



Attractive Living Environments and Flows— eight themes in planning good cities of the future

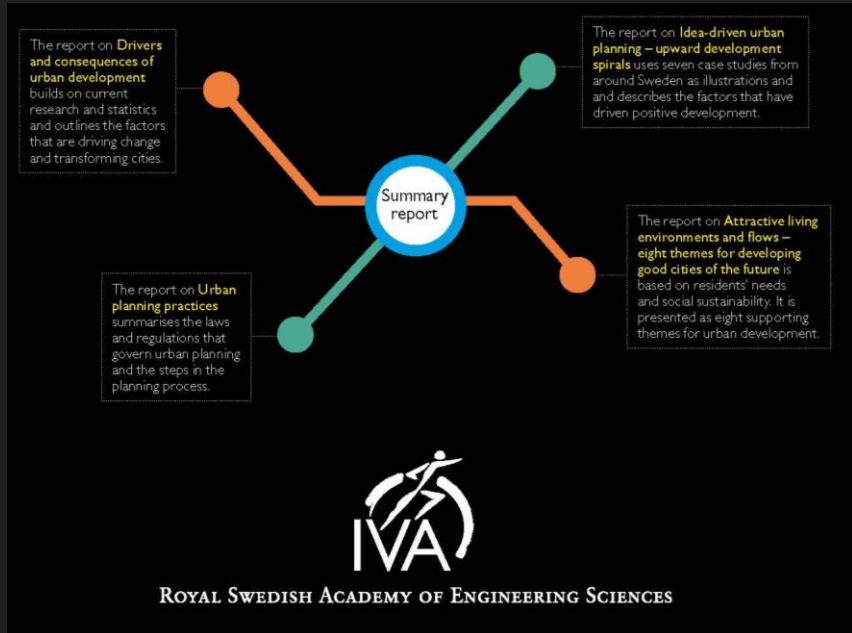
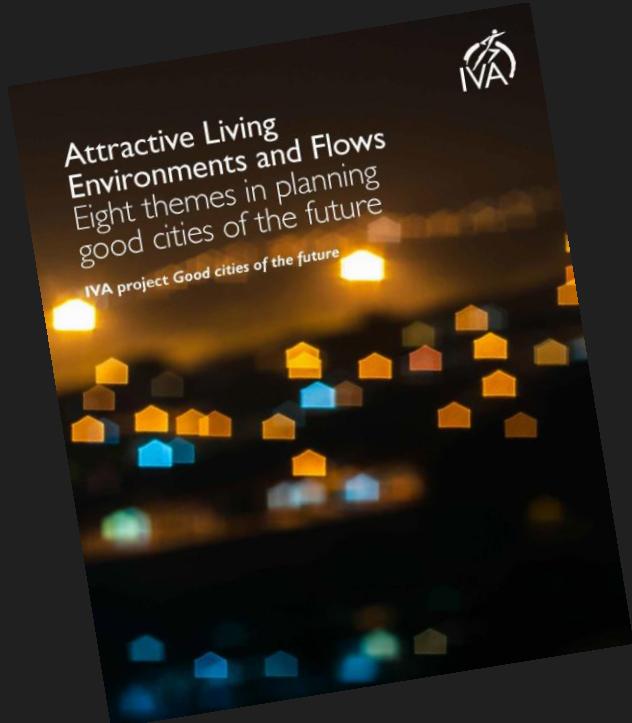


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Member of Swedish collaboration programme "Smart Cities"

Smart Cities and Regions
Sundsvall 20180131

SWECO ✎





One of four sub projects within the project "Good Cities of the Future" download from www.iva.se



A people-centric focus

Health

Comfort

Safety and Security

Life quality

Participation

Global and Local Challenges in Cities and Regions

Synergies and links between all goals should be observed in a holistic way





The Sustainable Development Goals and Internet

More than half of the world population lack robust access to Internet and thus to information, education, and economic development

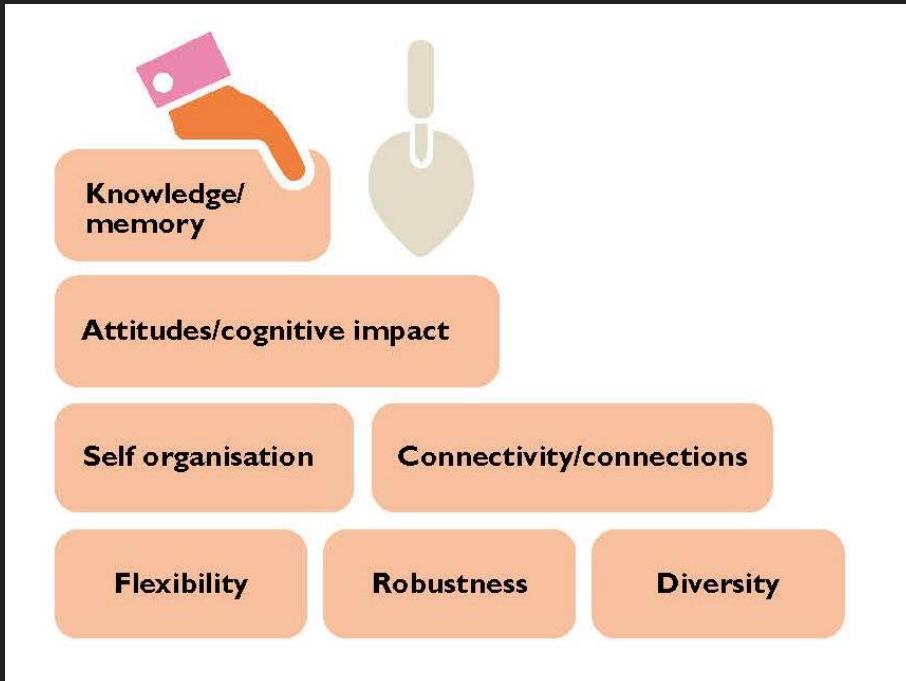
*“Our Vision is to make Internet accessible for all people 2027 to a reasonable price”
(Greg Wyler, Oneweb)*



Vizag, India

Ecological, Social and Economic Resilience

Combined spatial planning and digitalization is increasingly important in order to be able to meet unforeseeable changes



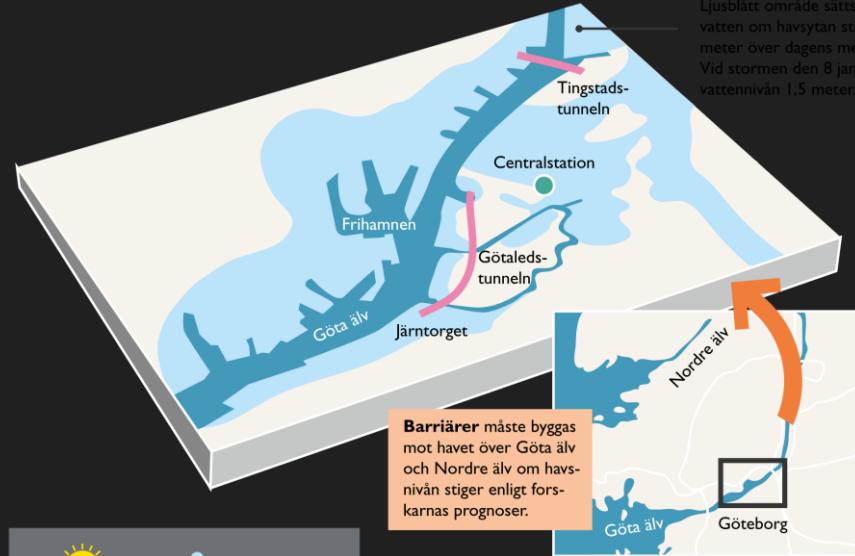
Source: : Ranhagen, U, 2015, Resan mot starkt hållbarhet.TRF 2015:www.rufs.se



Coordinated strategies for climate adaptation



Example: Rio De Janeiros Operations Center
Follows natural changes in real time



Example Gothenburg



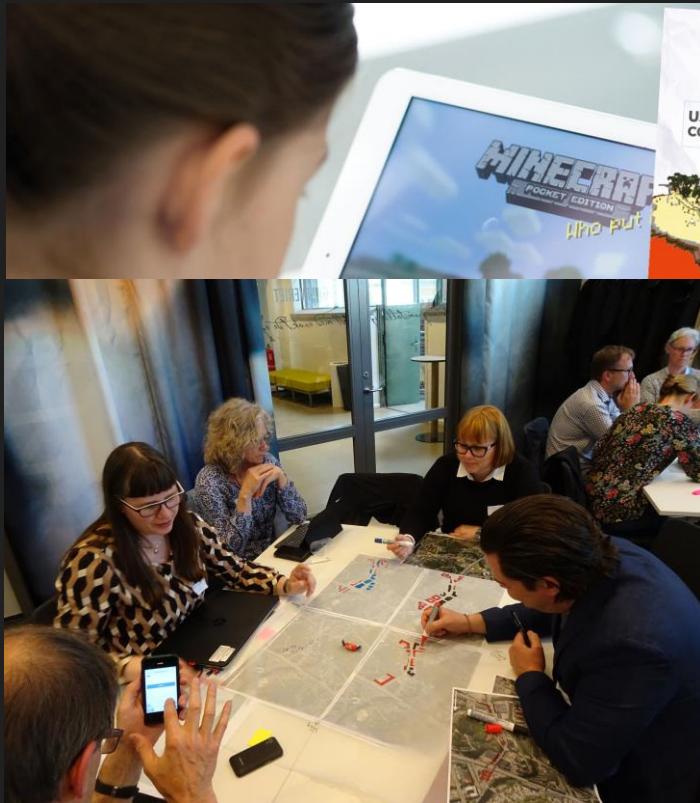
Retreat = Dra tillbaka bebyggelsen

Defend = Bygga skyddsvallar

Attack = Bygga ut i vattnet

Source: The City of Gothenburg/Mistra Urban Futures/Sweco

Theme I: Develop Visions for the future in dialogue between actors (on regional, municipal and local level)



Combine manual and digital tools in systematic and creative planning and design processes

Source : UN Habitat/Sweco/Mistra Urban Futures

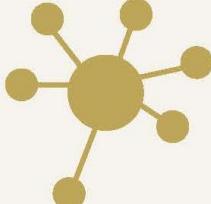
Theme 2: Looking at Good Cities of the Future in a regional context – digitalisation facilitates a polycentric development



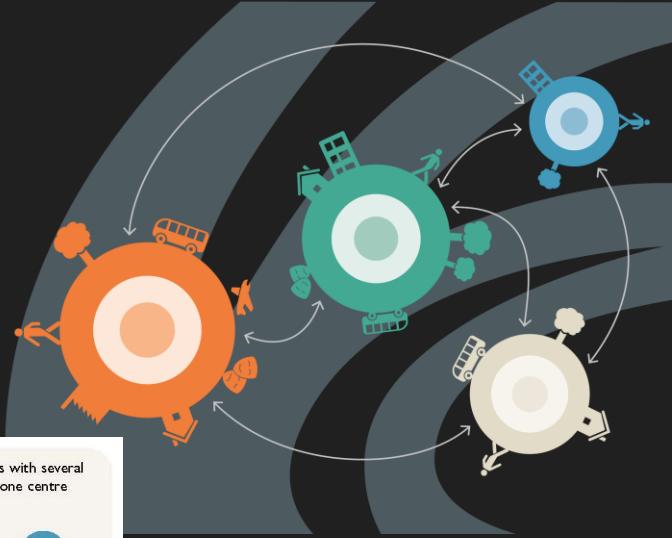
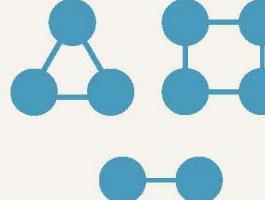
Monocentric town structure with one or more isolated urban centres of activity.



Hierarchical polycentric region with one centre dominating.



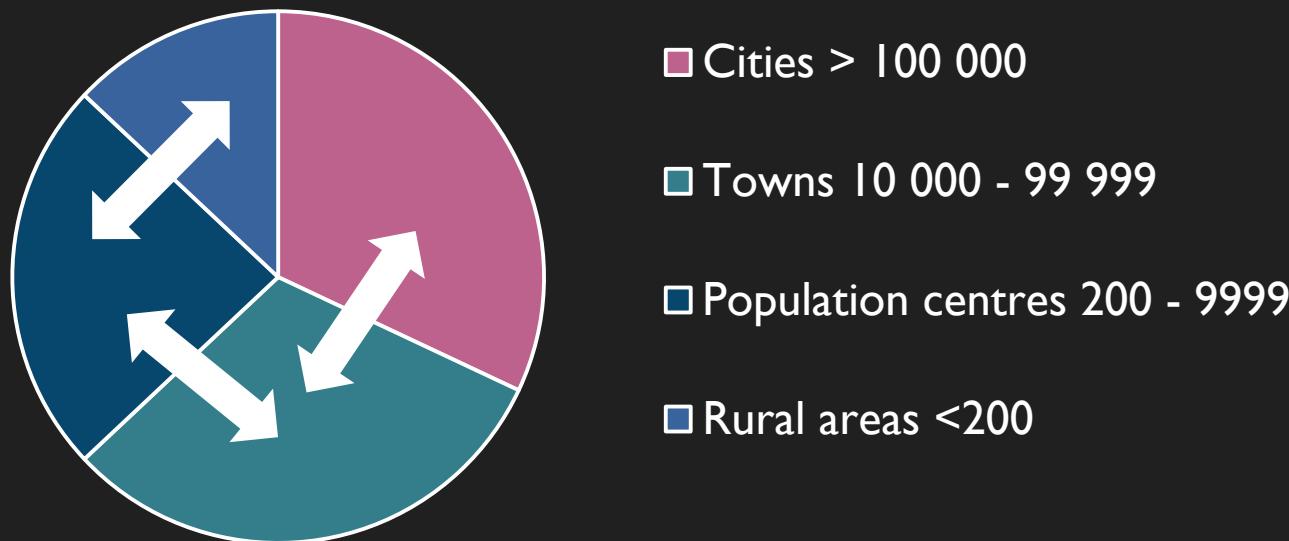
Complementary polycentric regions with several urban centres of activity where no one centre dominates.



Source: : RUFS/KTH/Region Skåne

Theme 2: Looking at Good Cities of the Future in a regional context – regional planning and digitalisation facilitates interplay and balance between places of different sizes

Distribution of the population in cities and towns (SCB 2015)





Theme 3: Build Cities inwards *Which type of development do we want?*

Atlanta



Barcelona



Both these cities have 5 million citizens and the same GNP but Barcelona has less than 1/10 of the emissions generated in Atlanta.

Source: Johan Kuylentierna Bertaud & Richardson, 2004

Theme 3: Build Cities inwards – dense, green and mixed-use

Spatial planning, digitalisation and new technology facilitate a better utilisation of existing resources, and space efficient transportation systems



Gothenburg



Rinkebystråket



Norrköping



Borås

Theme 3: Build Cities inwards – dense, green and mixed-use

E-commerce offers conditions for future transformation of working and commercial areas to mixed-use cities – E-commerce increased 18% between 2016:4 and 2017:1 (Postnord)



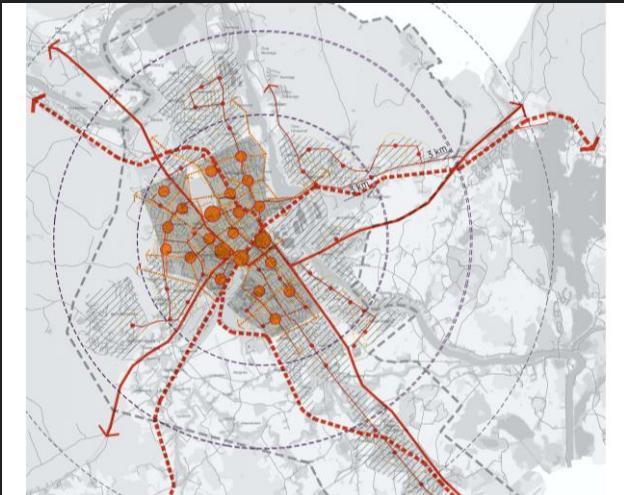
Plans for 2,6 mill
sqm external
shopping centres
2017 in Sweden
(Dagens Handel
maj 2017)

Mobilia Malmö City building prize 2014

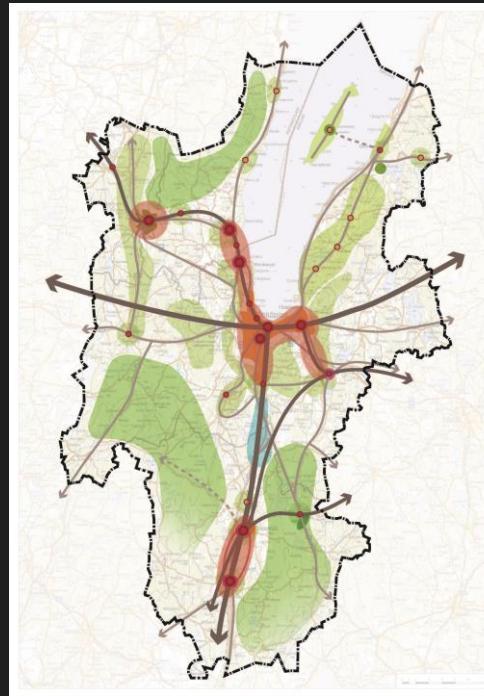
Source: Real Estate Magazine

Theme 4: Enhance meeting places , high streets and rail connections

Develop a network of meeting places and public spaces on different levels



FÖP Falun urban centre



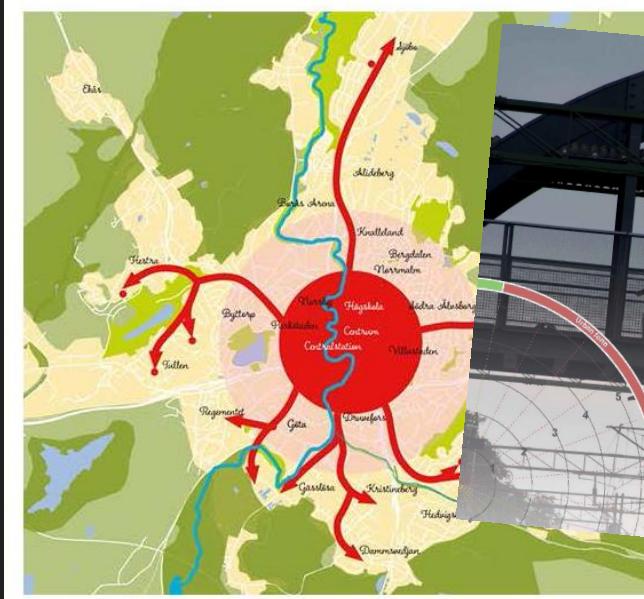
Sub regional planning Södra Vätterstranden





Theme 4: Enhance meeting places , high streets and rail connections

Utilise the potential to develop station communities . Utilise the station proximity principle and develop high streets for buses, cycling and walking as well as car sharing



www.mistraurbanfutures/urban station communities



Theme 4: Enhance meeting places and sustainable transportation



Bollnäs

Sensors for adapted illumination in public subways., Linköping



Better block



© Malmö Stadsbyggnadskontor 2012



Malmö

© Malmö Stadsbyggnadskontor 2012



Theme 4: Enhance meeting places and sustainable transportation



Co-working



Walking



Bicycling pools



Self driving buses for people/deliveries



E- education



A system of urban nodes and meeting places combining digital and physical communication
(Houten in the Netherlands)



E- medicine



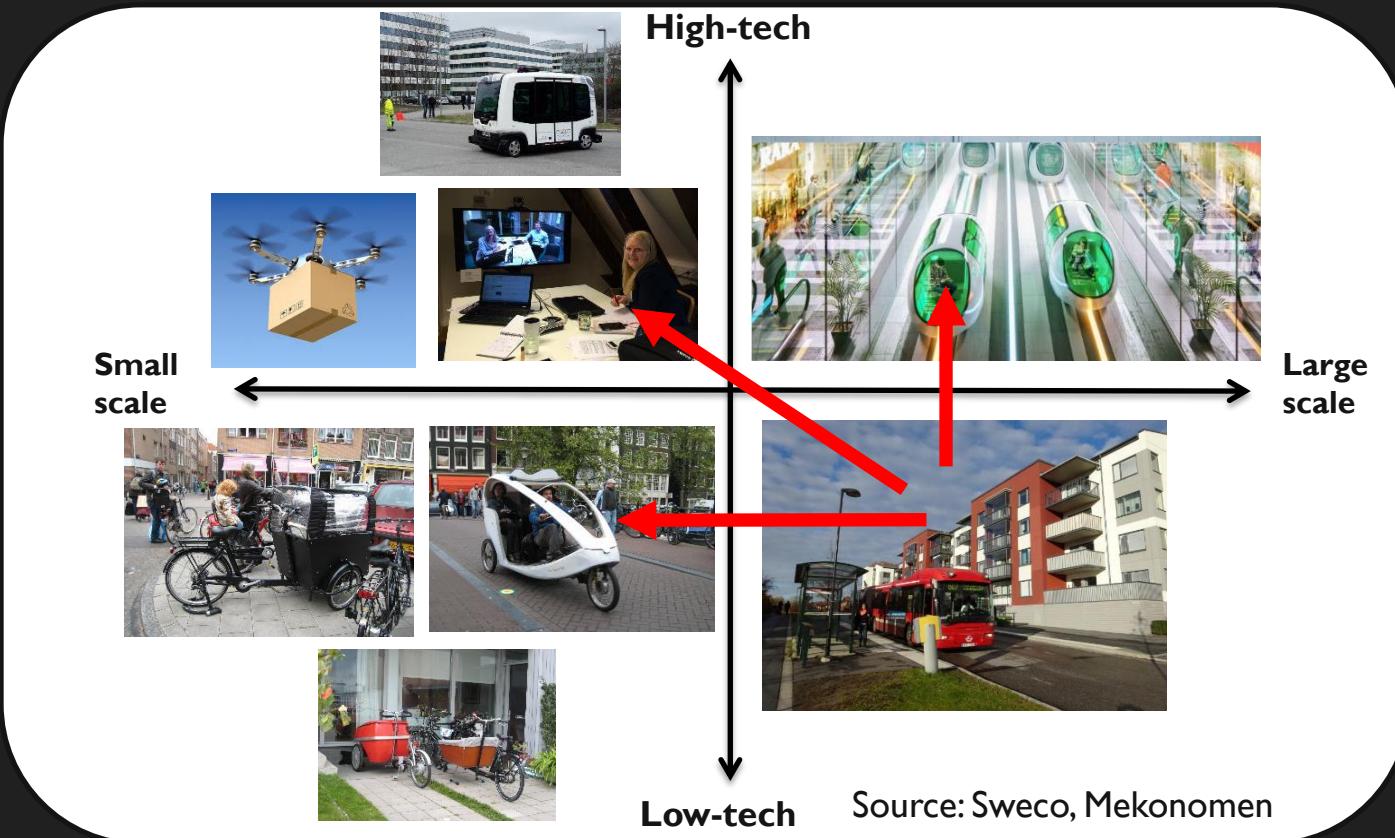
Car pooling – car sharing



E-commerce + Reuse, recycling, sharing



Theme 5 Promote digital and climate-smart mobility and communication



Theme 5 Promote digital and climate-smart mobility/communication

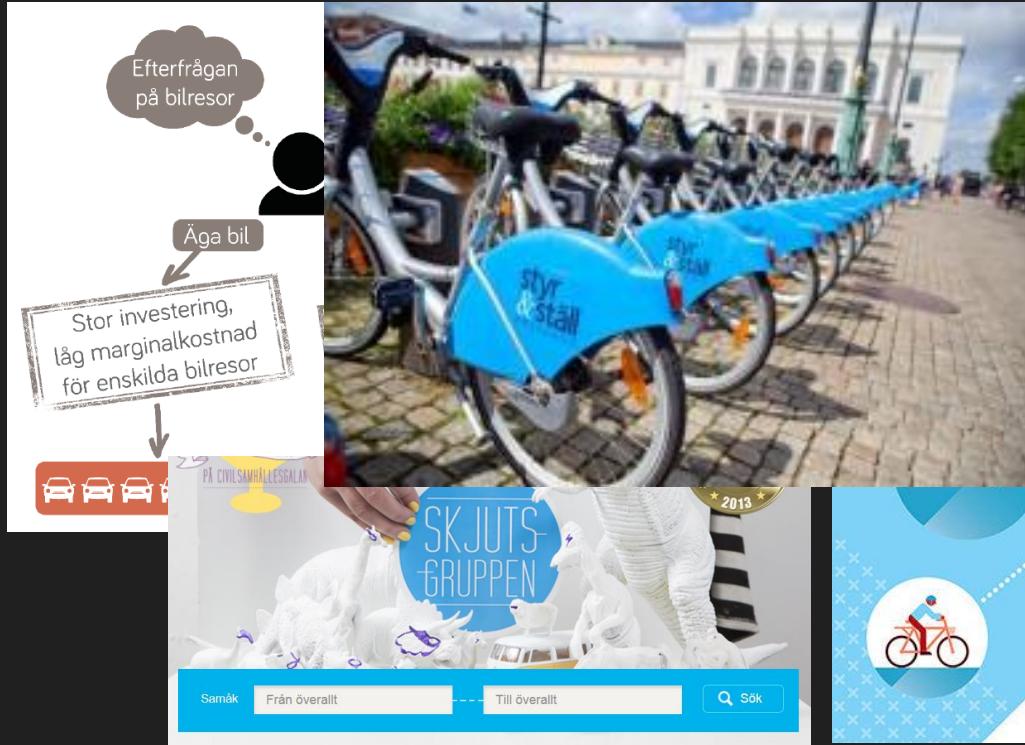
Intermodal mobility demands a huge amount of information



Source: Innoz, Innovationszentrum für Mobilität und gesellschaftlichen Wandel, Berlin



Theme 5 Promote digital and climate-smart mobility and communication



Shared ownership is changed by leaps
New business models and entrepreneurs



Source: Jonas Sundberg, Sweco/BTH

Theme 6: Focus on circularity and circular material flows

New business models and entrepreneurs

Investigate alternatives to new buildings:

- Reduce space
- Intensify the use of space and co-utilise spaces
- Rebuilding
- New building

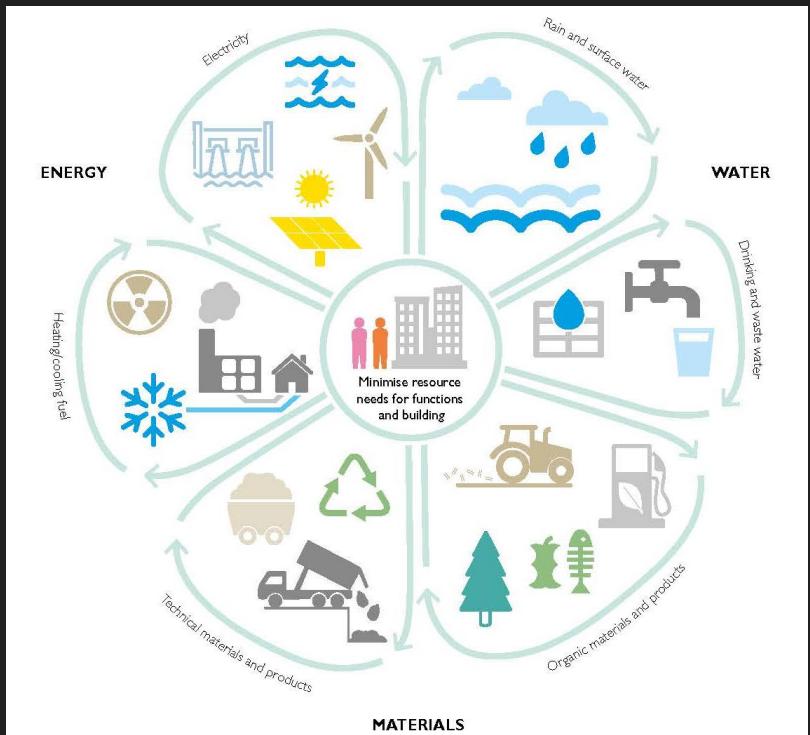
Source:

<https://www.dagenssamhalle.se/de/batt/har-ar-fyra-smarta-alternativ-till-att-bygga-nytt-17320>



Theme 6: Focus on circularity and circular material flows

Eco-cycle models taking advantage of synergies between energy, water and materials



Symbio City

Biogas an example of synergies between waste water, sludge, organic waste and energy (huge potential)

Source: Eco-cycle model 2.0 for SRS , www.kth.cesc.se and Symbio City

Theme 7: Smart integrated supply systems

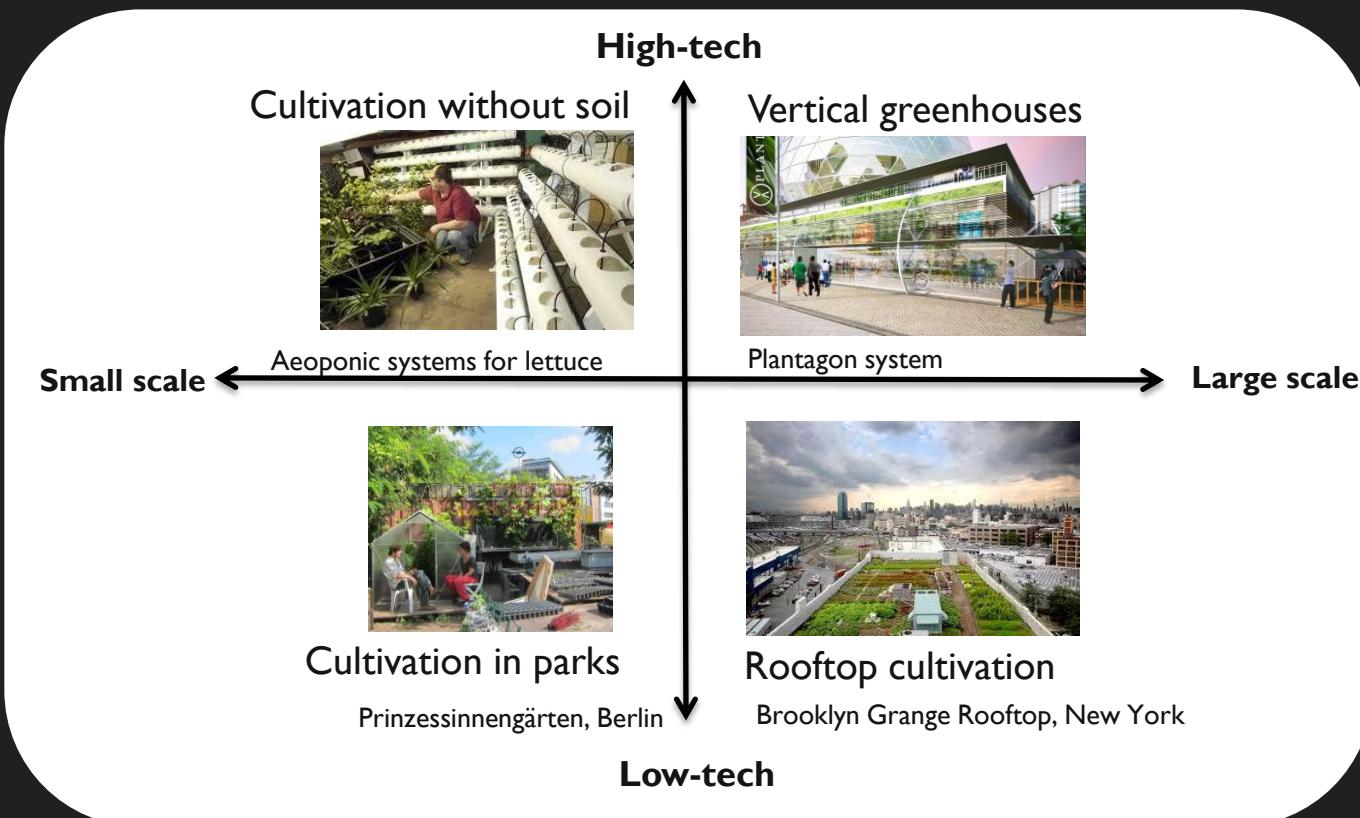
Large scale, medium-scale and small scale systems can be combined by robust spatial planning and digitalisation in order to achieve environmental benefits, comfortable weekdays and attractive public spaces



Source: SymbioCity, Sweco, Envac

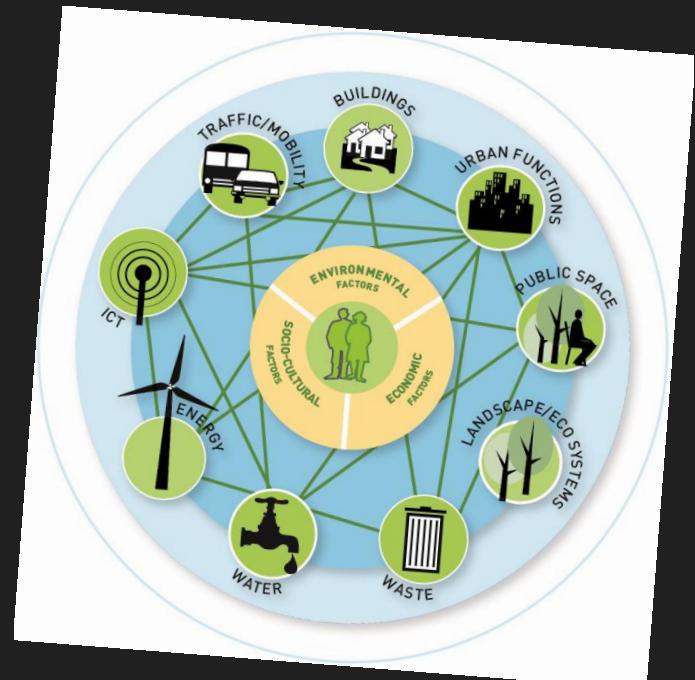
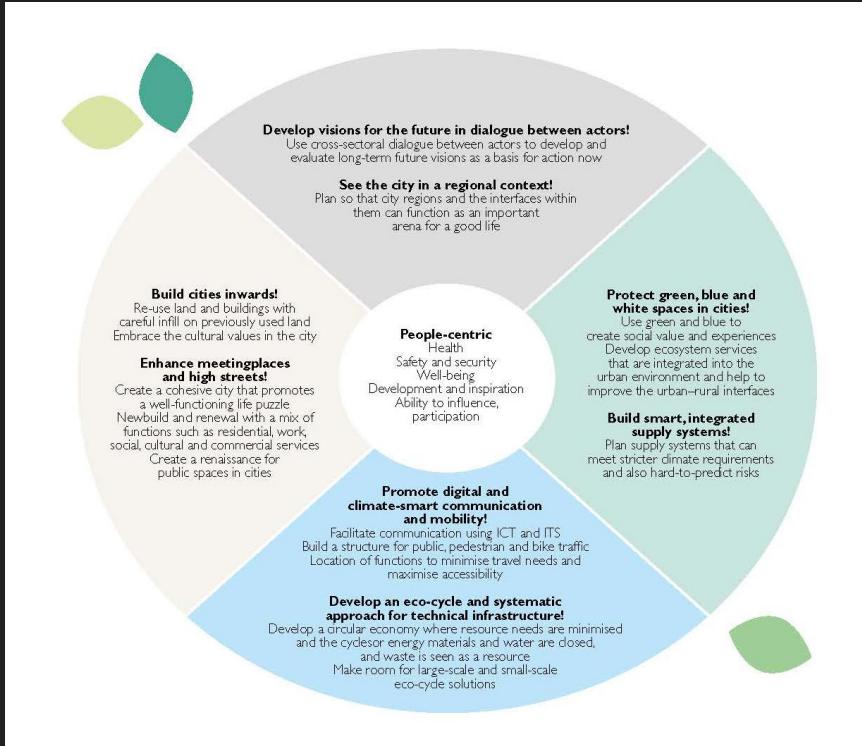
Theme 8: Protect green, blue and white values in cities

- spatial planning and digitalisation facilitates new types of cultivation





A people-focused integrated systems approach is the core philosophy Behind our action plan for the future attractive city



Source: www.symbiocity.org



**Combine people-centric co-creation, spatial planning ,
digitalisation and new technology**

**"If we can build a city which is good for both children and
elderly we will get a city which is good for everybody"**

Thank You for Your Attention!