Kapsch TrafficCom.

We make traffic flow.

Company.

We offer products, systems and services for high-performance **intelligent transportation systems (ITS)** as a one-stop shop and cover the entire value creation chain of our customers with our end-to-end solution portfolio.

Key facts:	
Annual revenues	€ 550 million (fiscal year 2011/12)
Headcount	2.705 employees (as of March 31, 2012)
Global headquarters	Vienna, Austria
Worldwide presence	Subsidiaries and representative offices in 30 countries.
R&D competence centers	Argentina, Austria (2x), Canada, Italy, South Africa, Sweden, USA.

Kapsch TrafficCom. Portfolio.

We make your traffic flow.

Road user charging	Urban access and parking	Road safety enforcement

- Manual or electronic tolling (Satellite and terrestrial tolling)
- Components, subsystems, systems and complete end-to-end tolling solutions

- Urban Road user charging, Limited Access Zone, Low Emission Zone, Dynamic Parking
- Full range of charging policies, based on the time of the day, the length of the stay, the vehicle's pollution class or the traffic

- Red Light and Speed Enforcement, Weigh-in-motion, Lane Enforcement, Traffic Surveillance
- Comprehensive and fully integrated solutions for enforcing traffic laws

Manage traffic intelligently, systematically create added value.

Kapsch TrafficCom. Portfolio.

We make your traffic flow.

Commercial vehicle operations	Electronic vehicle registration	Traffic management	V2X cooperative systems

- Inspection and pre-clearance of trucks
- Check of vehicle weight
- Improvement of road safety and the productivity of fleets

- Registration of vehicles through electronic readable tags
- Centralized management of vehicle registration data
- Automated monitoring by regulatory authorities

- Incident Detection, Traveller Information Services
- Solutions for monitoring and controlling road traffic
- Improved traffic flow and protection of the environment
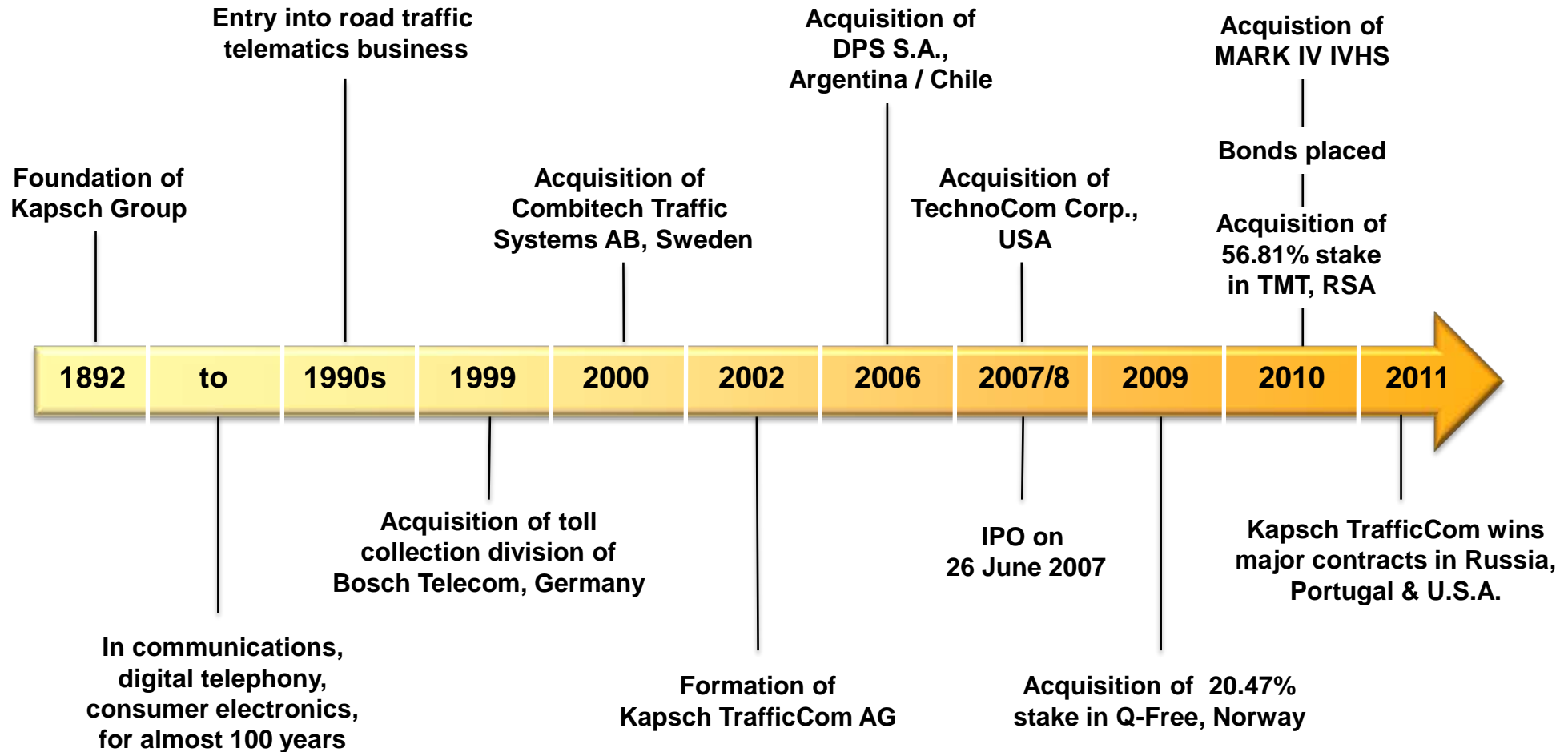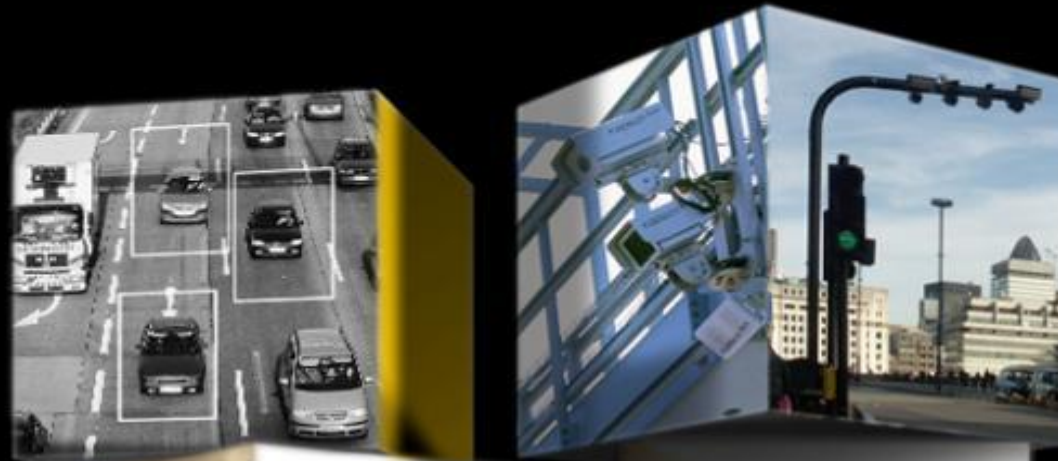
- Core technology for managing and improving traffic safety and mobility in the future
- In-vehicle components, roadside stations or complete solutions

Manage traffic intelligently, systematically create added value.

History.

Entry into road traffic telematics business

Acquisition of DPS S.A., Argentina / Chile

Acquistion of MARK IV IVHS

Foundation of Kapsch Group

Acquisition of Combitech Traffic Systems AB, Sweden

Acquisition of TechnoCom Corp., USA

Bonds placed

Acquisition of 56.81% stake in TMT, RSA

| 1892 | to | 1990s | 1999 | 2000 | 2002 | 2006 | 2007/8 | 2009 | 2010 | 2011 |

Acquisition of toll collection division of Bosch Telecom, Germany

IPO on 26 June 2007

Kapsch TrafficCom wins major contracts in Russia, Portugal & U.S.A.

In communications, digital telephony, consumer electronics, for almost 100 years

Formation of Kapsch TrafficCom AG

Acquisition of 20.47% stake in Q-Free, Norway

Kapsch TrafficCom.

An eco-friendly transport infrastructure.

Values. Future transport infrastructure.

- **Healthy & clean**

- **Nutritious & refreshing**

Values. Future transport infrastructure.

- **Available & (fair) accessible**

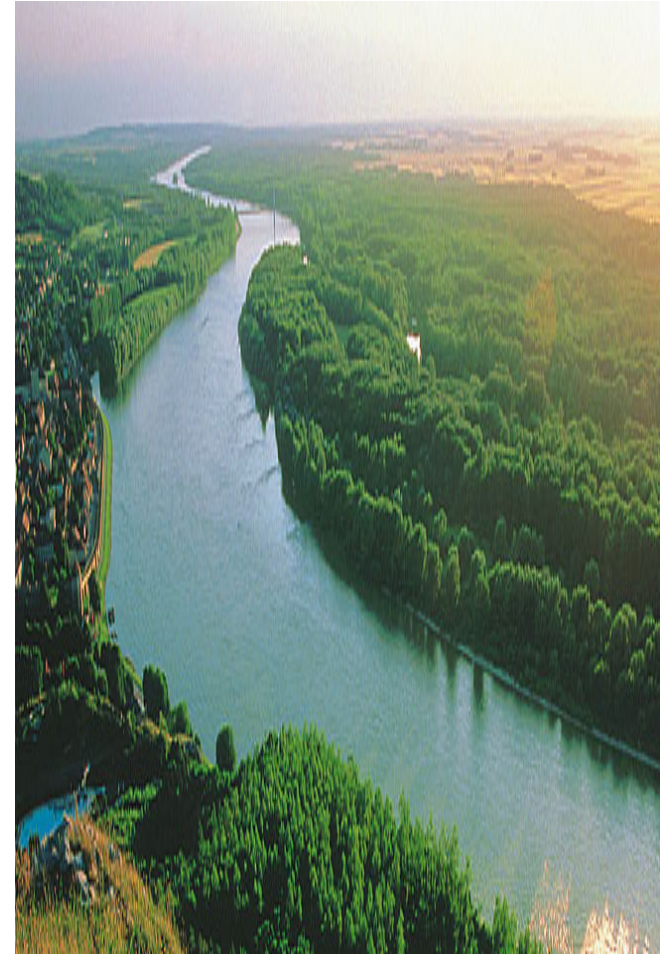- **Supply- & distribution function**

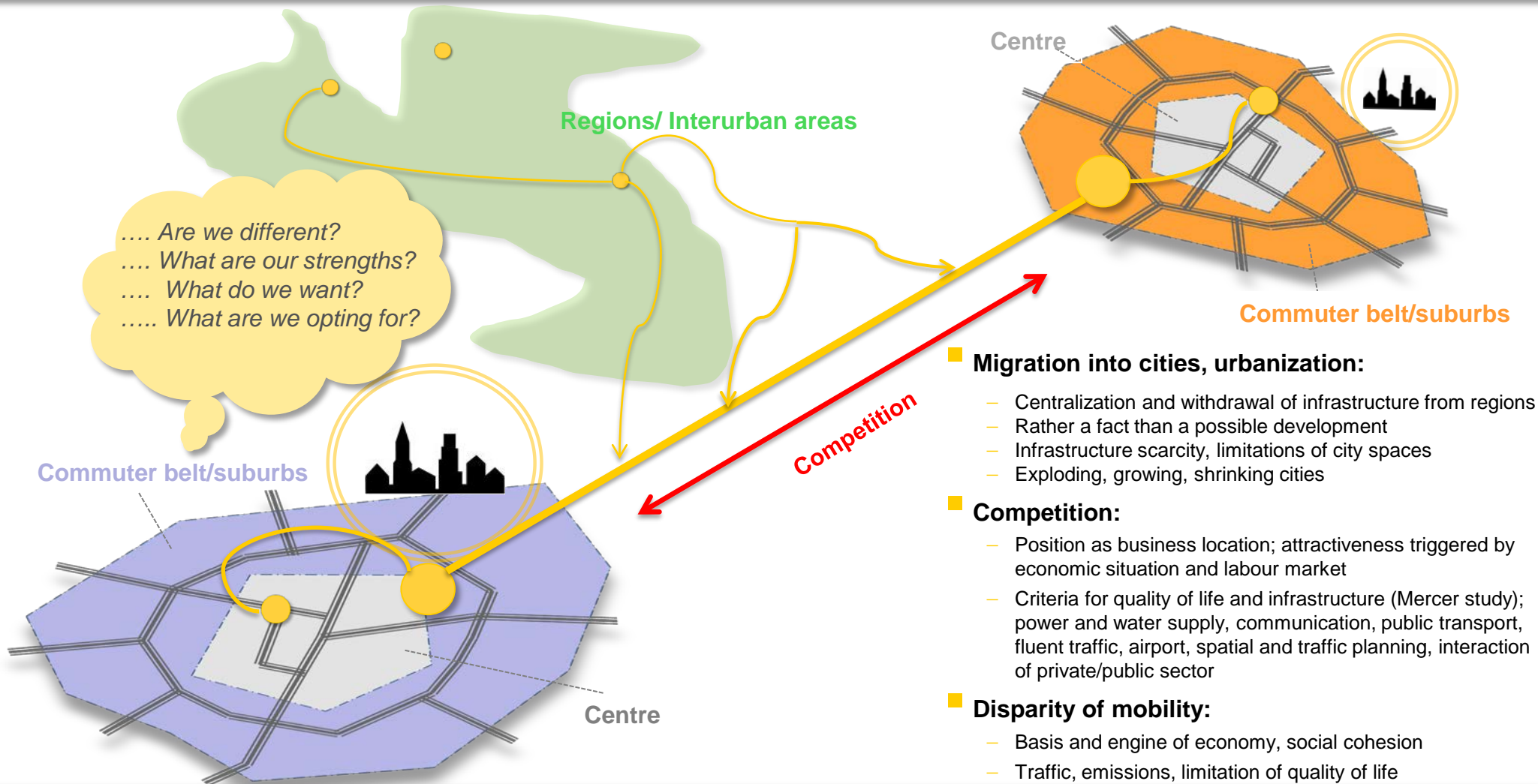# Values. Future transport infrastructure.

■ **Continuous & fluent**

Value = Awareness + Pricing.

2018. Regulative framework for local road user charges and access schemes

Situation. Cities and communities in transition and competition.

Regions/ Interurban areas

Centre

…. Are we different?
…. What are our strengths?
…. What do we want?
….. What are we opting for?

Commuter belt/suburbs

Commuter belt/suburbs

Competition

Centre

■ **Migration into cities, urbanization:**
  – Centralization and withdrawal of infrastructure from regions
  – Rather a fact than a possible development
  – Infrastructure scarcity, limitations of city spaces
  – Exploding, growing, shrinking cities

■ **Competition:**
  – Position as business location; attractiveness triggered by economic situation and labour market
  – Criteria for quality of life and infrastructure (Mercer study); power and water supply, communication, public transport, fluent traffic, airport, spatial and traffic planning, interaction of private/public sector

■ **Disparity of mobility:**
  – Basis and engine of economy, social cohesion
  – Traffic, emissions, limitation of quality of life

Strategy, what to do. Regulative framework for local road user charging and access schemes.

…. City as a system; energy management, water, waste, assisted living,
traffic management
…. Aspects; political, functional (system), environmental, human,
economic
…. Role of the government is to operate the system and to organize
"smart" technology …..

MOBILITY

- o *To decouple growth of cities and resource consumption*
- o *To use digital data*
- o *Incenting people to use environmentally friendly modes*
- o *Cross-regional land use planning*
- o *Three tuning levels for decision makers*
  - ➢ *Manage supply*
  - ➢ *Manage human demand*
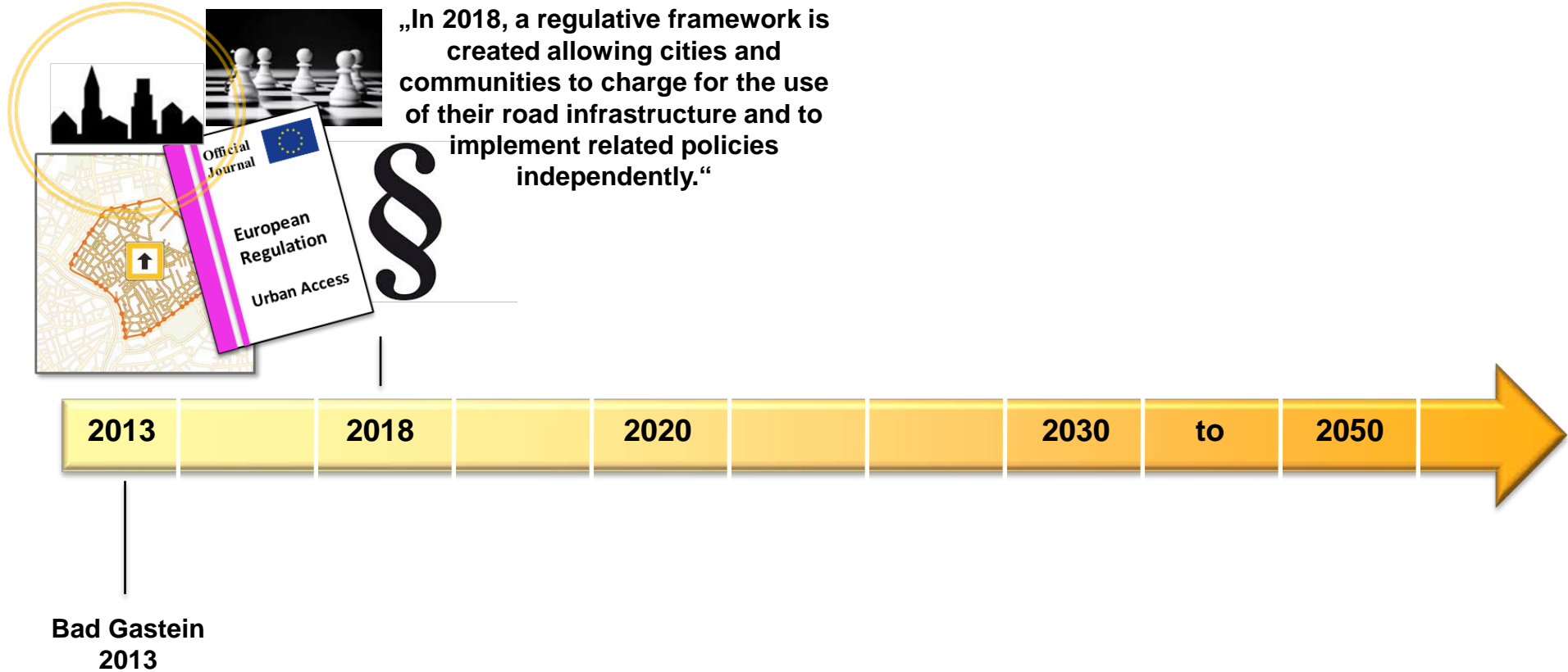 - ➢ *Make infrastructure adoptive*

… Short distances
… Trip planning reliability
… To contribute to a cleaner environment
…. Willing to pay for adequate level of
service and better quality of life

■ **Local Empowerment:**
– Self-definition, Positioning
– Fiscal powers for road user charges

….. leads to improvement of the price/ performance ratio of the public service
….. user acceptance through transparancy and use of funds (... As important as revenue neutrality … OECD/ITF 2010)

Perspective/Strategy.

„In 2018, a regulative framework is created allowing cities and communities to charge for the use of their road infrastructure and to implement related policies independently."

| 2013 | | 2018 | | 2020 | | | | 2030 | to | 2050 | |

Bad Gastein 2013
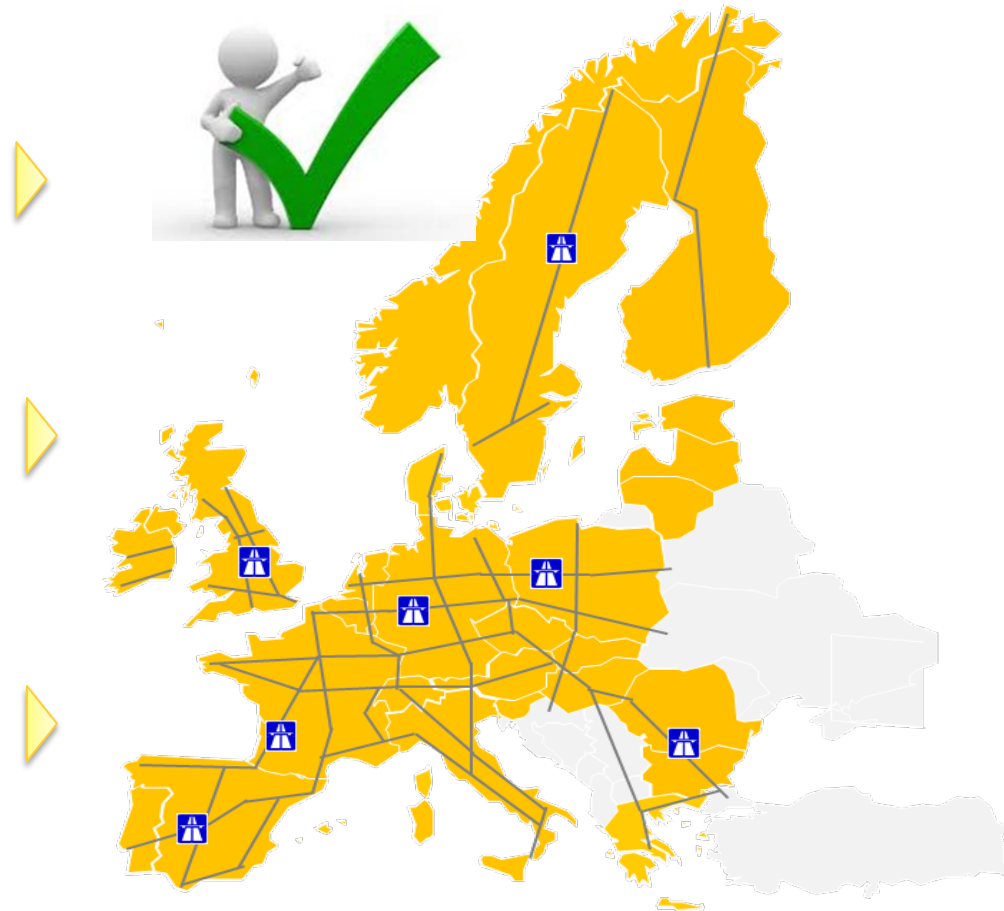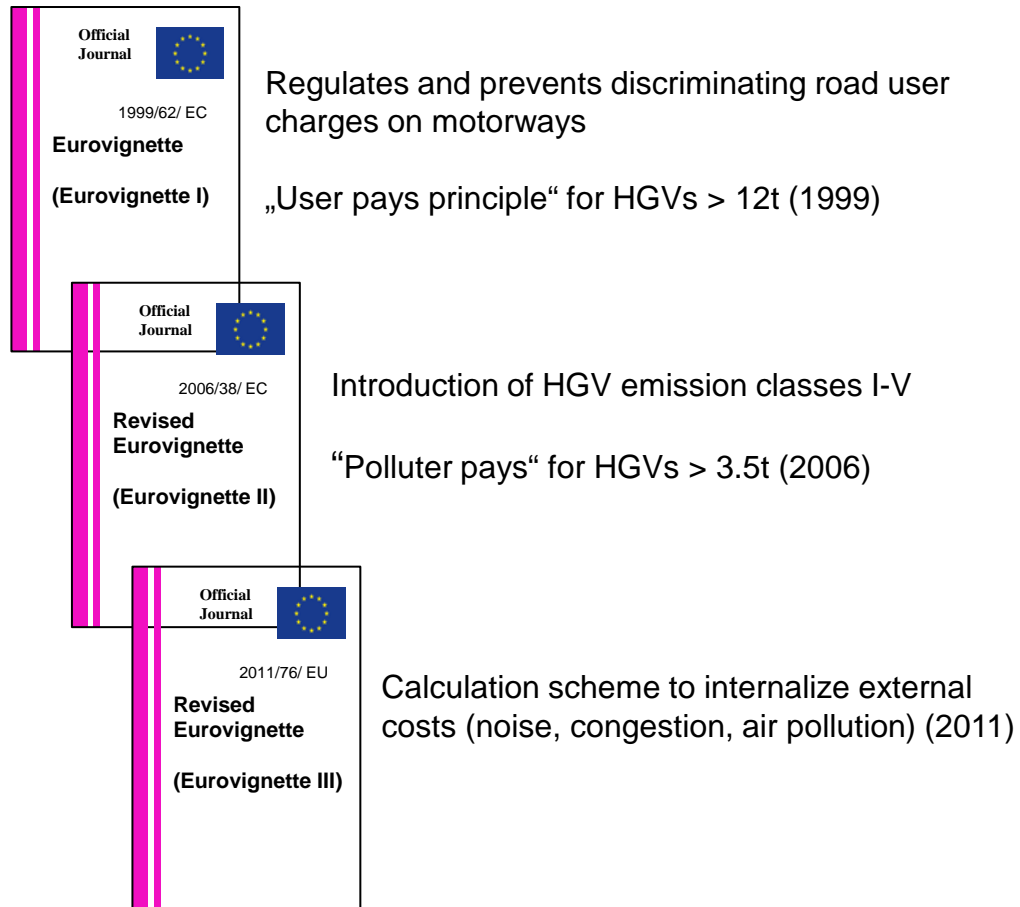
2020. Equal, non-discriminatory rule application, fair access and development of the „user- and polluter pays" principles.

Situation. Development of the "user and polluter pays" principles.

Official Journal — 1999/62/ EC — **Eurovignette** **(Eurovignette I)**

Regulates and prevents discriminating road user charges on motorways

„User pays principle" for HGVs > 12t (1999)

Official Journal — 2006/38/ EC — **Revised Eurovignette** **(Eurovignette II)**

Introduction of HGV emission classes I-V

"Polluter pays" for HGVs > 3.5t (2006)

Official Journal — 2011/76/ EU — **Revised Eurovignette** **(Eurovignette III)**

Calculation scheme to internalize external costs (noise, congestion, air pollution) (2011)

Art 191/2 EU Treaty: "..the polluter should pay"

Strategy, what to do. Fair and effective application of rules.

Equal, non-discriminatory Road charging scheme

mandatory	🏍	€/km
mandatory	🚗	€/km
mandatory	🚌	€/km
mandatory	3.5 t	€/km
mandatory	12 t	€/km

Costs of infrastructure, congestion, noise, pollution

Art 18 EU Treaty: Non-discrimination on grounds of nationality

■ **Legislation to make sure that users rather than taxpayers are to pay the infrastructure they use:**

– Consistent application of "user- and polluter pays" principles

– Phasing out vignettes, make tolls the only legal way of charging vehicles for road use (time-based => distance-based charging)

– Dynamic pricing according time and place (long-term)

– Replacing distortionary taxes and subsidies with fair pricing (e.g. policy recommendations for Austria, OECD economic peer review, July 2013)

– Principles of Non-discrimination, Proportionality, Fairness

….. leads to „Value Pricing"

...... user acceptance through transparency and revenue allocation (… as important as revenue neutrality … OECD/ITF 2010)
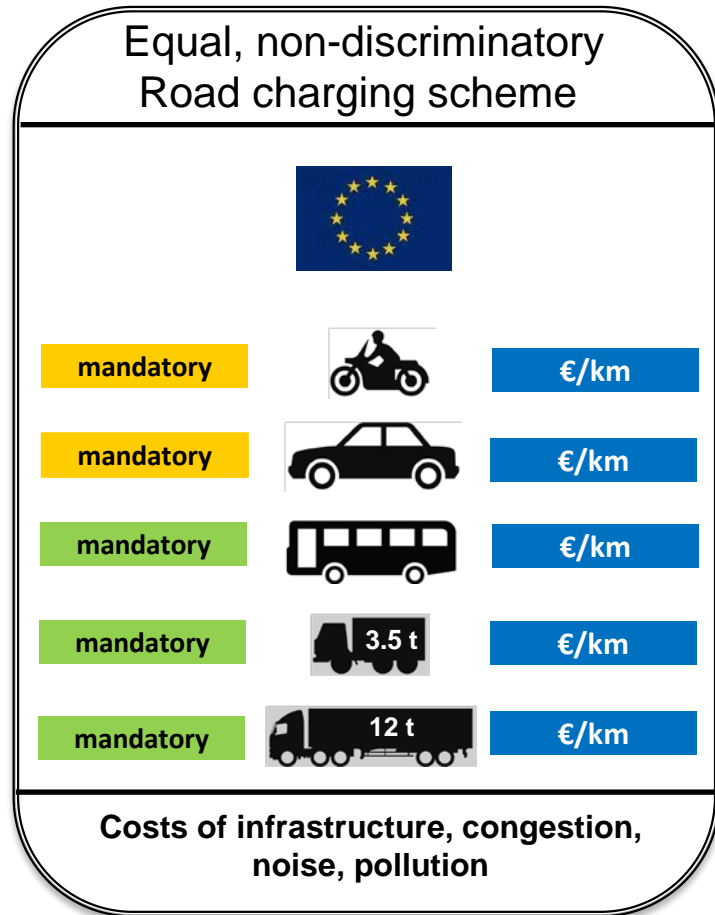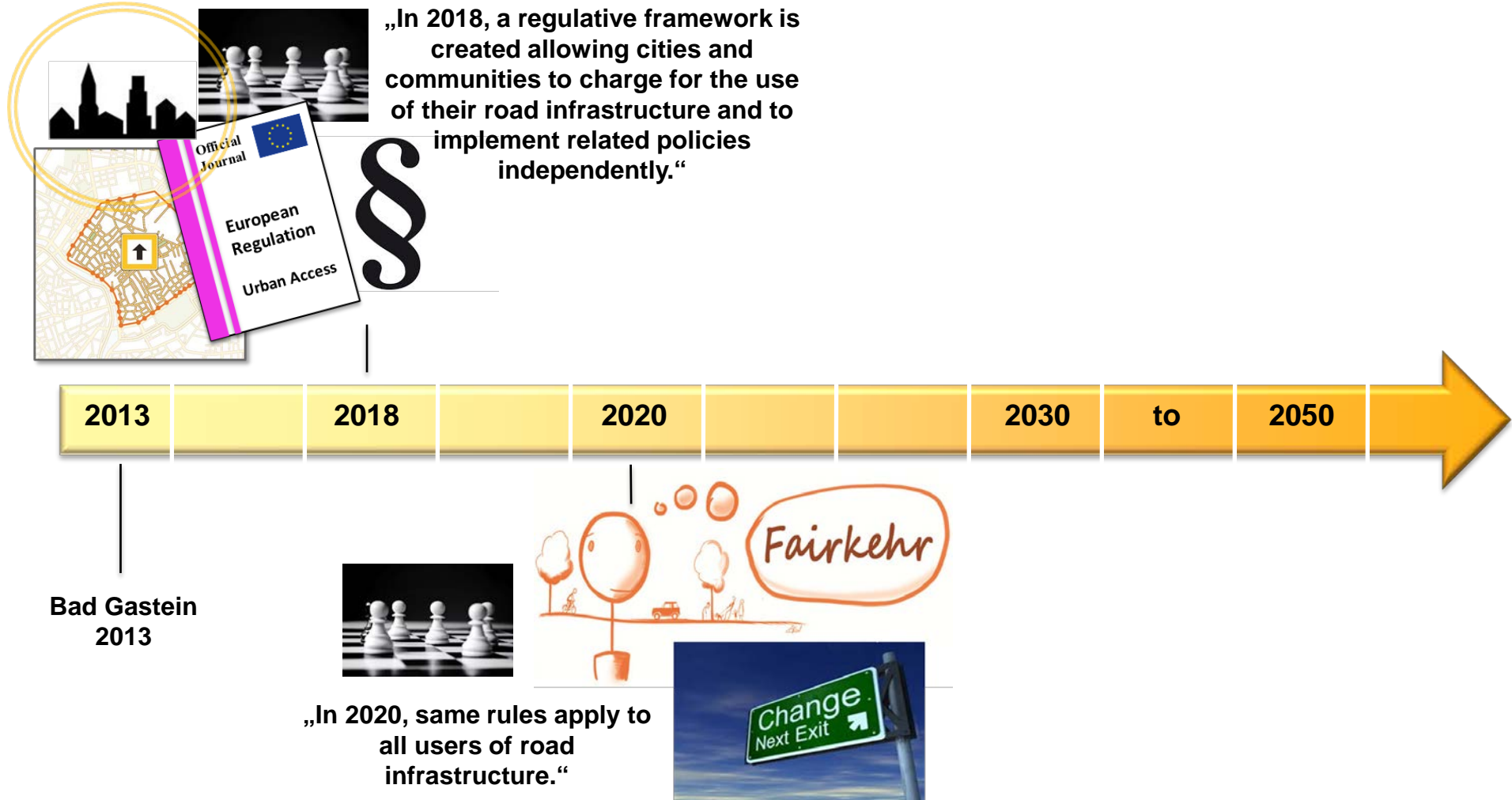
Perspective/Strategy.

„In 2018, a regulative framework is created allowing cities and communities to charge for the use of their road infrastructure and to implement related policies independently."

2013	2018	2020		2030	to	2050

Bad Gastein 2013

„In 2020, same rules apply to all users of road infrastructure."
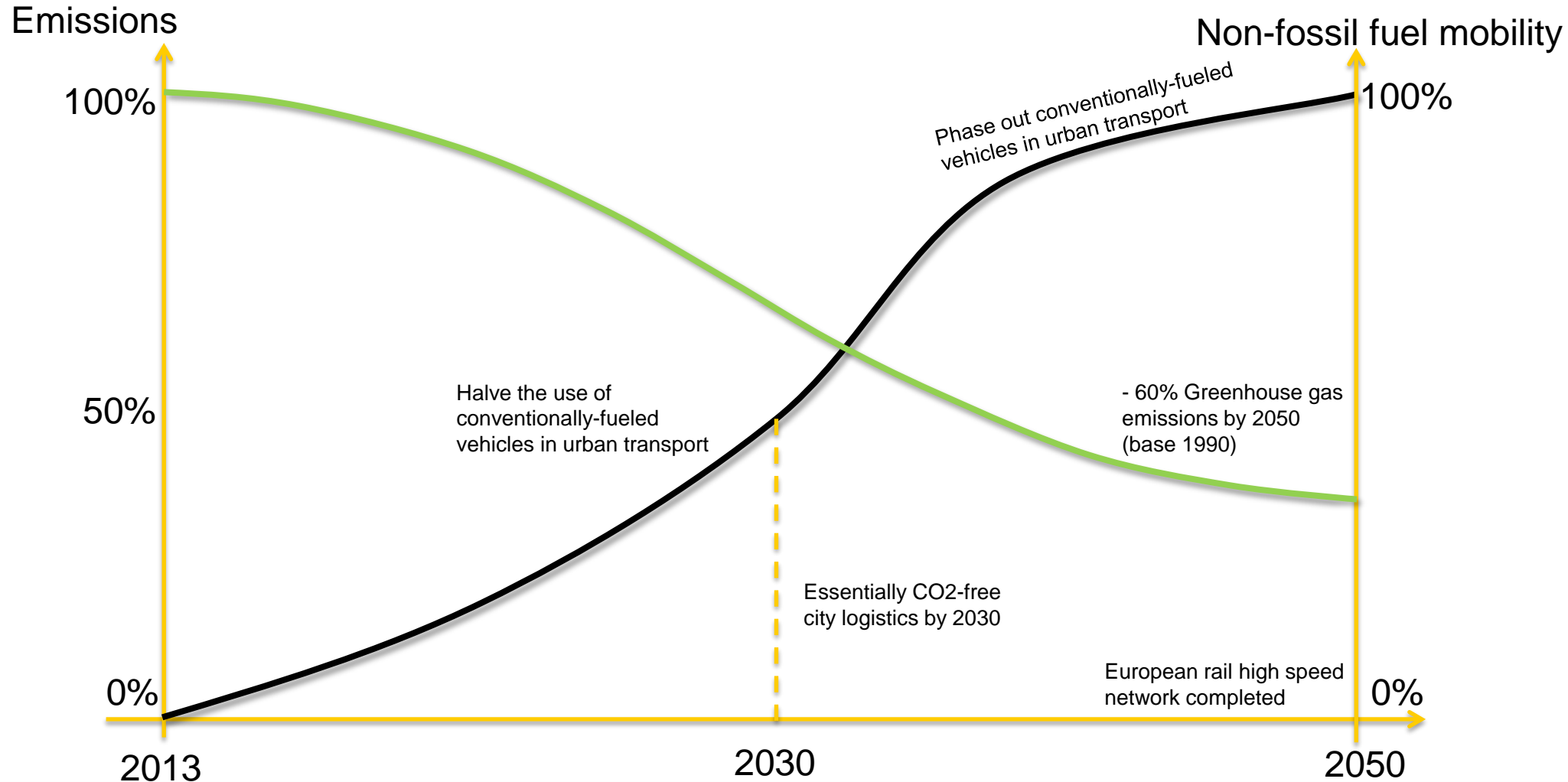
2030/2050. Halving/banning the use of conventionally-fueled vehicles in urban transport.

Situation. Requirements on European level (EU 2011 White Paper)

Emissions

Non-fossil fuel mobility

100%

100%

50%

0%

0%

Phase out conventionally-fueled vehicles in urban transport

Halve the use of conventionally-fueled vehicles in urban transport

- 60% Greenhouse gas emissions by 2050 (base 1990)

Essentially CO2-free city logistics by 2030

European rail high speed network completed

2013

2030

2050

Strategy, what to do. Operationalising the 2011 EU White Paper.

		Emissions	ITS			
			Information	€€€	**Restriction**	**Enforcement**

Motorised Private Transport
- Fossil fuel mobility (Conventional passenger cars, motorcycles, …)

Parking
- Parking Management
- Park & Ride

Alternatives to Motorised Private Transport
- User based models (Car Sharing, Rental Cars, …)
- Higher share of public transport
- Clean and efficient cars
- Better infrastructure for walking and cycling

Spatial and traffic planning
- Public space and local recreation
- Co-Housing, Village in the city, shared space
- Traffic optimization

Implementation in the temporal context.

Emissions

Non-fossil fuel mobility

100%

100%

Phasing out conventionally-fueled vehicles

Spatial and traffic planning

Access/ Restriction

Halving the use of conventionally-fueled vehicles

50%

- 60% Greenhouse gas emissions by 2050 (base 1990)

€€€

Essentially CO2-free city logistics by 2030

0%

European rail high speed network completed

0%

2013

2030

2050

Perspective/Strategy.

„In 2018, a regulative framework is created allowing cities and communities to charge for the use of their road infrastructure and to implement related policies independently.“

„In 2030, there are only half as many conventionally-fueled vehicles as of today.“

„ … in 2050, such vehicles are completely banned from urban transport.“

| 2013 | 2018 | 2020 | 2030 | to | 2050 |

Bad Gastein 2013

„In 2020, same rules apply to all users of road infrastructure.“

Kapsch TrafficCom.

"We can't solve our problems by using the same kind of thinking we used to create them.." (Albert Einstein)

Keywords. To develop the future – An eco-friendly transport infrastructure.

Assumption: Conventional challenges are valid

- Scarcity of resources, Urbanization, new technologies, …
- Two topics through all perspectives; environment & volume (scale of infrastructure, traffic volume)
- Traffic infrastructure shapes mobility. Mobility shapes quality of life.
- Traffic infrastucture is the basis of an integrated single market.

"Transport of values"

- High/Adequate service of (traffic) infrastructure has a value. Pricing as the fine-tuning tool.
- Challenges do not stop at national borders. Value projection? To promote a set of rules?
  - Across goverments and organizations (UN, EU, OECD, …)
  - Across the private sector, to the advantage of the economy (Green Industry, Green Jobs, competitive advantages, value chain, …)