

# EGCA 2018, Umeå, Sweden

## City introduction & context – involvement, investment & innovation



*Figure 1: Umeå viewed from the north with Umeälven (Ume River), Natura 2000 area river delta and its plains, forests and the sea in the background*

Umeå with 120 000 inhabitants is the centre of growth in northern Sweden, doubling its population over the last 50 years and making it one of Europe’s fastest growing cities in an otherwise sparsely populated region. One of the City Council’s seven strategic long-term objectives states that Umeå’s growth is reached with social, ecological and economic sustainability, aiming towards the vision of 200,000 citizens in 2050. Thus, sustainable growth is both the challenge and the opportunity for Umeå.

- Umeå’s growth is reached with social, ecological and economic sustainability, aiming towards the vision of 200,000 citizens in 2050.
- We will create opportunities for more jobs in Umeå through growth in the business sector, in collaboration with industries, universities etc.
- We will develop “the knowledge city of Umeå” with good education and lifelong learning, in that way managing competence provision.
- We will keep our position as international city of culture and promote culture as an investment and inspiration for a sustainable society and growth.
- We will create conditions that equally empower women and men to shape society and their own life.
- Umeå will have the best public health in Sweden by 2020
- Child poverty will be halved by 2020

*Figure 2: The City of Umeå’s seven strategic long-term objectives*

The strategic objectives show Umeå's dedication to sustainability in a wide sense. The selection of Umeå as European Capital of Culture in 2014 and the city's highly renowned gender equality work are good examples as well as Umeå's active participation in the coming UNESCO Vindelälven biosphere reserve and monitoring work of public health among teenagers.

The green frontrunner Umeå forms a relevant peer city for Europe; not least for the majority of Europeans living in medium-sized cities and urban areas. To all of Europe Umeå can provide ready-to-use demos, examples and initiatives of smart, sustainable and inclusive growth.

## Involvement



*Figure 3: The cold and snowy winter city Umeå is used by outdoor loving citizens on skis, skates and here bikes – actively contributing to better air quality and public health and reduction of CO2 emissions.*

The businesses and especially the citizens of Umeå are famous for their active involvement in Umeå's sustainable development, confirmed in the 2014 European Smart City benchmarking by Vienna University of Technology ranking the Umeå citizens Europe's most environmentally aware citizens. They put pressure on the city to be progressive, bold and to put forward new green solutions.

Umeå is characterized by its two universities with 36,700 students and was selected European Capital of Culture in 2014 as a token of its vibrant cultural life and the vision "Curiosity and passion - the art of co-creation" – very much part of Umeå's ambition as a Green Capital with active INVOLVEMENT and participation of its citizens, local and regional businesses, community initiatives and universities.

Ongoing examples of green involvement in Umeå include:

- SEE week - annual activity week with sustainability stakeholders in the city and region
- Network for Sustainable construction and real estate management in cold climate – 55 members from whole construction chain with vision to become world leader in the segment by 2020
- Miljöcaféet (the Environmental café) – discussion forum for environmental issues, initiated by engaged citizens
- Project Free-zone – a part of a city centre park will be rebuilt and redesigned in collaboration with the target group: young girls living in Umeå.
- Counsel for sustainable development – yearly collaboration between students, teachers, politicians, officials and sustainability experts.

## Investment



*Figure 4: Umeå - a cold winter day in 1960s and in the 21st century - changing the city skyline over 50 years of systematic investment in a renewable district energy system*

The city's growth took off in the 1950s and 1960s with one key element being the establishment of Umeå University. Parallel to this growth, the city made systematic INVESTMENTS in sustainability; both long-term socio-cultural investments in areas such as culture, gender equality and public health promotion, but also in green infrastructure such as a city-wide co-generation district energy system, co-owned hydro-electric power plant, green infrastructure, clean water supply etc.

These investments are keys why the city owned utility company Umeå Energi has established 2018 as the year when Umeå, to our best knowledge, will be Europe's first climate neutral energy system. Another key investment is the 1990s large broadband development, now making Umeå hold one of the world's fastest broadband – an important basis for sustainable growth.

These investments are altogether readying the city for continued, smart and inclusive sustainable growth of the city to 2050 and beyond.

### **Environmental challenges and comprehensive planning**

Umeå's comprehensive plan outlines the vision for the future with continued sustainable growth to 200 000 inhabitants in 2050. The award-winning plan includes six sustainable development strategies, infrastructural planning, focus on progress monitoring and a holistic approach to all aspects of comprehensive planning and major environmental challenges.

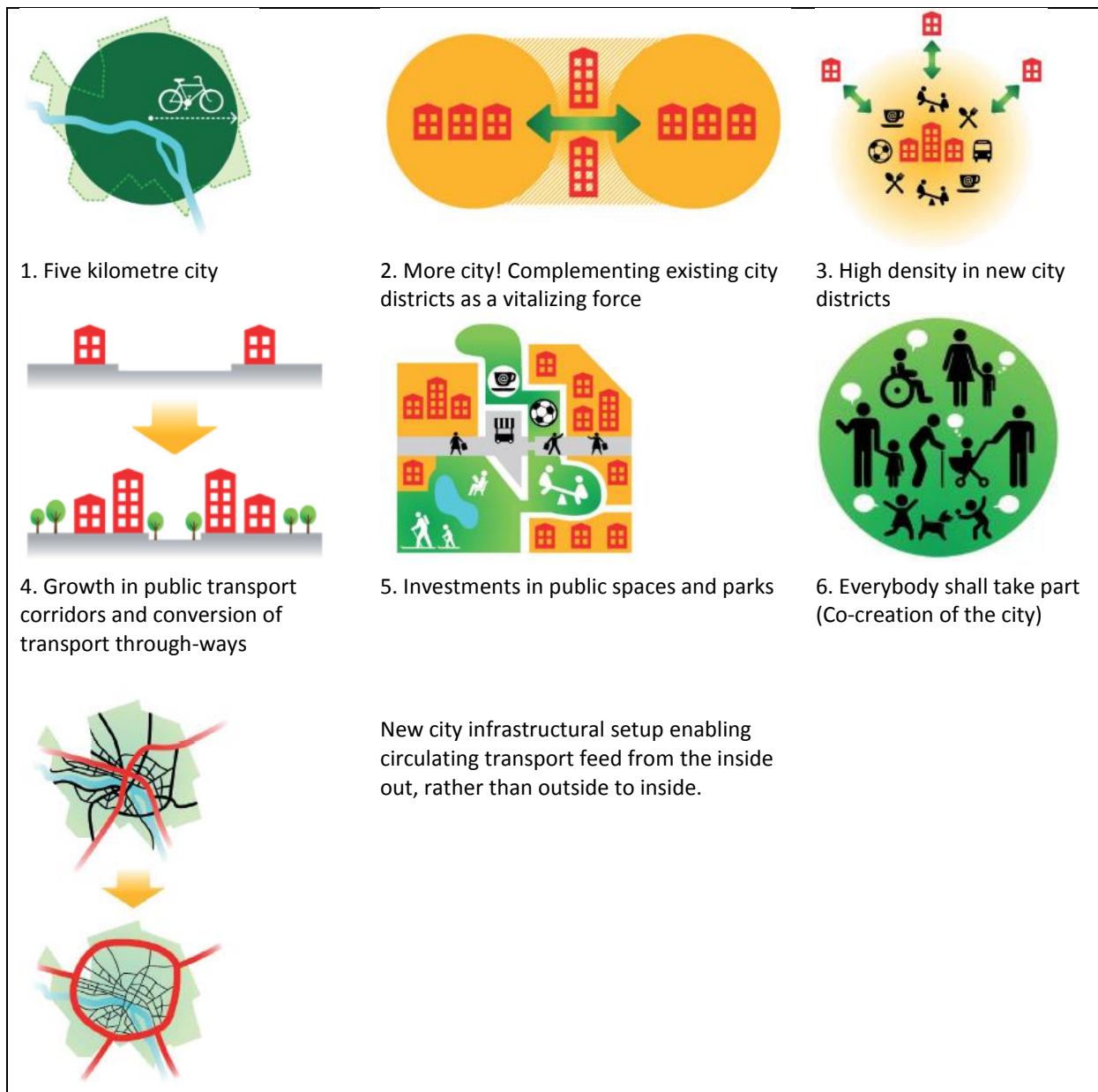


Figure 5: Pictograms of the six development strategies for sustainable growth and new city infrastructural setup, from Umeå's comprehensive plan

Transport CO<sub>2</sub> emissions and air quality in the city centre are two of Umeå's *major environmental challenges*. Implementing the comprehensive plan, finalizing the new city infrastructural setup and working with mobility management and eco-friendly transports are keys when meeting these challenges. Umeå's Action plan for decreasing green-house gases and Air quality management plan are developed and adopted to handle the challenges.

In a growing city there are also potential negative impacts on biodiversity, green urban areas, acoustic environment etc. The importance of a holistic approach to all aspects of sustainable planning cannot be stressed enough and excellent examples of such an approach are the "Peace and Quiet Park", the comprehensive plan for the coastline and management of the Natura 2000 site Umedelta and its plains. Umeå's state-of-the-art gender planning and "The gendered landscape tour" are other examples.

## Innovation

As an international centre for research and education, Umeå boasts a highly educated and skilled population and, as such, the culture of cooperation has generated a number of high profile innovative green initiatives.

There are several platforms stimulating INNOVATION in Umeå region. These platforms complement/cooperate with incubators supporting promising entrepreneurs to develop business ideas. Each sustainability platform has different focus, but all with triple- or quadruple-helix set-up to stimulate innovative and sustainable approaches – a European/international connection and based in local/regional development strategies. Three examples are Be Green Umeå, Technical visits – Sustainable Umeå and BioFuelRegion.

Innovative actions include:

- Green parking pay-off – voluntary agreement for reduced parking standards for employee parking, first demo in Sweden, now being scaled up in the city.
- Sustainable Ålidhem (awarded European Sustainable Energy Award in 2013)
- Triple-helix demonstration project to grow and convert algae into bio-fuels based on waste-water nutrition, Sweden's largest of its kind.
- Ultrafast-charging all-electric buses, pan-European business-driven project, awarded CIVITAS Technical innovation award 2015, now implemented full-scale in the city
- Gender planning and the Gendered Landscape tour

Current plans for green innovation include:

- Cleaner growth – a regional initiative to further develop the Technical visits approach, enhance the competitiveness of the region, companies and universities while mitigating climate change.
- Open North – developing a regional test-bed for environment and energy data – generating new and faster knowledge for the future integrated urban management of cities.
- +Project - an innovation initiative centred on inter alia 3D printed sustainable housing, new methods of design and production in architecture and housing and circular sustainable business models.

*Requested table:*

<b>Indicator</b>		<b>Units</b>	<b>Year of data</b>
<b>Population</b>	120.000	Inhabitants	2015
<b>Area</b>	2331 (without water)	Km <sup>2</sup>	2015
<b>Population density</b>	51	Inh./km <sup>2</sup>	2015
<b>GDP</b>	40.100	€/Capita	2012
<b>Köppen climate classification</b>	Dfc		