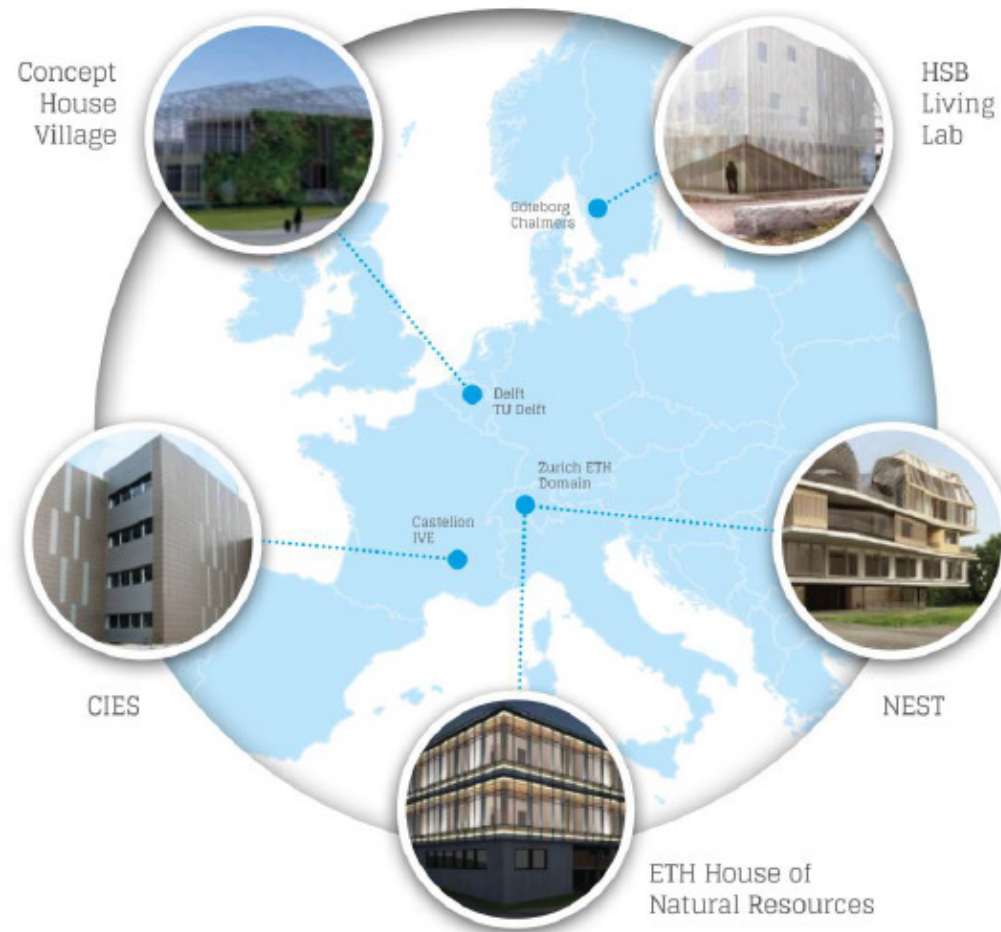
- Building Materials ABC (Chalmers)

Flagship example: Building Technology Accelerator



40% of global anthropogenic greenhouse gases and 50% of landscape change are the result of building activities.

Market 'saturated' and risk averse: decision takers do what they always did



BTA: A network of 'Living Labs' where technologies can be assessed in real life conditions

a pathway towards exploitation of the full potential of GHG reductions in the built environment

Innovation Project examples



Diffusion of E-Bikes

Converting E-Bikes into scalable public transportation



Azofast

Producing Azolla biomass for a large scale production of proteins and raw materials for food and non-food purposes



Delivering sustainable energy solutions for ports

Bringing innovation to container terminals in European ports to reduce carbon emissions



Fuel Supply Chain Development and Flight Operations

Reducing Carbon Emissions in the Aviation Sector



Mun-E-P (Municipal E-Bus Planner)

Driving the transition from diesel to electrified buses in local public transport



Reduced Footprints of Monumental Structures, Landscapes and Buildings

Building a market for reducing energy emissions in heritage buildings



Urban Mobile Instruments for Environmental Monitoring

Urban Resistance to the Effects of Climate Change



Realising carbon footprint reduction in food and non-food chain by new production systems based on LED lighting

Reducing the carbon footprint of greenhouse horticulture

Open Innovation Call



[Climate-KIC](#) > [Events](#) > Open Innovation Call for the city of Copenhagen

Event: 2 October 2015

Climate-KIC and the City of Copenhagen are calling on researchers, entrepreneurs, SME's and corporates in the Climate-KIC network to propose solutions

The five climate challenges posed by Copenhagen:

#1 Flooding of the city

#2 Flooding of citizens' property

#3 Buildings

#4 Smart city

#5 Urban Heat Island

Climathons -24hr Hackathons



[Climate-KIC](#) > [News](#) > Gothenburg's Climathon: 24 hours to find innovative ways to improve the experience of city travel

[Climate-KIC](#) > [News](#) > Finland's 24-hour Climathon: As it happened

[Climate-KIC](#) > [News](#) > Copenhagen's Climathon: 24 hours to uncover the right data and services to improve traffic flows



#Climathon
24-hours for city-level
solutions to climate change

Climate-KIC is supported by the
EIT, a body of the European Union



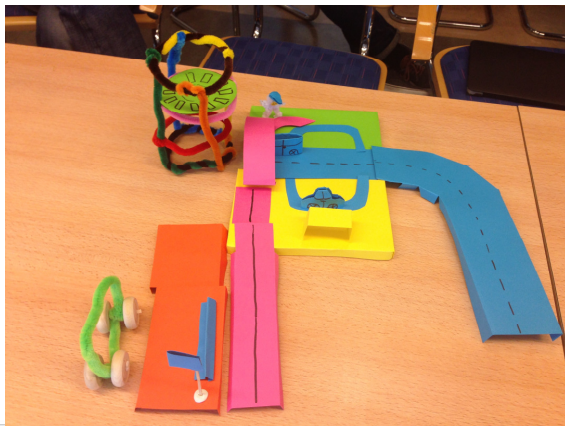
Gothenburg

The experience of travel



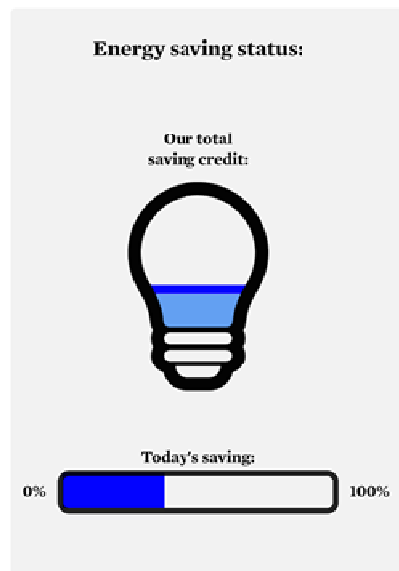
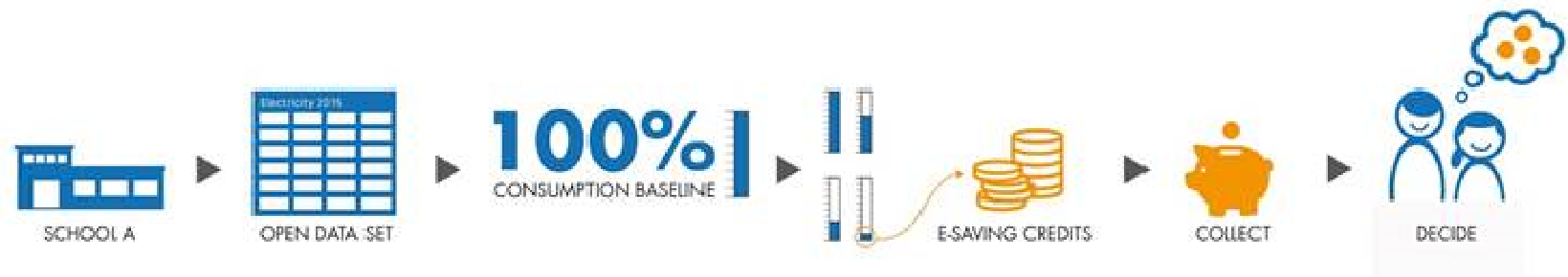
An inclusive card which provides benefits for environmental travel

The welcome in bus provides comfort and services for all



In 20 years rapid driverless inner city transport will be supported by efficient peripheral hubs

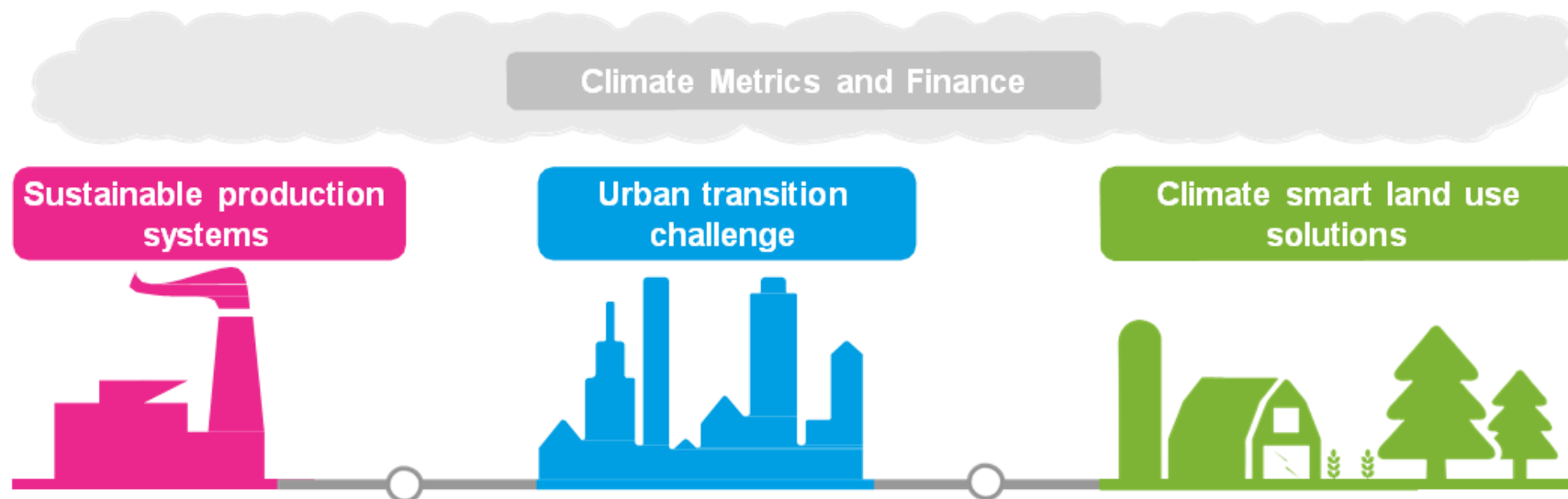
Helsinki



Copenhagen: cyclebox



Focus on four thematic areas



Production systems produce the building materials that are used in *Cities* and the consumption goods that are used by *urban end users*. *Agriculture and land use systems* produce food for urban users and bio-feedstocks for the *production industry*. These interlinked systems produce the majority of our greenhouse gases and at the same time are vulnerable to changing climates.

Climate-KIC focusses on bringing together different stakeholders within and between each of these sectors, help them find and test the best innovative solutions and scales up successful innovations.

The ***Climate Metrics and Finance*** theme will use climate measurement to incentivise companies and financial institutions to shift their focus towards sustainable investment strategies. The theme will also support other Climate-KIC themes with impact measurement.

External funding opportunities (examples)

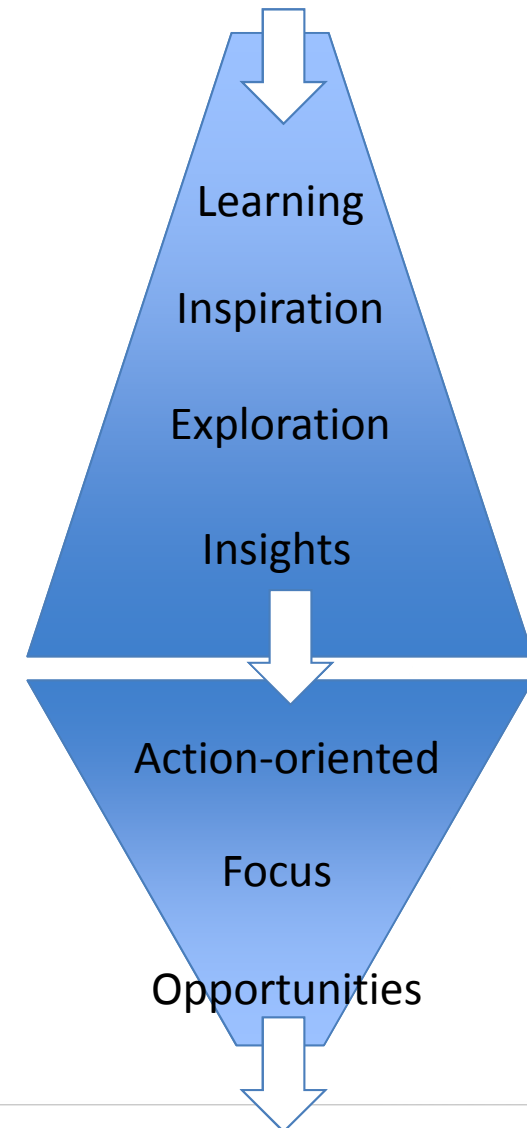
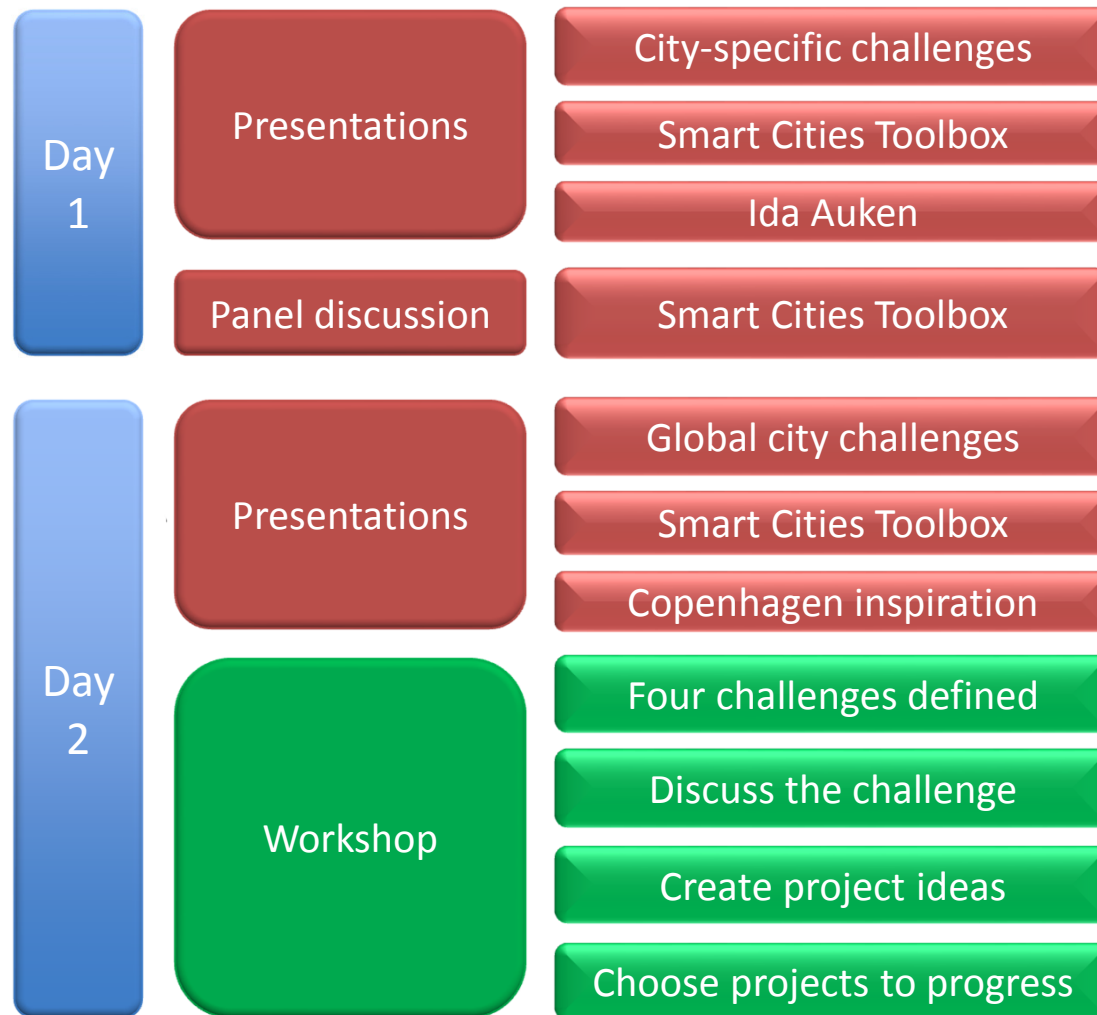


Country	Programme
EU	URBACT
EU	LIFE 2014-2020
EU	LIFE+
EU	GUDP
EU	H2020 SC Energy
EU	H2020 SC Food/Agriculture
EU	H2020 SC Transport
EU	H2020 LEIT NMPB
EU	H2020 Fast Track to Innovation Pilot (FTI)
EU	H2020 SME Instrument

Country	Programme
Sweden	MISTRA
Sweden	FORMAS
Sweden	VINNOVA

Country	Programme
Denmark	Grøn omstillingsfond
Denmark	MUDP Fyrtårnprojekter
Denmark	MUDP Test and Demonstration
Denmark	KR Foundation
Denmark	Villum og Velux

Nordic City workshop programme





Susanne Pedersen
Director, Climate- KIC Nordic
susanne@climate-kic-nordic.org
Anker Engelunds Vej 1
Building 101A
2800 Kongens Lyngby
Denmark
www.climate-kic.org