

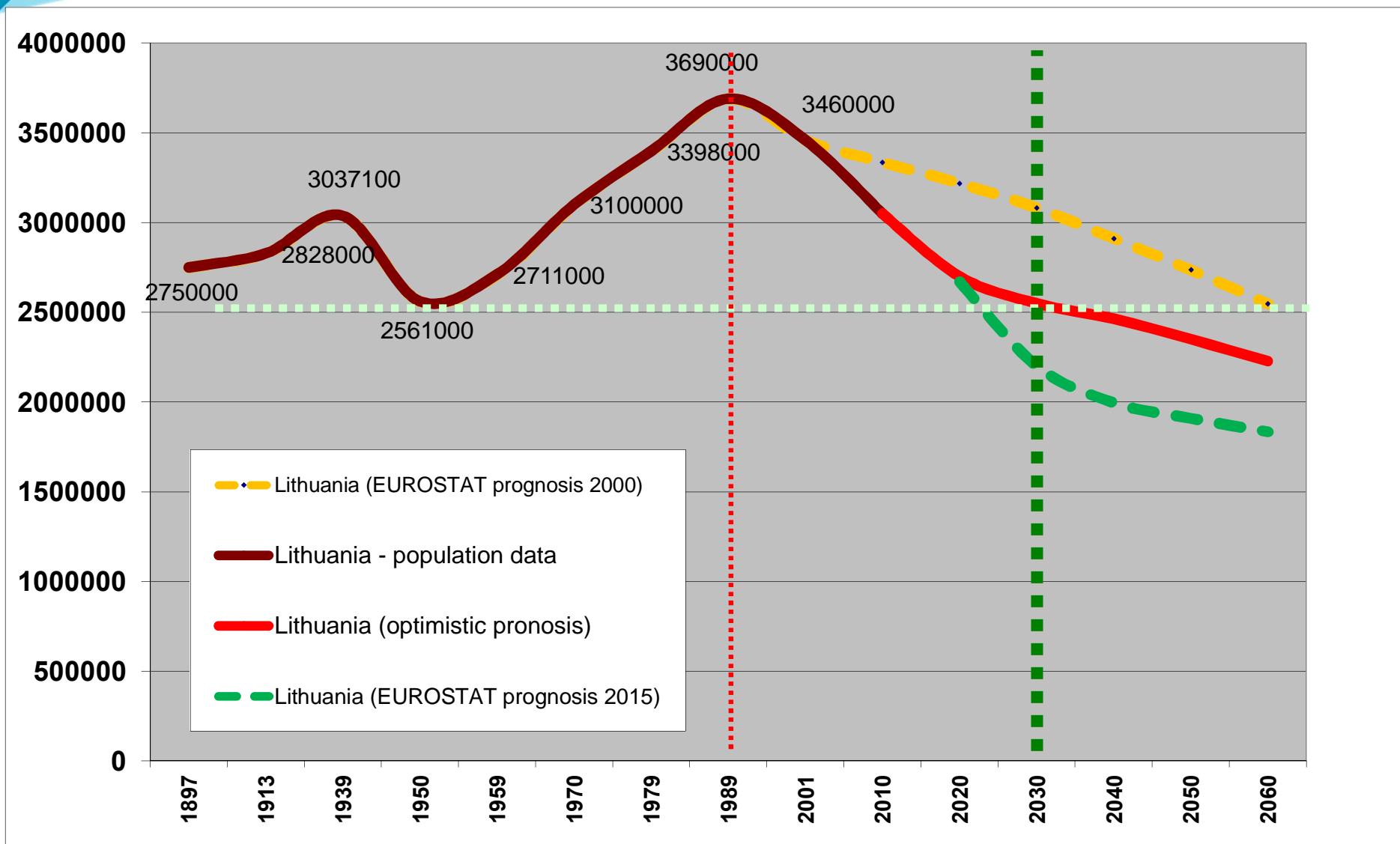


Response to demographic challenges – from smart city to smart country

June 4th, 2015

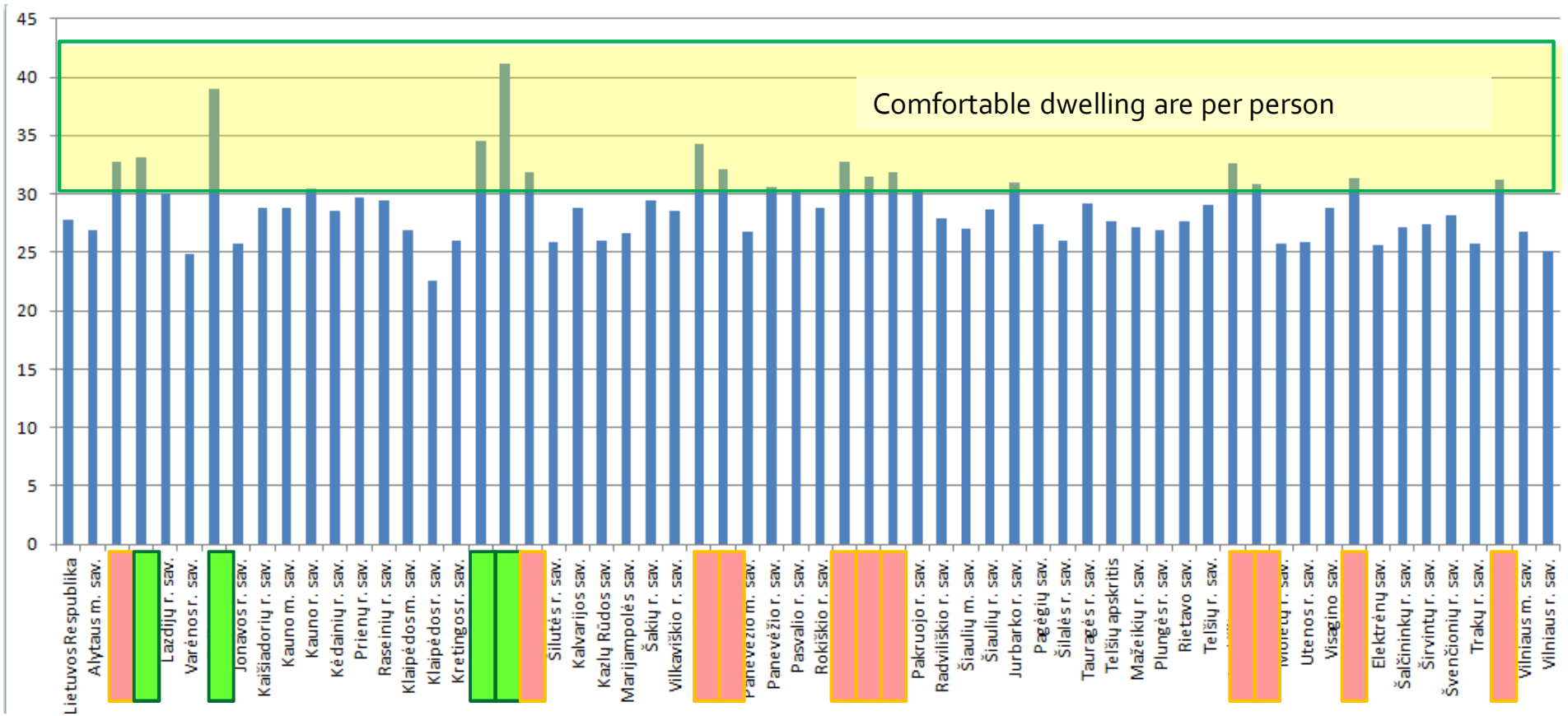


Population development in Lithuania



Source: Department of Statistics of Lithuania + prognosis of EUROSTAT

Are we potential to develop?





Smart cities or wise governance?

Huib Droogh
Urbanist

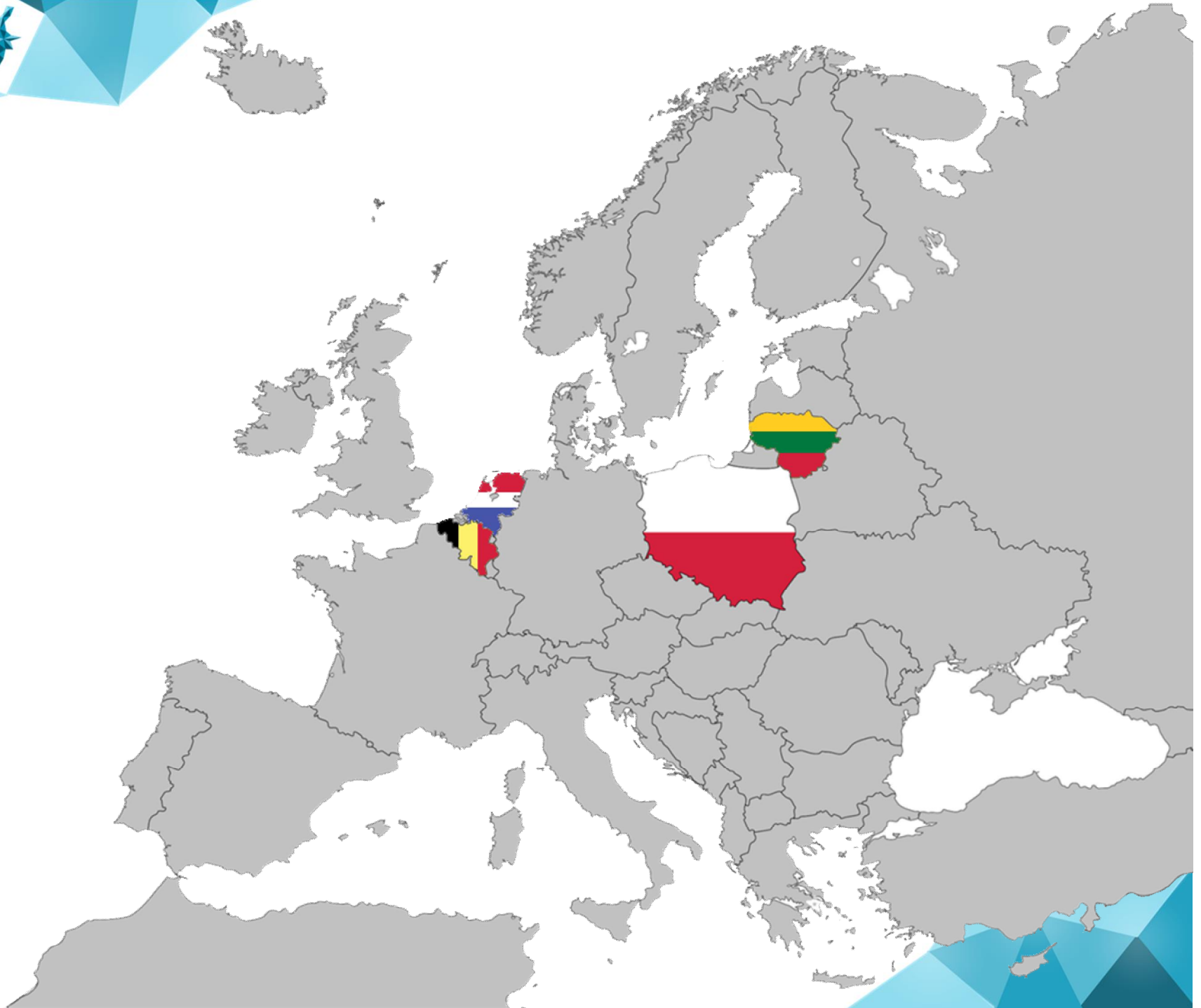




What does the future look like...?
How should we prepare the challenges awaiting...?





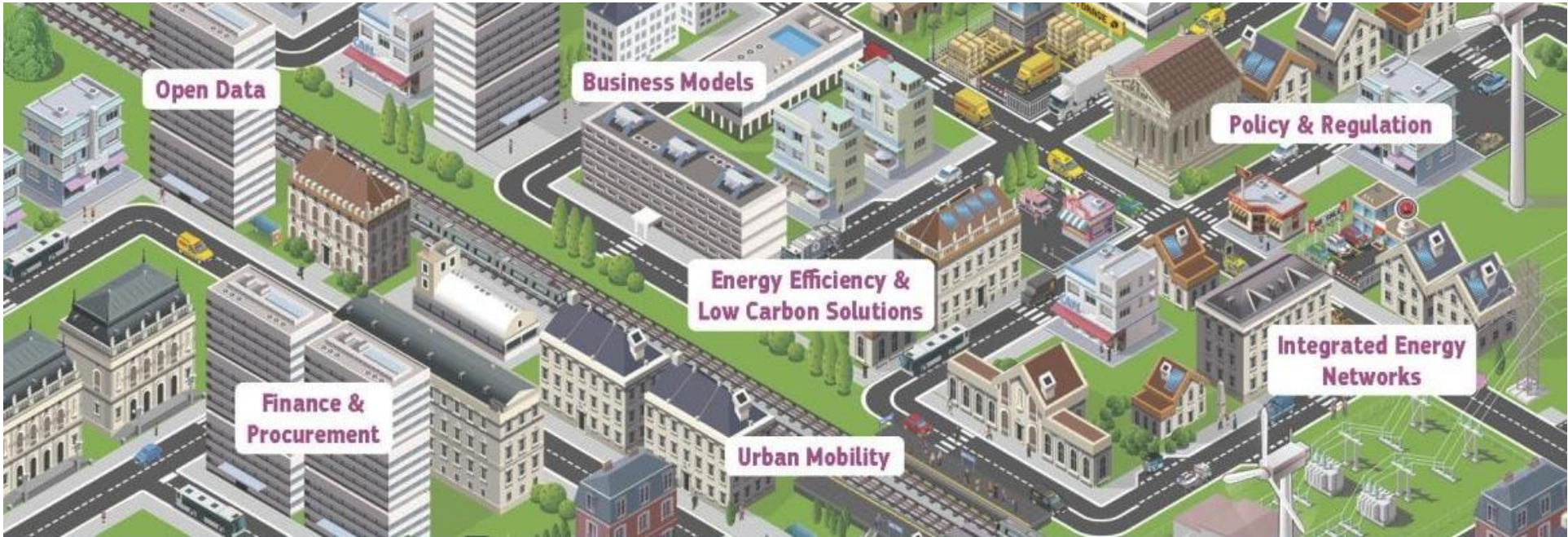




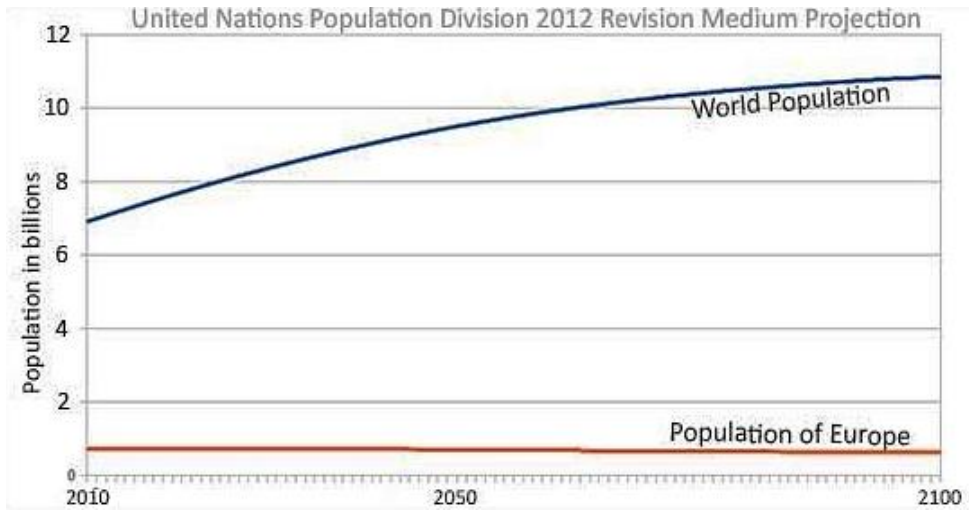
STATEMENT:

The use of new technology without coherent vision how to frame this technology into the objectives of city development will slow down its economic and social development...

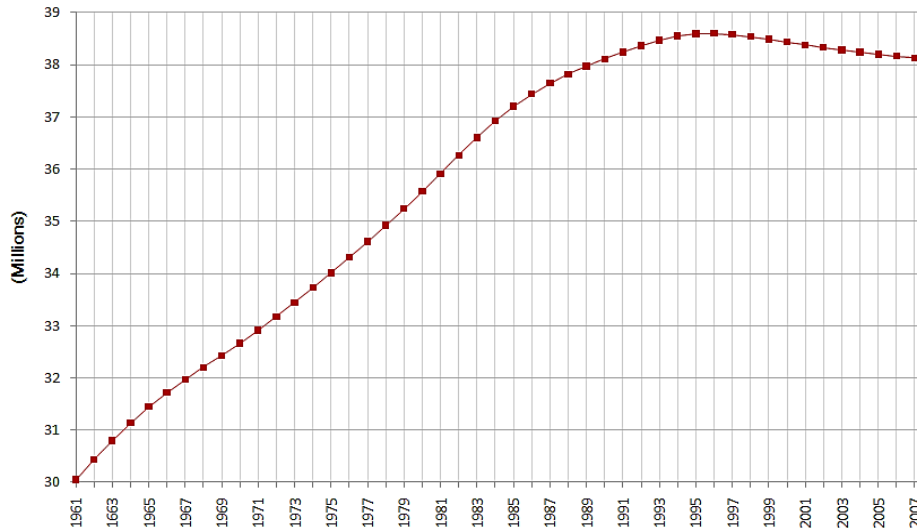




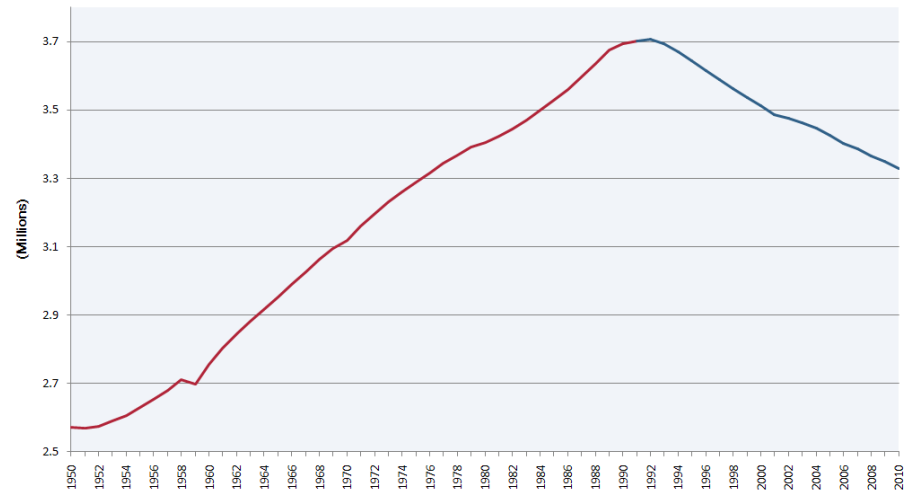




Population of Poland



Population of Lithuania





**Urban
Mobility**



**Open
Data**



**Business
Models**



**Finance &
Procurement**



**Policy &
Regulation**



**Metrics &
Performance
Indicators**

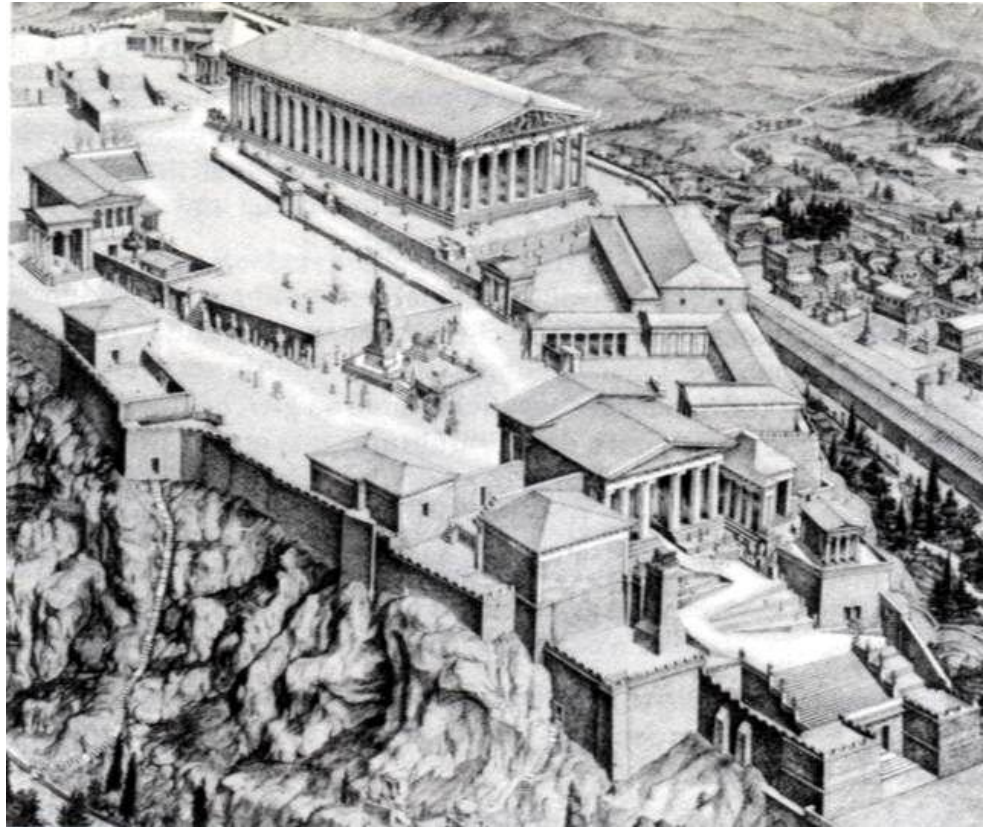
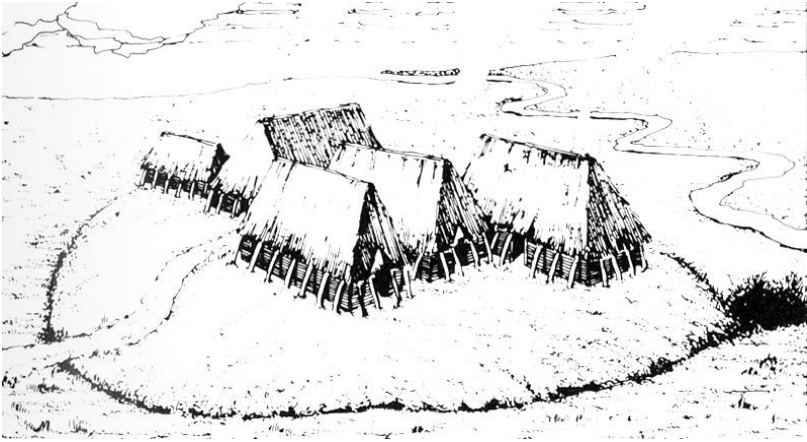


**Integrated Energy,
Transport &
Communication
Networks**

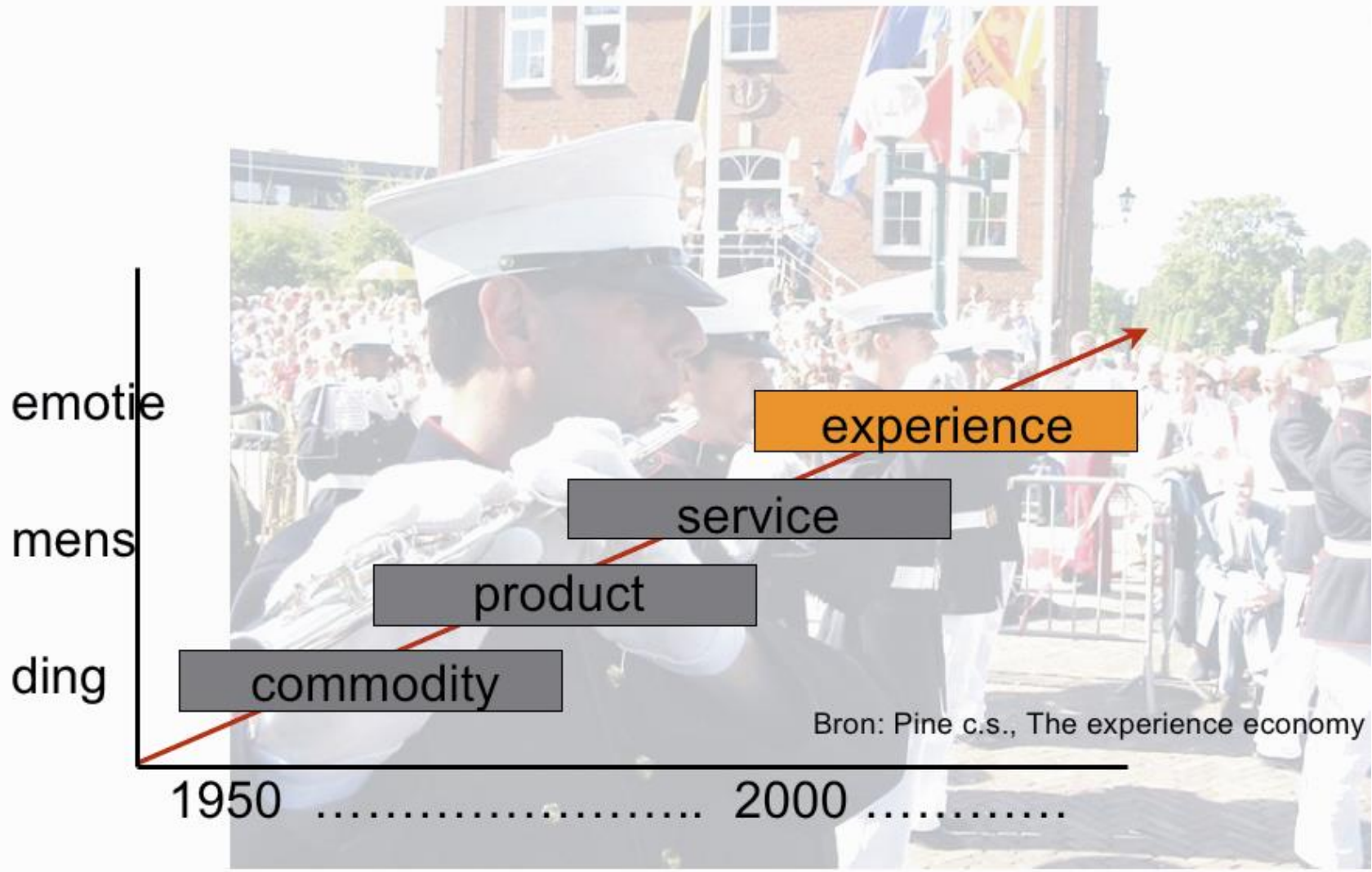


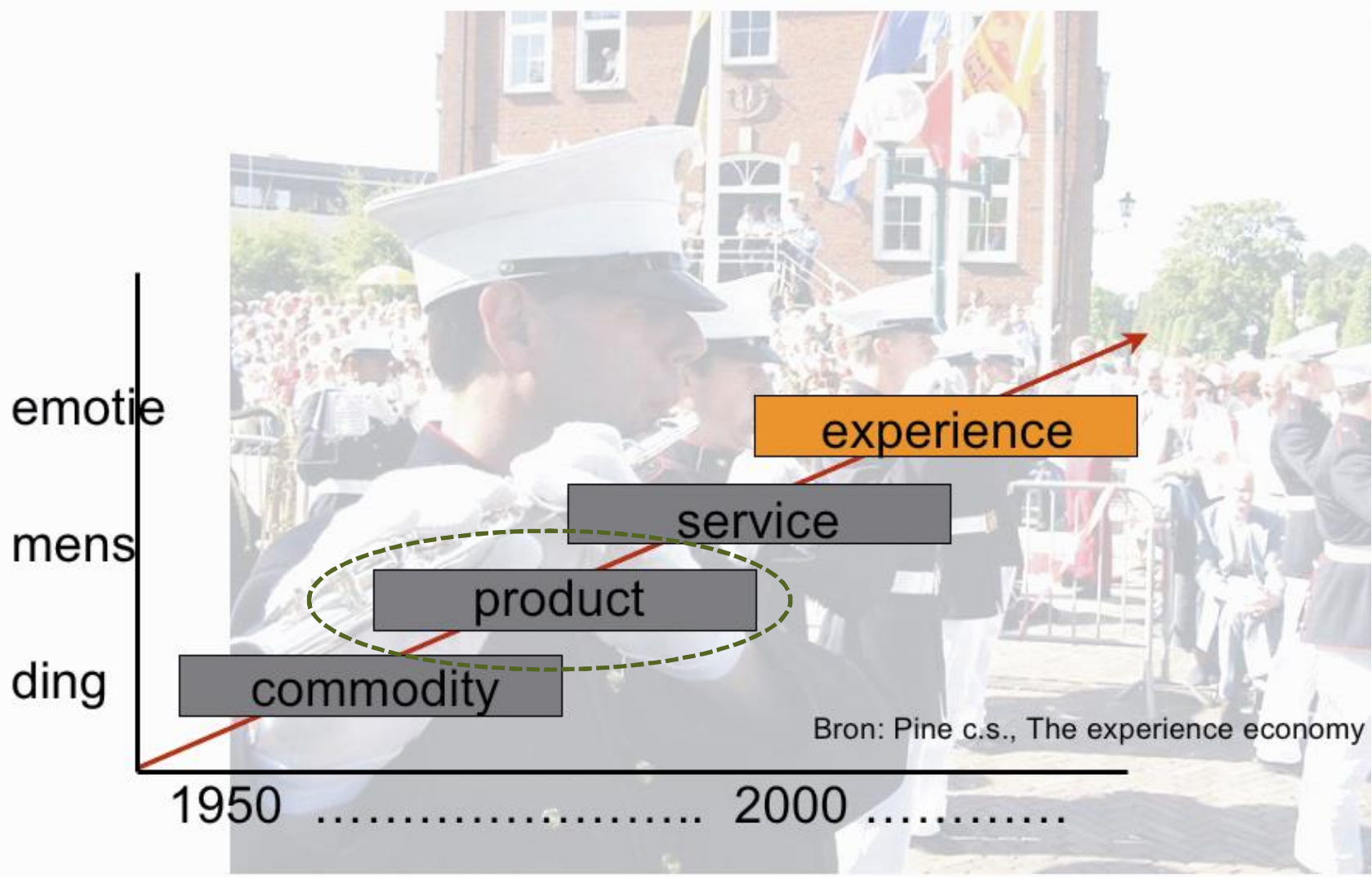
**Energy Efficient &
Low carbon
Solutions**


















2009 © photozoner, W. Kołodziejcki










Technical infrastructure and cost of living in the city

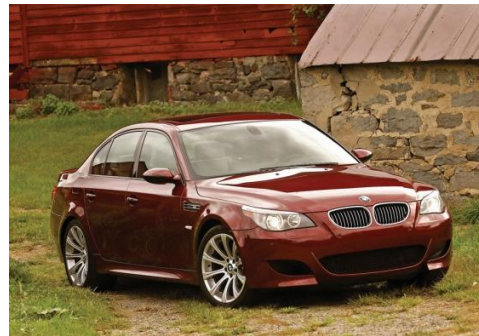
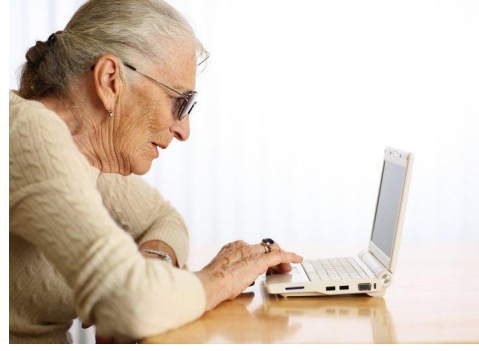
lata / years	80's	90's	00's	10's	20's	30's
liczba ludności (w tys.) / population (in thousands)	348	381	375	356	330	289
infrastruktura utrzymywana przez 1 mieszkańca (w metrach) / infrastructure maintained by one citizen (in metres)	 drogi / roads 588 km		1.55	1.65	1.78	2
	 sieć kolejowa / train network 56 km		0,15	0,16	0,17	0,19
	 sieć zaopatrzenia w ciepło / heating network 754 km		2	2,1	2,3	2,6
	 sieć wodociągowa / drinking water system 974 km		2,6	2,7	2,9	3,4
	 sieć kanalizacyjna / sewerage network 747 km		2	2	2,3	2,6
źródło / source: roczniki statystyczne GUS / Central Statistic Office yearbooks						



Technical infrastructure and cost of living in the city

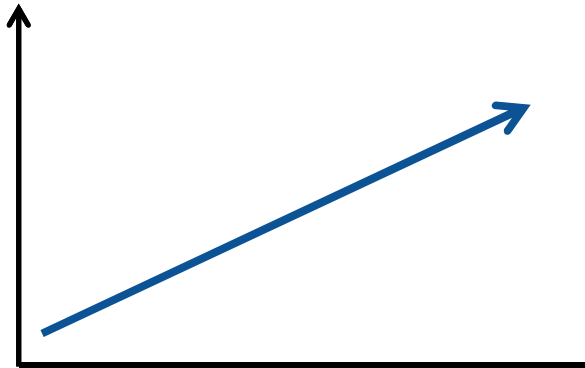
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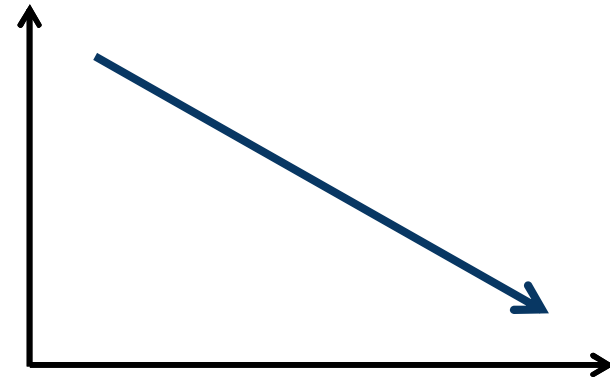




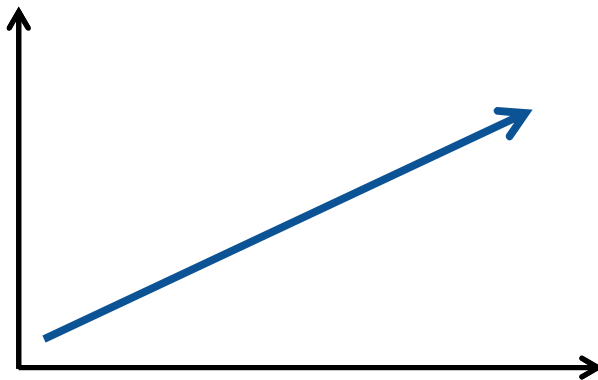
Economic grew



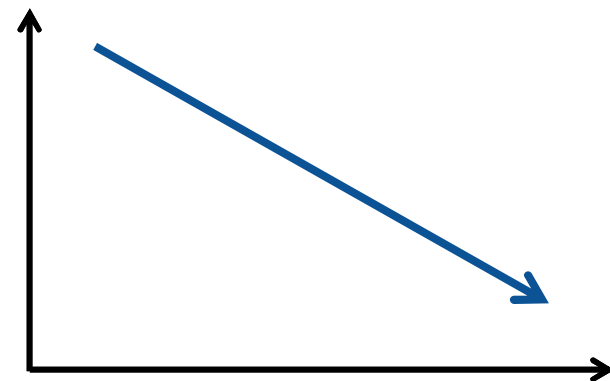
Quality of environment

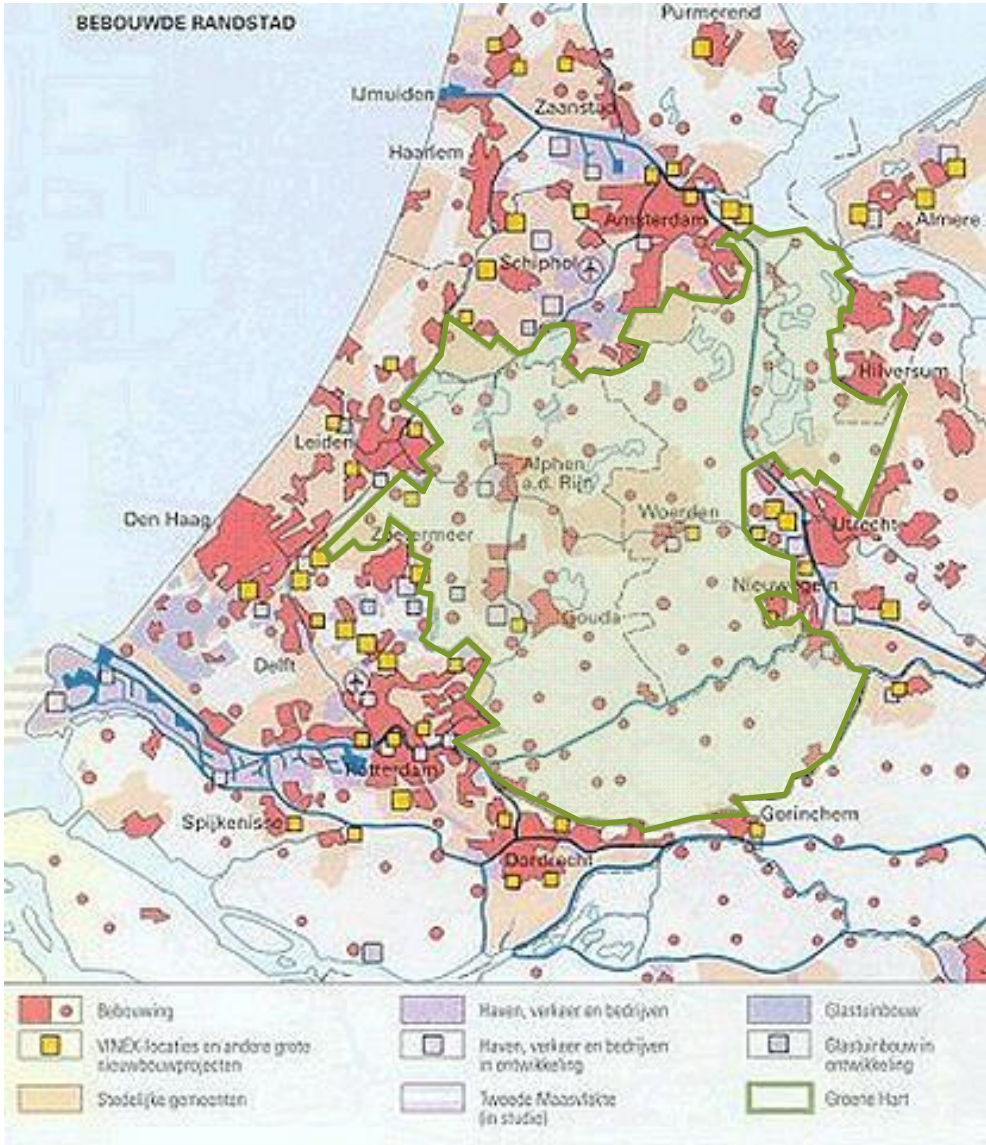


Costs for local government



Satisfaction of inhabitants





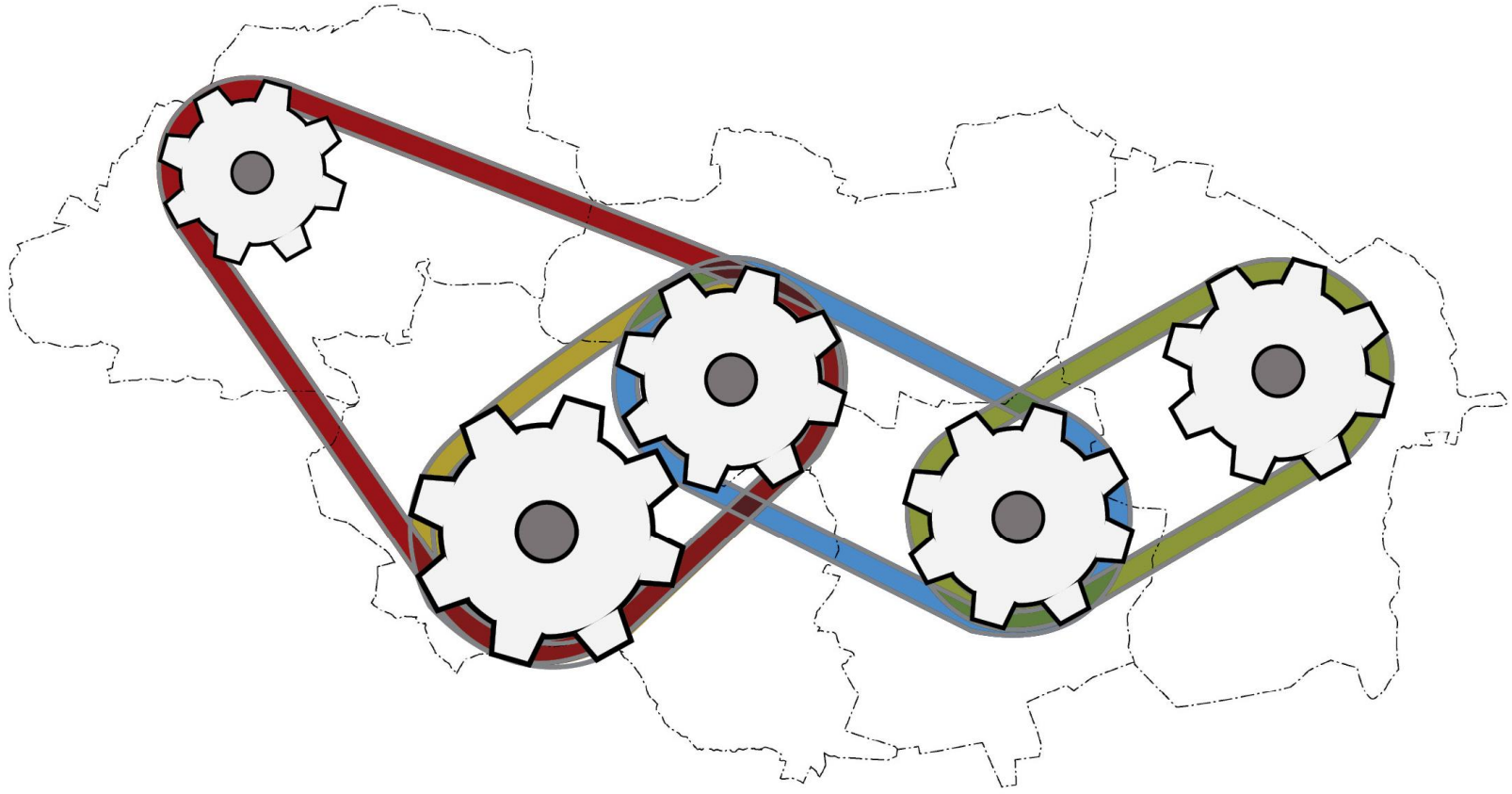


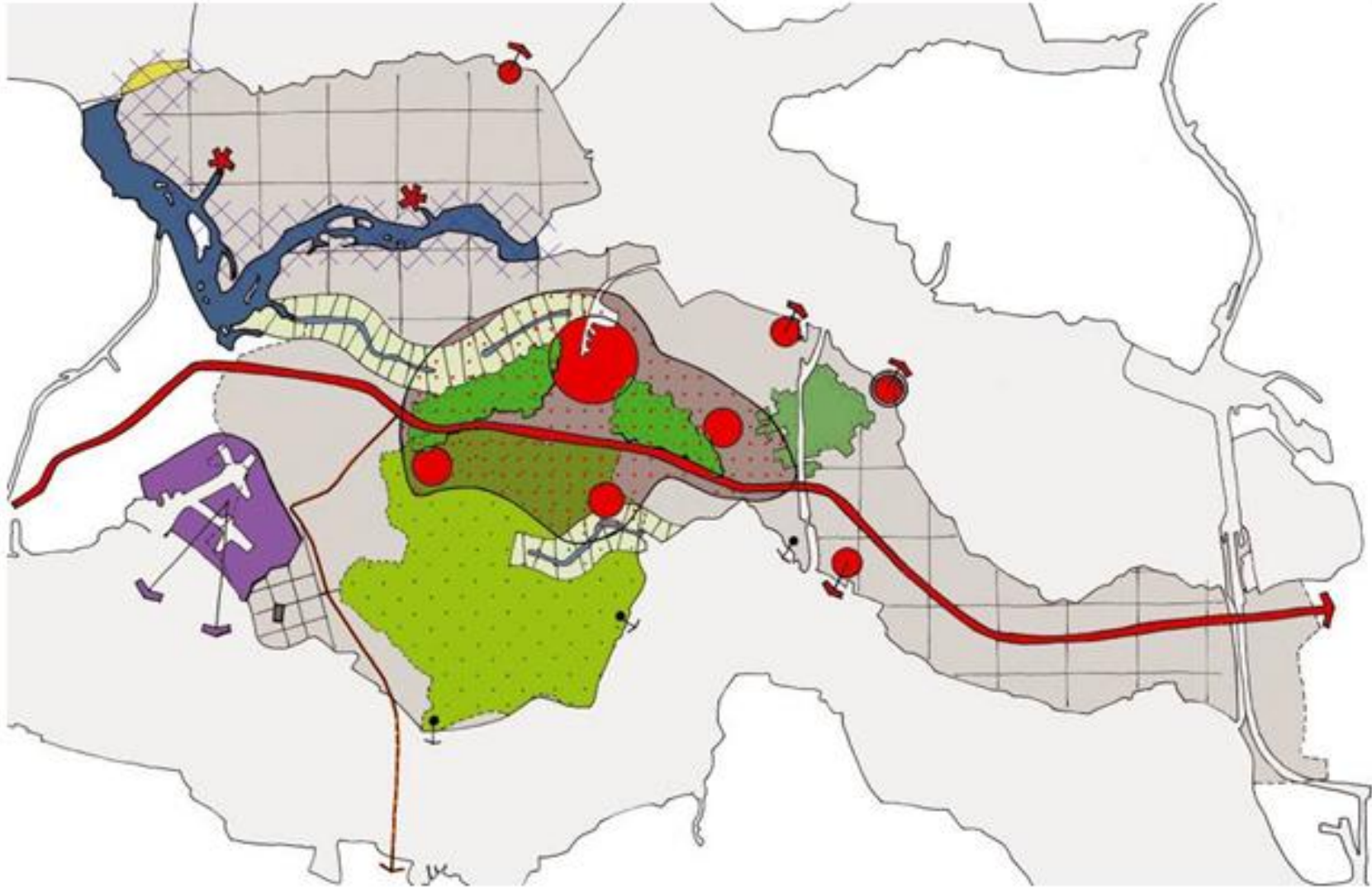
Water Management in the Netherlands

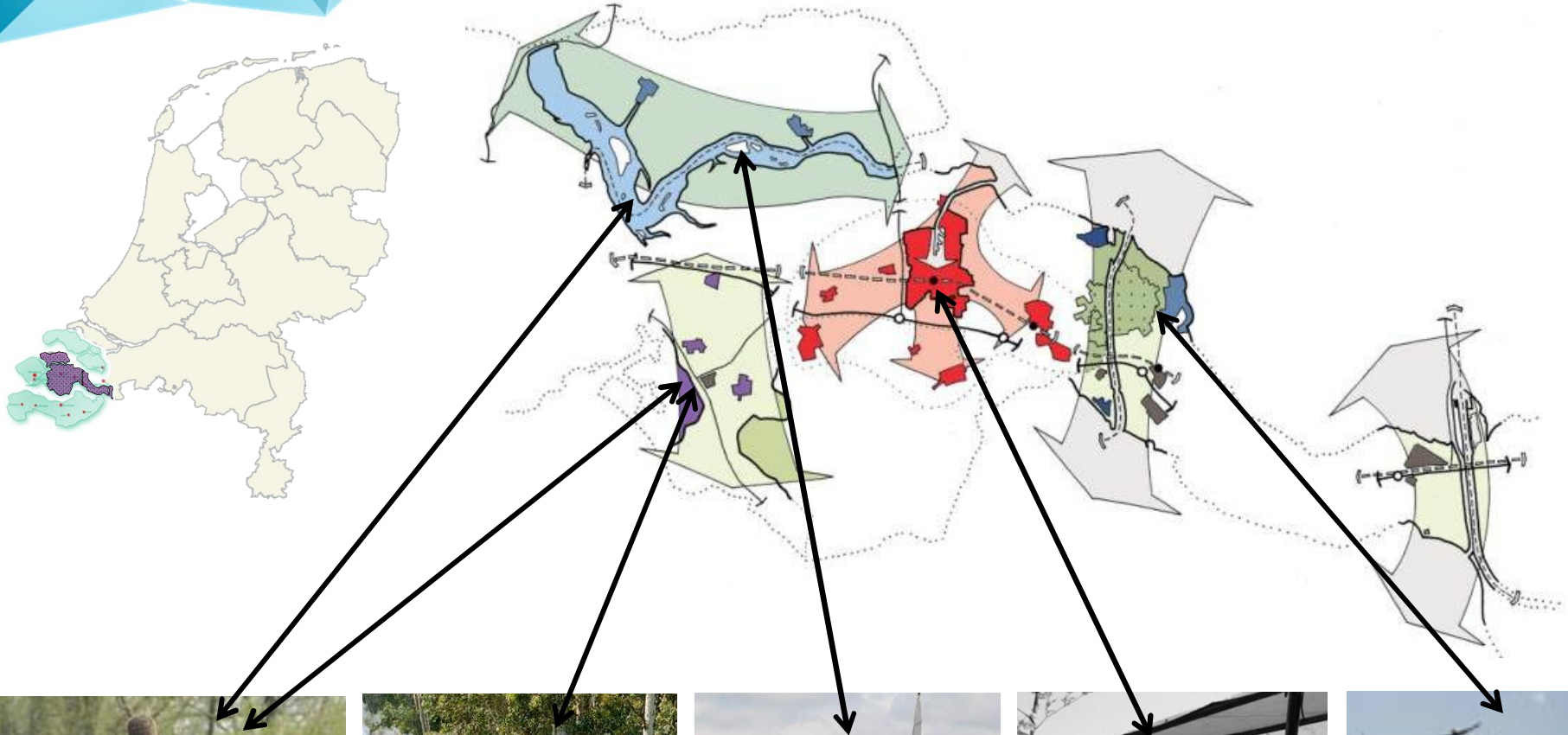


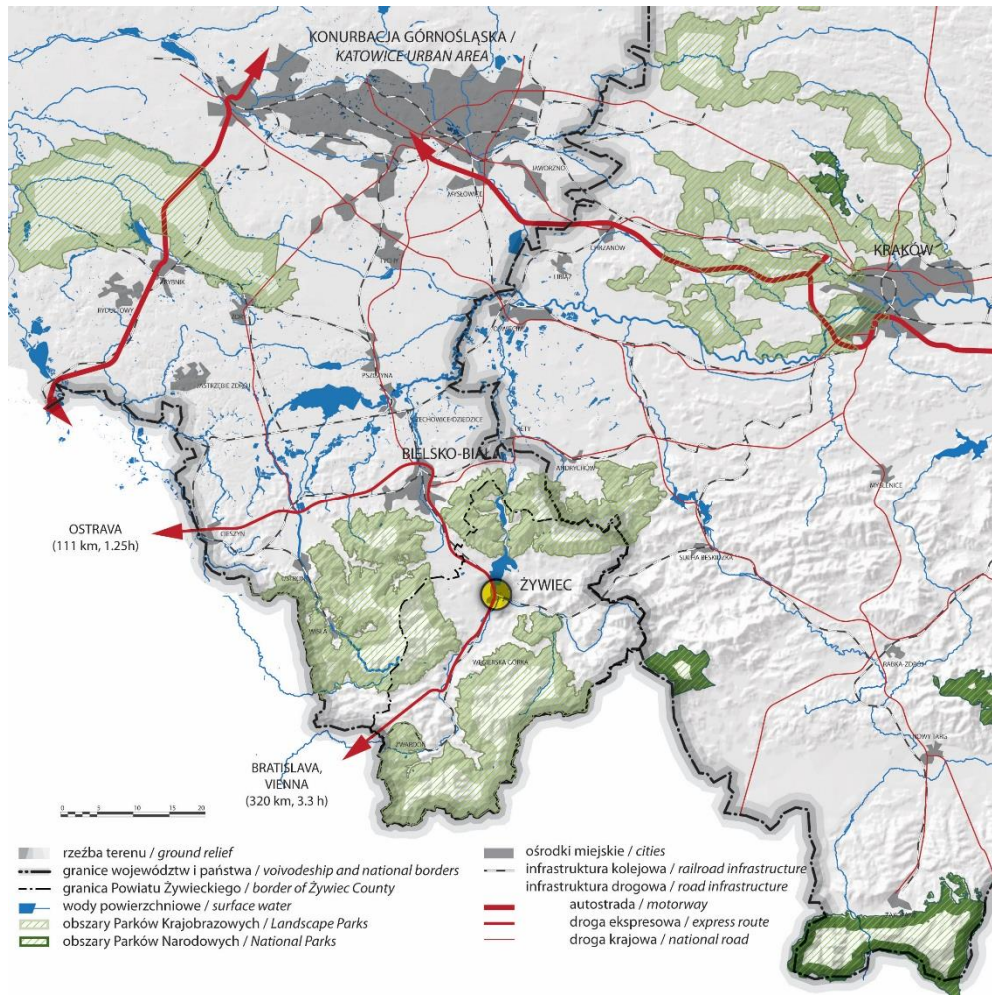
Summary Draft National Policy Strategy for Infrastructure and Spatial Planning with the Strategic Environmental Impact Assessment

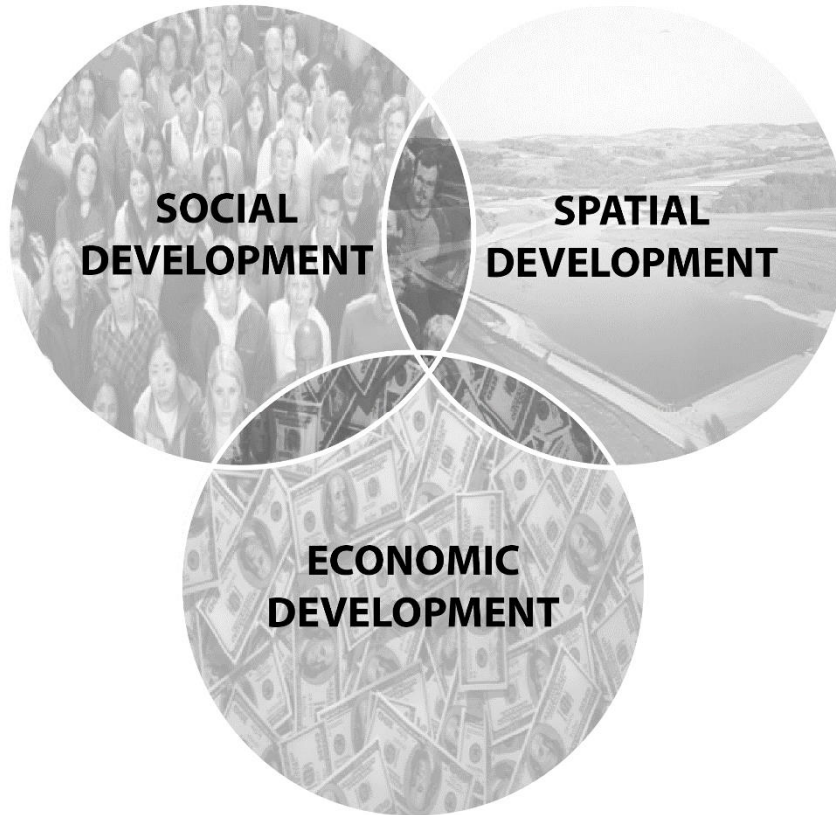




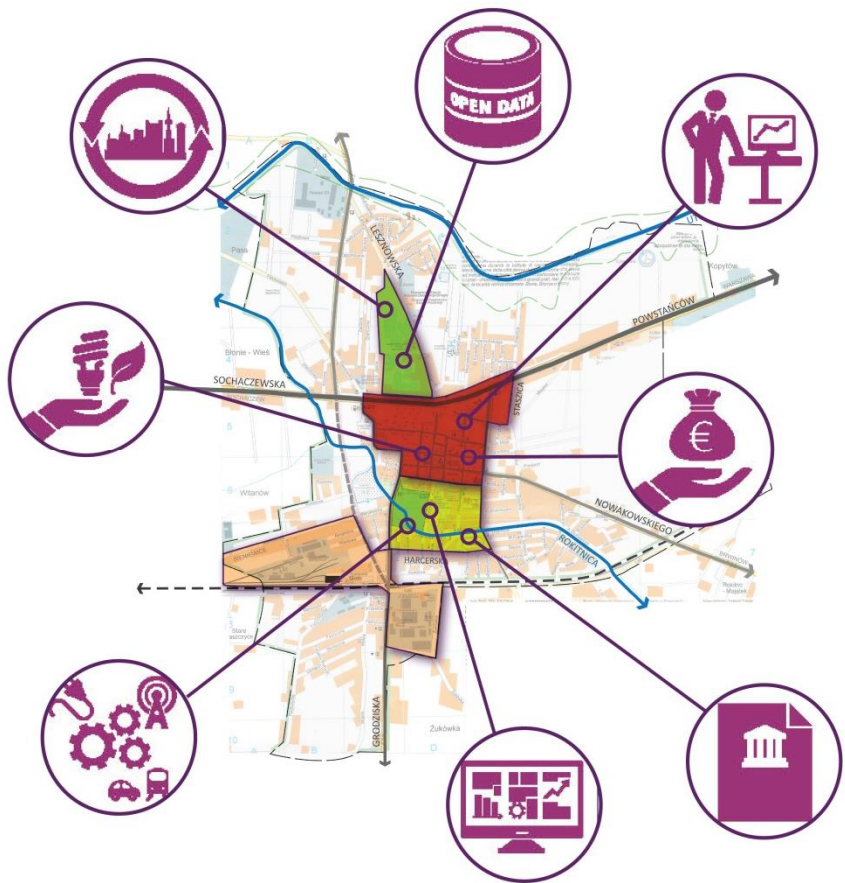
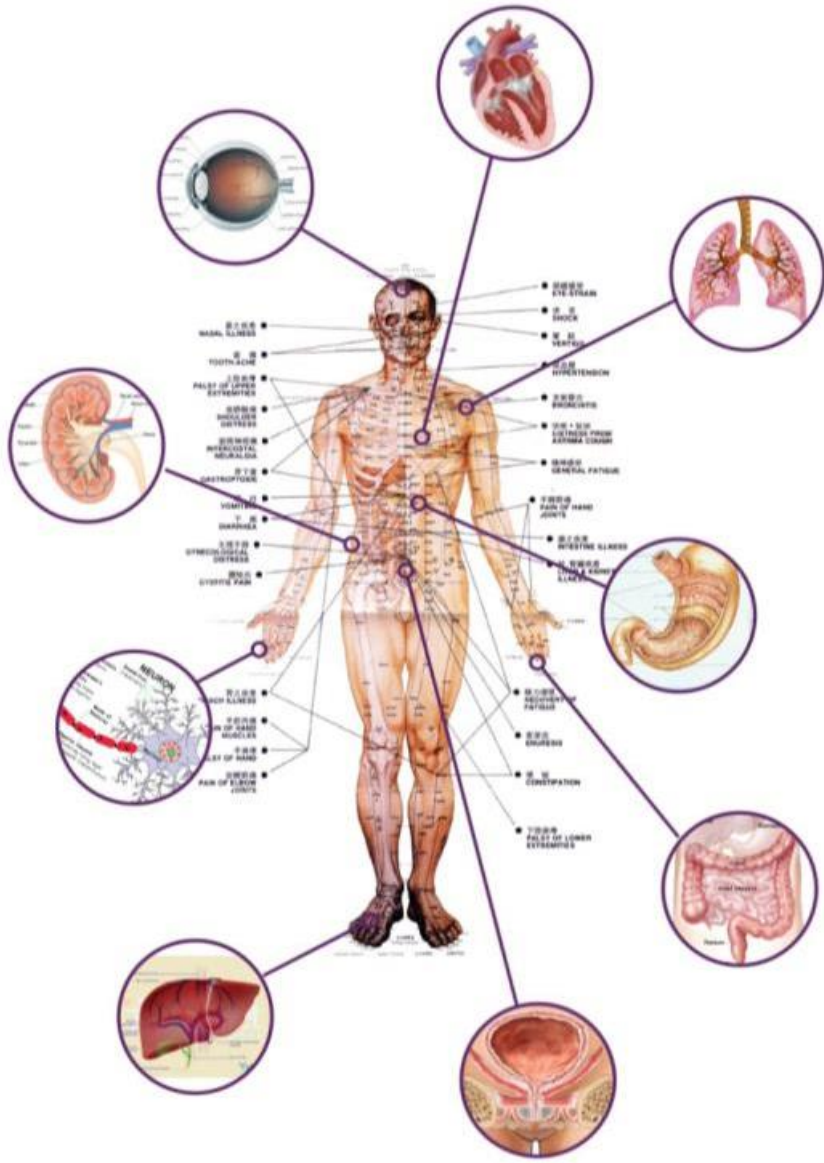
















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What to do when people move faster than we can plan or build for

- Smart cities as a tool for liveable and efficient cities

Andreas Gyllenhammar, PhD
Chief Sustainability Officer, Sweco

We're on the right track
- Science, technology and tools point in the right direction



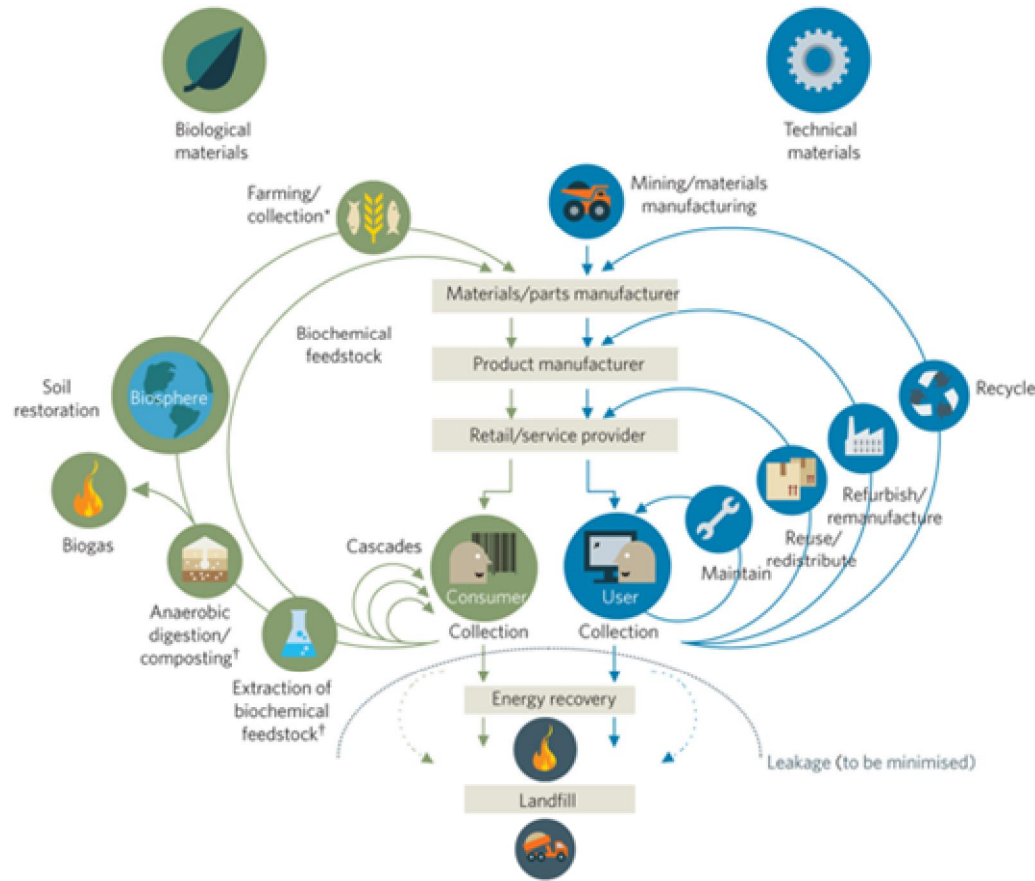
With a New Balance of Power

- Mayors are the new Prime Ministers, and companies are at the table

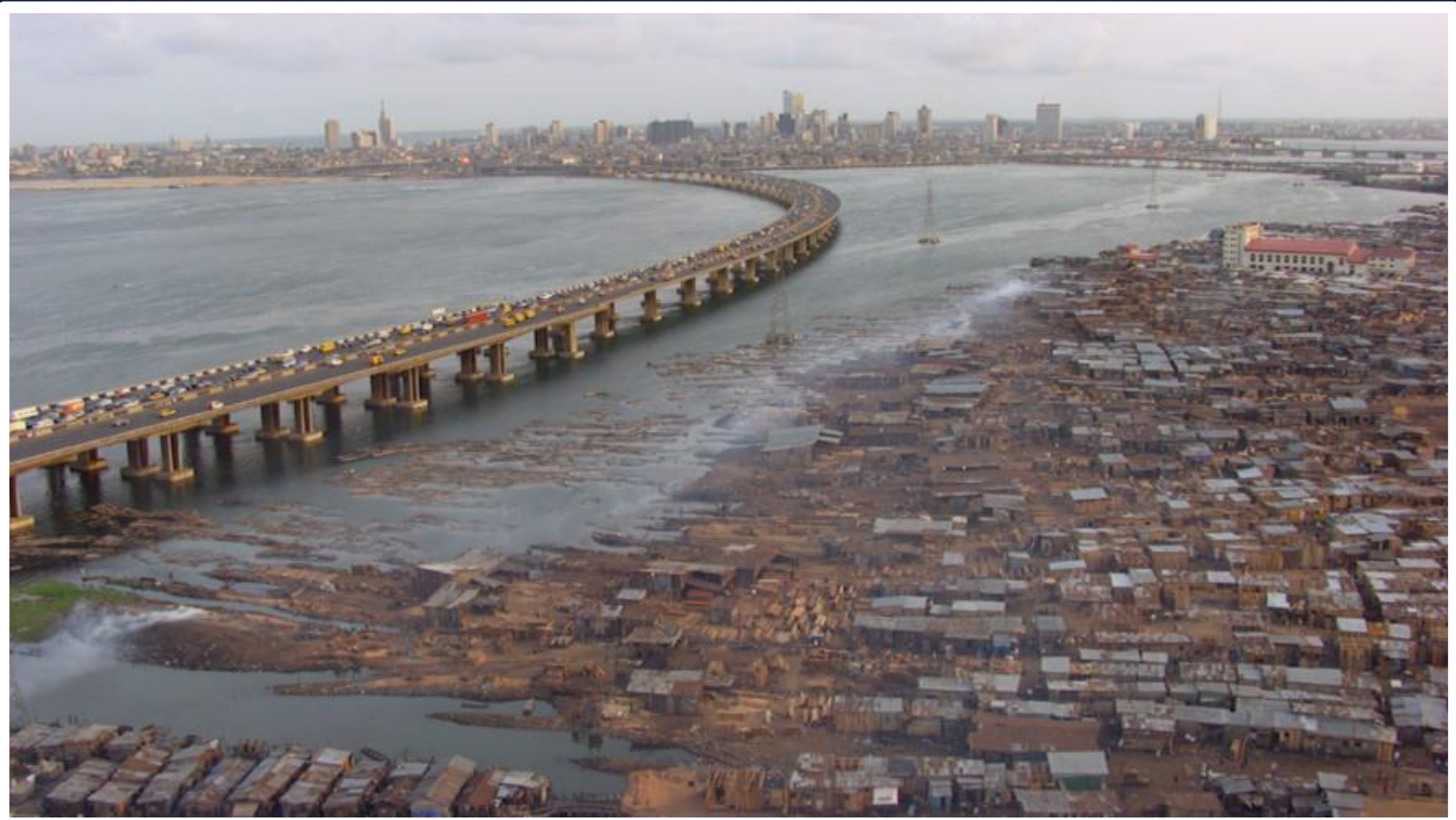


From linear to circular

- The greatest challenge and opportunity



But we simply do not have the time
- City development as an inherently slow process



But we simply do not have the time
- Lock-in effects of technology and infrastructure

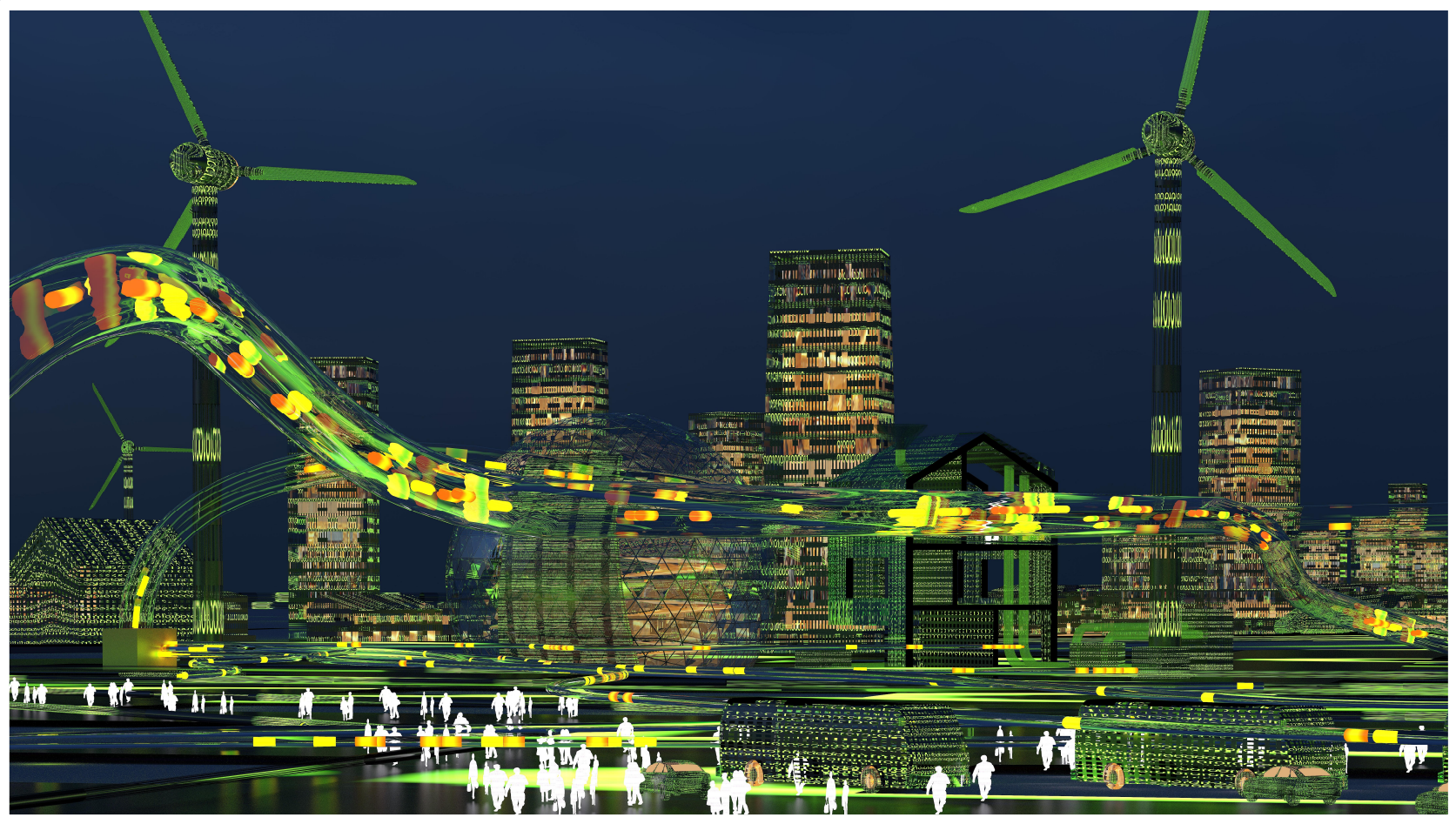


But we simply do not have the time
- Climate change defines our time frame



Talk of the Town

- When everyone and everything starts to communicate



The inherent power to short-circuit - ICT brings speed to the equation



What makes Smart Cities possible?

We are increasingly connected

Our things are getting connected (sensors and IoT)

Cloud services and social networks

Open data -Big data

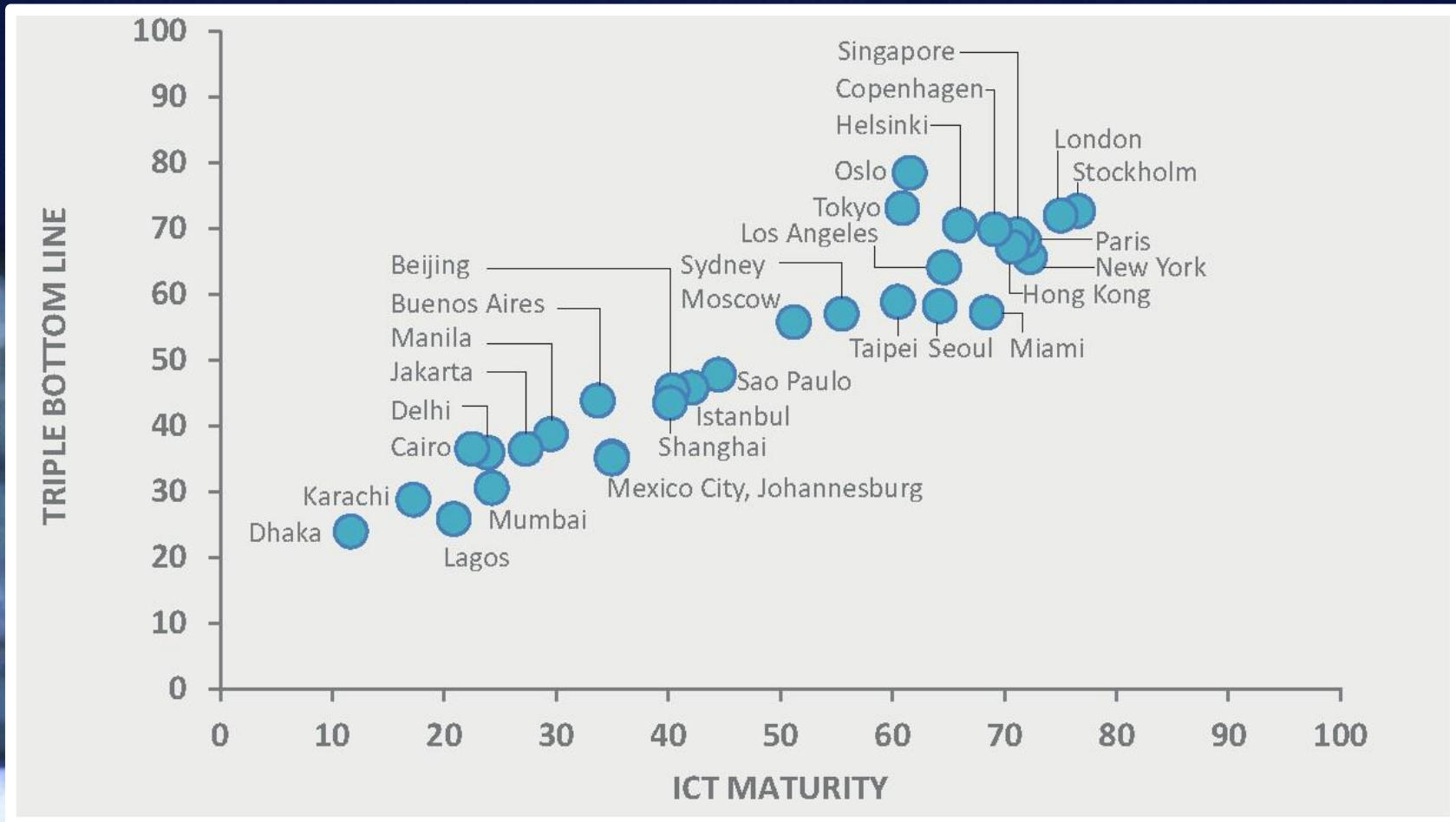
The power of Open Innovation

ICT infrastructure is more cost efficient than physical infrastructure

Is Smart = Green?



Is Smart = Green?



How can Smart be Green?

By being resource efficient

By reducing environmental impact

By integrating and creating synergies (SymbioCity 2.0)

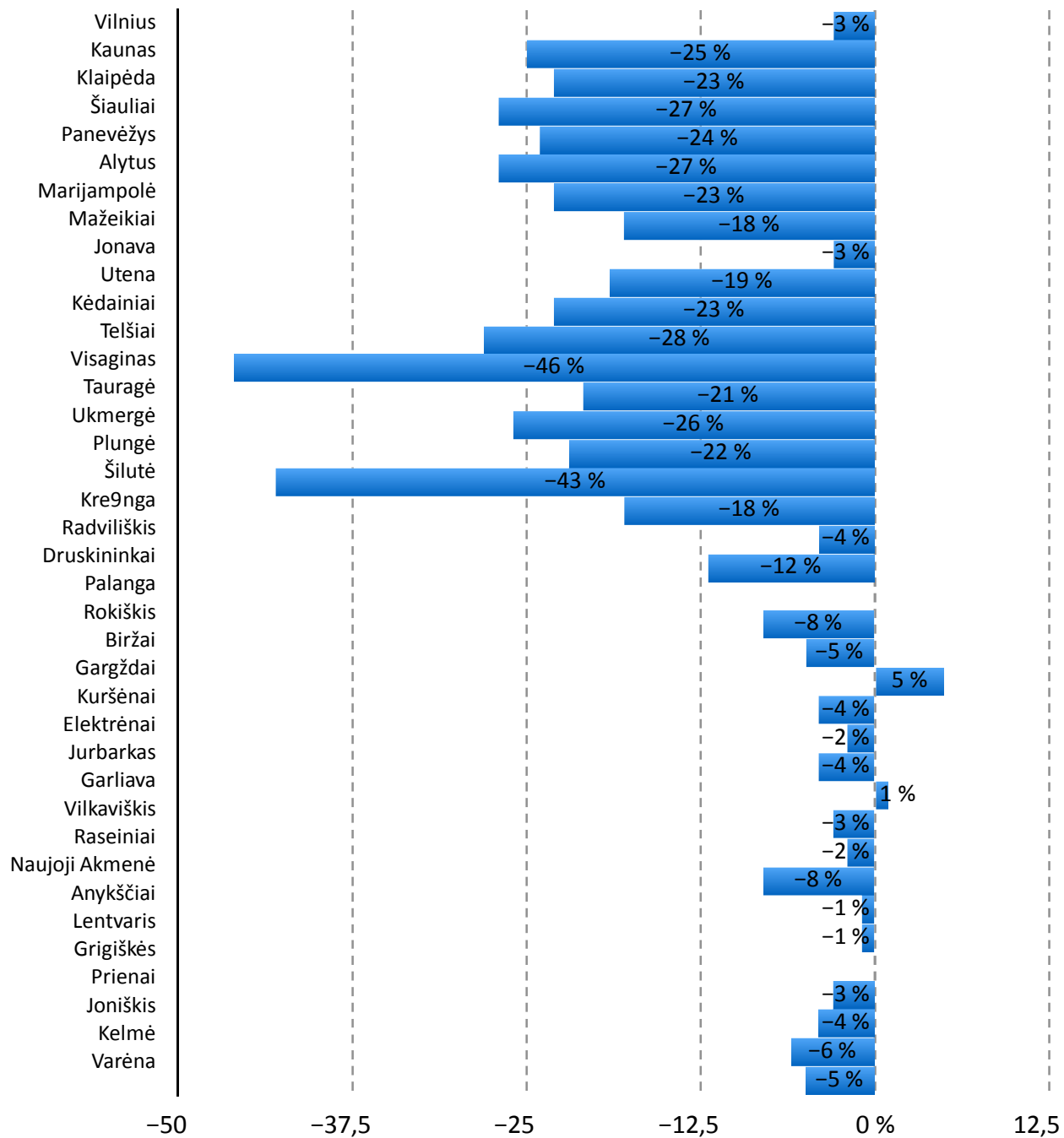
By increasing safety and accessibility

By making the city more livable

By contributing to city resilience (e.g. climate adaptation)

By connecting and involving

Change in urban population in Lithuanian cities 2001-2014



What's in it for small and/or shrinking cities - Quality of life and wise resource use



How to do it!

Aim for the gap between data and analysis Focus
on running a city instead of building it Smart as
accelerator towards integrated solutions Climb
the value chain:

Data → Information → Knowledge → Smartness

Statistics → Monitoring → Regulating

Data security and resilience in integrated systems

Mind the gaps! (Generation, income etc.)

Involve citizens

Thank you

Andreas.Gyllenhammar@sweco.se



Nordic City Network and New urban businesses

1. About Nordic City Network

2004-2014





Nordic City Network

19 member cities
Network organization
Think tank
Laboratory
Theory/Practise

Aalborg
Aarhus
Fredericia
Sønderborg
Odense
Tromsø
Trondheim
Stavanger.
Kristiansand
Skedsmo
Umeå
Uppsala
Eskilstuna
Norrköping
Linköping
Göteborg
Lund
Malmö
Vasa





Nordic City Network

Mission and ambition

Developing the Nordic cities in a global and competitive world

Explore and discuss the Nordic welfare model in the light of urbanization





Megatrends

Urbanization

Segregation

Social tensions

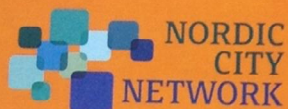
Democracy under pressure

Prize levels

But also:

New urban communities

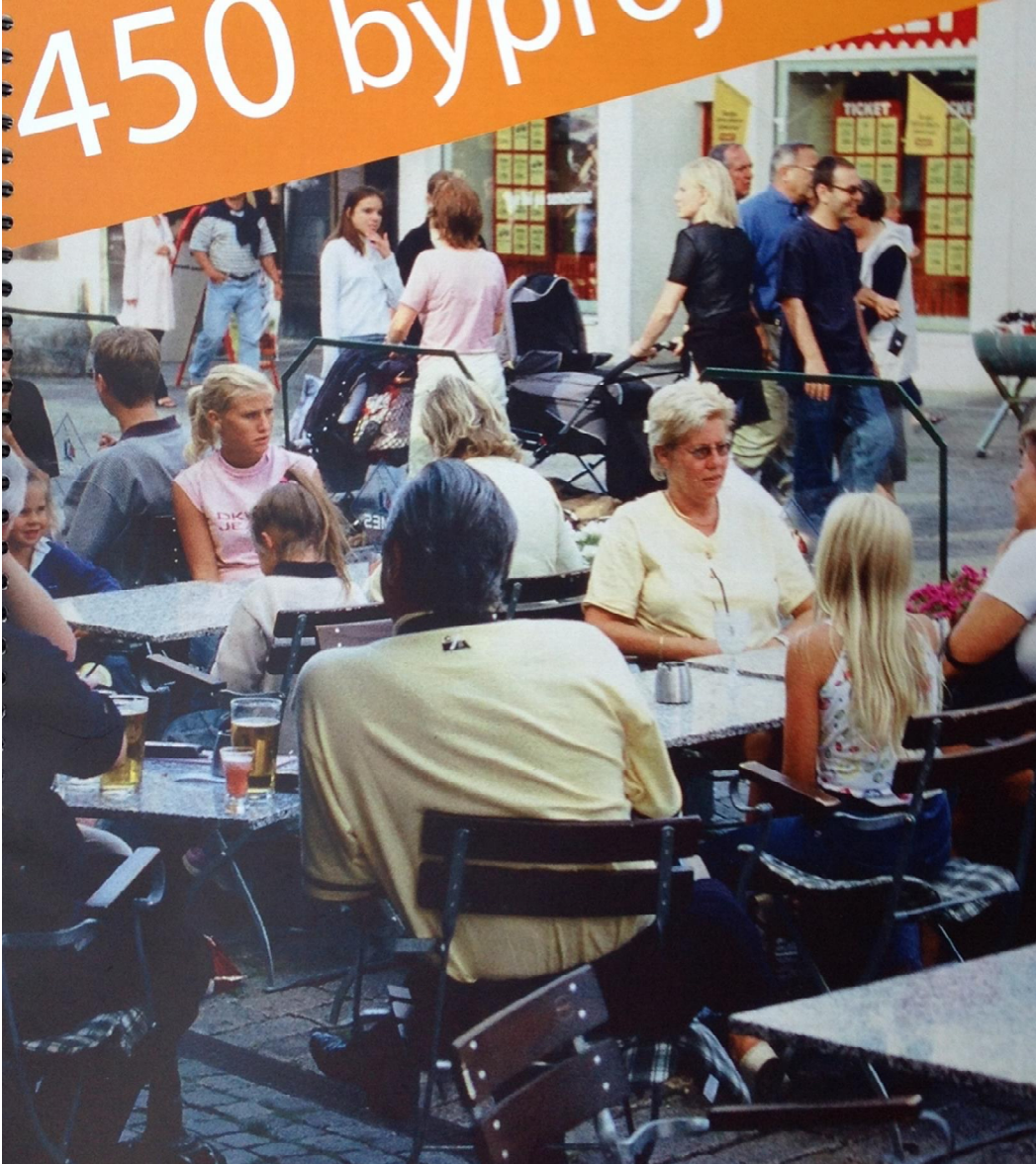
New urban companies



Nordic cities in transition

FORELØBIGT UDKAST TIL DIALOG OG VIDERE UDVIKLING

450 byprojekter



NORDIC CITIES IN TRANSITION



- New Nordic urban projects
- The Nordic models needed in transition
- Innovation and leadership
- New urban
- Competition & quality of life
- Innovative urban spaces
- Urban strategies

Urban communities
Urban capital
Horizontal and vertical thinking

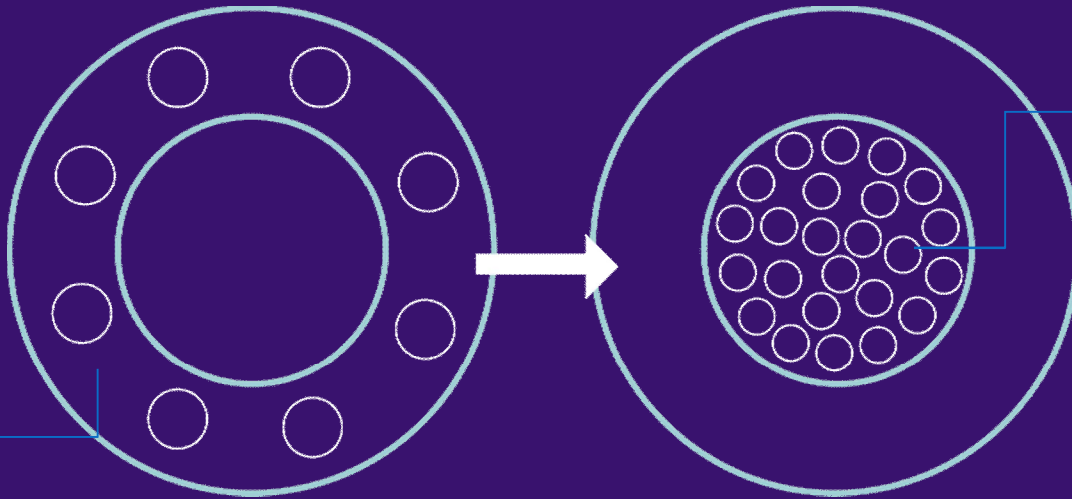




New urban communities:
Nordic Seminar
Aarhus 2015



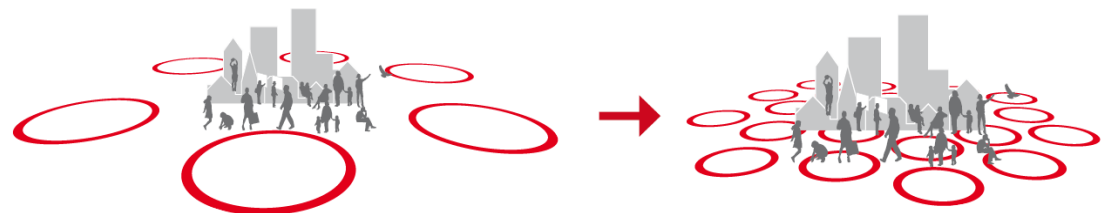
Malmö discovery



2005: 75% of all workplaces in the citycenter

1990: 75% of all workplaces in traditional business areas

37



1990
75 % of all workplaces are located outside the city centre.

2005
75 % of all workplaces are located within the city centre

Progressive Media Aalborg



BALTIC
INVESTORS
FORUM

2015
VILNIUS

MEDIA
EVOLUTION
CITY



Media Evolution City Malmö





Yesterdays company.
The missing link!

