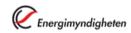


### Connecting the future to our cities.

Viable Cities – a Swedish Innovation Programme for smart sustainable cities Dr Charlie Gullström Research Strategist Viable Cities KTH Royal Institute of Technology











#### **Foundations**

- Climate and energy commitments:
  - zero net emissions of greenhouse gases by 2045
  - 100% renewable energy production by 2040
  - new goals for energy efficiency defined by 2017
- The sustainable transformation of cities as a vital condition for a turn-around to a zero-emission society.
- Information and Communication Technology as an enabler for such a turnaround







**Our vision:** Sweden inspires and has a leading role in energy and climate transitions through Smart Sustainable Cites



Swedish cities: Visions & targets

**Göteborg** is a sustainable city, open to the world, where everyone feels at home.

2020 Emission levels of  $CO_2$ e will be reduced by at least 40% compared to the levels in 1990

2050 The city will have a substantially reduced level of GHG emissions to less than 2.0 tons CO₃e per capita.

**Malmö** is a world leading in sustainable urban development by the year 2020.

2020 Greenhouse gas emission will be reduced with 40% and the use of energy will decrease by 20% per person

2030 the entire city will run on 100% renewable energy and the use of energy will further decrease by 20% per person

**Umeå** growing with social, ecological, cultural and economic sustainability for 200 000 inhabitants by 2050.

2018 Climate neutral energy system

2020 Fossil fuel free public transport

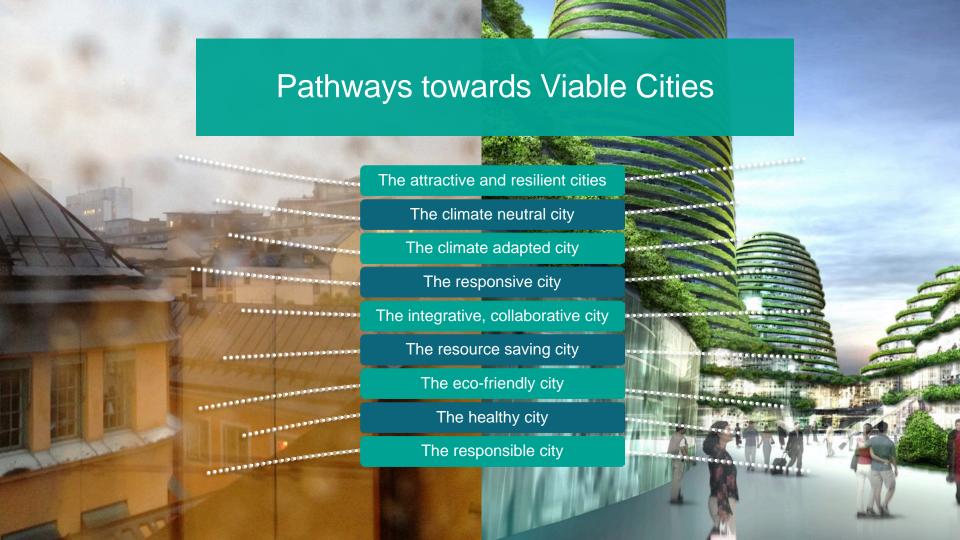
2030 Fossil-fuel independent vehicle fleet

2045 No net greenhouse gas emissions in Umeå

**Stockholm** for everyone — the City of Stockholm should be a socially, financially, ecologically and democratically sustainable municipality by 2040.

2040 Reducing GHG emissions per person in Stockholm to less than 2.3 tons CO<sub>3</sub>e per capita, and to be fossil-free

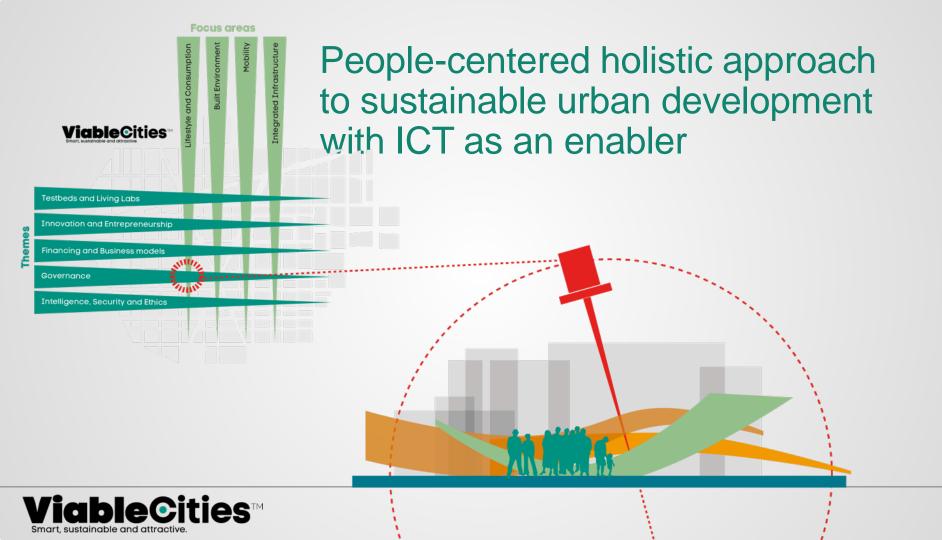




# Focus areas & cross-cutting themes







#### **Activities**

**Knowledge and Innovation Actions** 

Research, development & innovation

Demonstration

**Support and Coordination Activities** 

Roadmap & critical analysis

Knowledge sharing & capacity building

Policy, regulation & standards

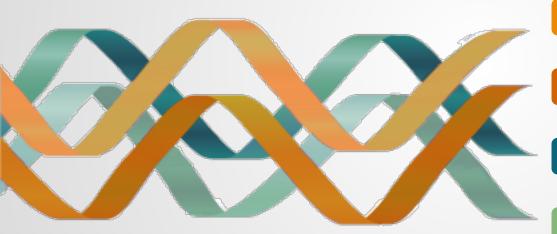
Entrepreneurship & growth

Internationalisation



#### Strong consortium

Viable Cities: a cross-sectorial, transdisciplinary and multi-stakeholder approach



Public authorities

Universities/Research Institutes

Industry in core SSC-sectors

Civil society



ABB AB, Corporate Research	Chalmers University of Technology	City of Gothenburg	City of Malmö	City of Stockholm	City of Umeå	City of Växjö	CLEANER GROWTH	E.ON Sverige AB
ElectriCITY Stockholm	Electrolux AB	Envac AB	Ericsson AB	Fortum Sverige	Growth and Regional Planning Administration, Stockholms Läns Landsting	Göteborg Region Association of Local Authorities (GR)	Handelsbanken Sweden	Hertz (First rent A Car AB)
IBM Svenska AB	Intel Sweden	IVL Swedish Environmental Research Institute	Johanneberg Science Park AB	K2, Swedish Knowledge Centre for Public Transport	KTH Royal Institute of Technology	Lund University	Lunds Kommun	Marketing Technology Center (MTC)
Miljöstrategi E&J AB	NCC AB	NetPort Science Park AB	Nobina Technology AB	Region Skåne	Swedish ICT	Scania CV AB	Siemens AB	Skanska Sweden
			3		SP Technical Research Institute of Sweden	WWF Sweden	Svenskt Vatten	Sweco Sverige AB
					Swedish Union of Tenants	Teknikföretagen	Swedish Transport Administration	Trivector AB
					Umeå University	WSP Sweden AB	Xeric AB	

### ViableCities Smart, sustainable and attractive.

### Programme board



Allan Larsson *ElectriCITY, Stockholm* 



Anna Ledin
City of Gothenburg



Lena Neij *Lund University* 

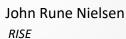


Catarina Naucler Fortum Sverige



Gunnar Björkman
City of Stockholm









Mikael Östling KTH Royal Institute of Technology

Mikael Anneroth

Ericsson AB

Ulf Ceder Scania CV AB



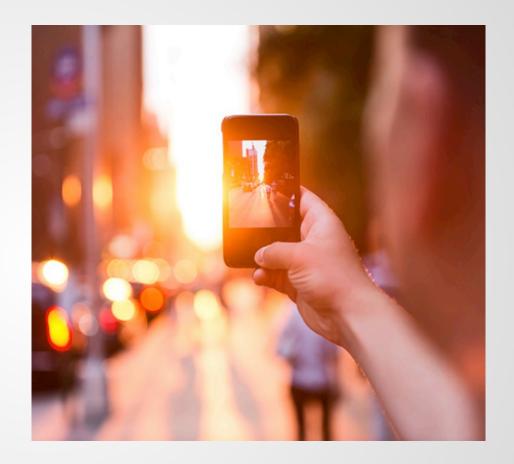
# Open call #1, 2017: Energy and climate transition through smart sustainable cities





# Welcome to submit proposals that

- Meet energy and climate challenges in cities
- Use digitalisation and citizens' engagement
- Are cross-sectorial and transdisciplinary
- Are based on citizens' needs and deliver benefits for citizens
- Facilitate inclusion, gender equality and diversity
- Enable scalability, replicability and interoperability













Urban Futures
Innovation platforms
and testbeds



Smart Built Environment SIP

Drive Sweden SIP

IoT SIP





Horizon 2020 Societal Challenges





JPI Urban Europe





KIC InnoEnergy
Climate KIC

**EIT Digital** 



# Pathway to the zero-emission society





### Thank you.



