Sustainable mobility
From Research to Innovation

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Wien und Bratislava: Eine Logistik- und Verkehrsregion?

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Transport - a crucial sector of economy

Transport represents

- 9 % of the total Gross Value Added of the EU economy (2015)
- 9 % of the total EU employment (2015)
- around 1.2 million private and public companies in the EU
- 17.2 % of the EU's total exports of services - transport related (2016)

However, transport also generates negative societal effects such as:

- accidents, greenhouse gas emissions, air pollution, noise and environmental effects
- EU transport policy of the 21st century has to address the challenges the sector is facing

Source: Transport in the European Union: Current Trends and Issues, April 2018, EC DG MOVE

Transport 2050

EC outlines ambitious plan to increase mobility and reduce emissions

- No more conventionally-fuelled cars in cities (50% by 2030, 100 % by 2050)
- Achieve essentially CO2-free movement of goods in major urban centres by 2030
- A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport

By 2050

60% cut in transport emissions

Close to zero fatalities in road transport

Decarbonisation & Air quality

- The push for making transport independent from fossil fuels and tackling climate change (to meet the EU target of achieving a 60% reduction of transport GHG emissions by 2050 compared to 1990 levels)
  - Promote **eco-driving and eco-routing** to change driver behaviour;
  - Improve **quality of vehicle fleets** by:
    - Reducing the total number of cars, particularly the old cars via age limits, taxation, or access regulations;
    - Fostering the change to clean vehicles and fuels, in particular electric vehicles (market promotion, subsidies for replacing polluted vehicles, parking incentives, …)
  - **Rationalise the use of cars**
    - Developing new interconnections of cars with other modes, integrated with public modes and innovative mobility concepts and services
    - Identify packages of measures to promote intermodality
    - Modal shift through measures such as pricing schemes, public transport promotion

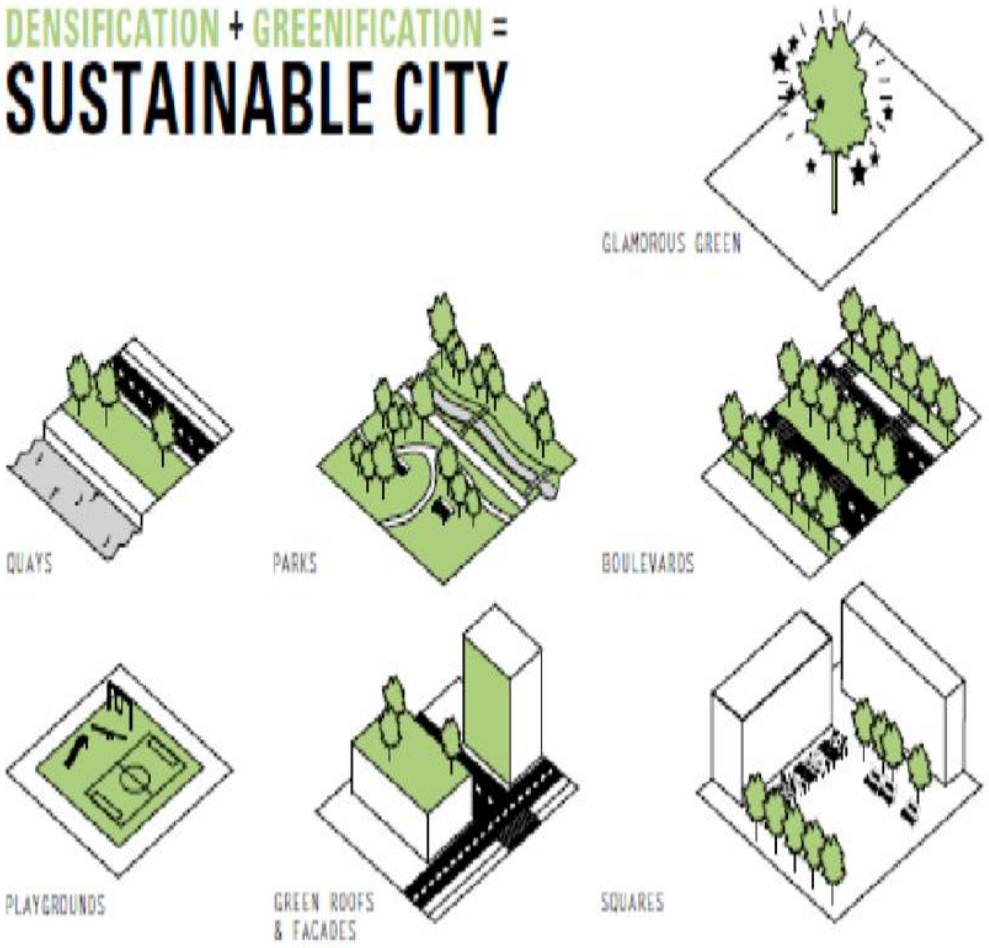
Digitalisation

- Technological disruption which sees the increasing merging of the mobility sector with ICT
- Rebranded under the sweeping terms Intelligent Transport Systems (ITS), or ‘Smart Mobility’
- Solutions target all parts of the transport system
  - Real-time and multimodal data monitoring for traffic and infrastructure management
  - End-user services such as MaaS, car/bike sharing, carpooling or eco-driving apps
  - Vehicle-specific technologies, particularly in terms of automation – CAVs
  - …

Diversification

- Diversification in transport modes
  - Public transportation - various forms of bus rapid transit (BRT)
  - Bicycles come-back
  - Diversifying as well with one-, two-, three- and four- light electric wheelers
  - Attracting a wider variety of socio-demographic groups
- Diversification in ownership
  - Sharing of cars, bikes and electric scooters
  - Ride hailing, ride sharing
  - Car pooling

Densification

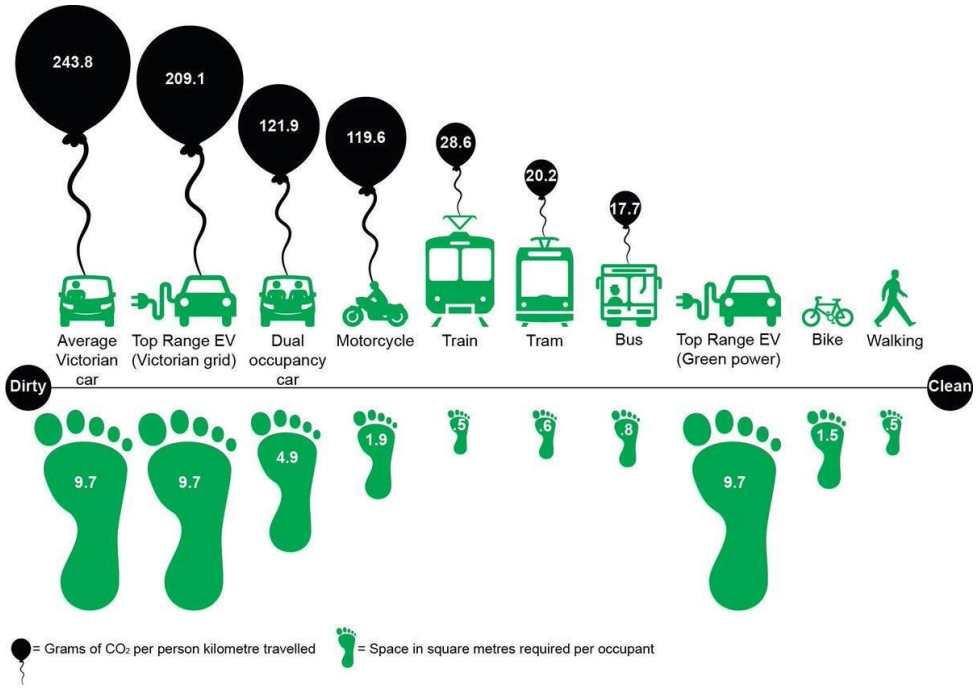


- Both a trend and a policy that can challenge the (re-)allocation of space
  - Developing and designing land-use mix and zoning schemes
  - Rethinking the functionality of urban areas
  - Conceptualising and analysing urban nodes to support effective land use and a multimodal and intermodal mobility behaviour
- Increases the need for integrated mobility planning - close consultation with stakeholders and users/citizens

Innovative does not be necessarily New

We can learn from each other …

- Innovation
  - Innovative mobility ‘solution’ not already existing in the target location, but that may already exist successfully and may already be the focus of research elsewhere
  - Shaped according to local citizens needs
- ‘Proof-of-concept’ research projects to address implementation barriers of best practice interventions and innovations for sustainable mobility in the urban context
- ‘Solution’ - an integrated package of interventions covering products, services and processes
  - Ex.: transport/mobility system and its infrastructure (e.g. protected cycle lanes), new supportive policies and regulations (e.g. parking or land-use retrofit policies), technological or data-oriented experiments and services (e.g. MaaS), innovative planning, impact-assessment, indicators or decision-support tools (e.g. multi-actor multi-criteria analysis)



Thank you

Questions & feedback:

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