Sustainable urban planning and system thinking

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AALTO Systems Thinking in Sustainable Living Environment

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Relevance

- Urban planning is a system as it self
- Urban planning needs systemic change
- Urban planning has a tendency towards path depency
- Urban planning is about planning layers of technical systems

Urban Planning in wider societal (sosio-systemic) context

Macroscale phenomenas

Value base

Political will

Societal discource

Urban Planning practisies

Legislation, taxation etc.

Hierarchy of urban planning

Impact assesment

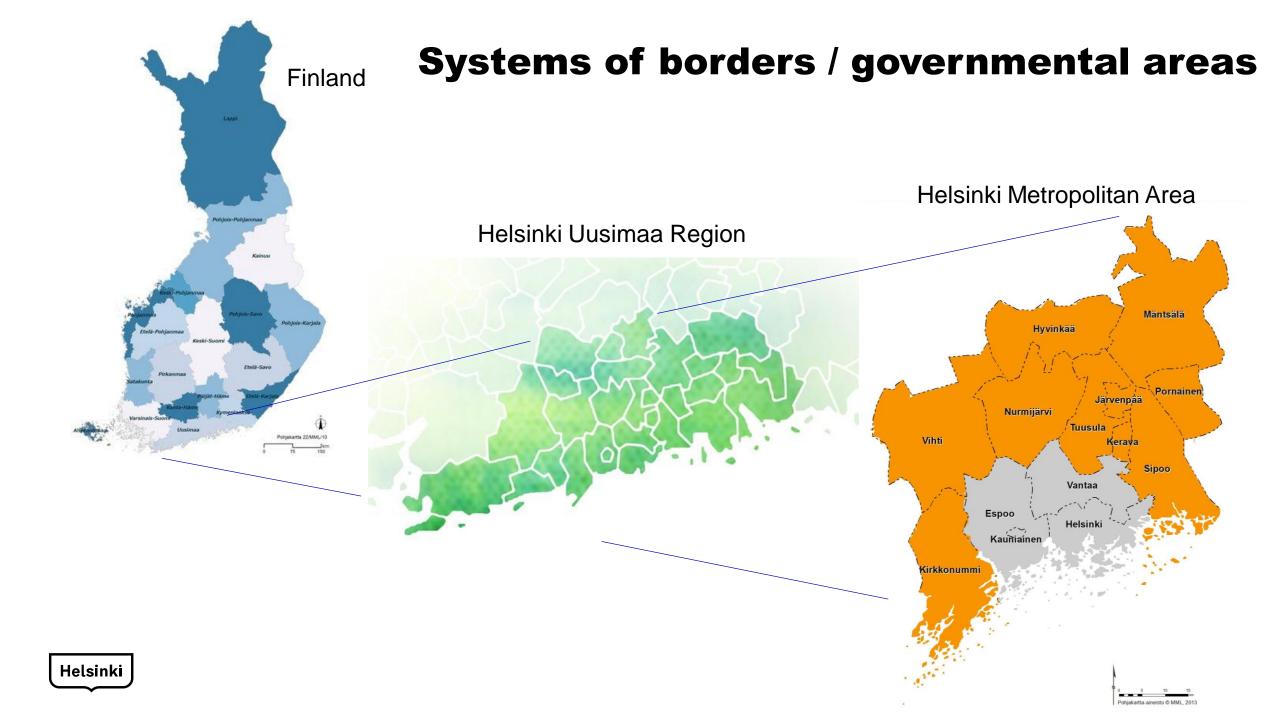
Political decision making



in physical environment (for better, towards sustainability)

years and years





Finnish (hierarchical) Planning System

Land use and building act

→ Regional Planning (Helsinki Uusimaa Regional Council)

→ General Planning (municipalities)

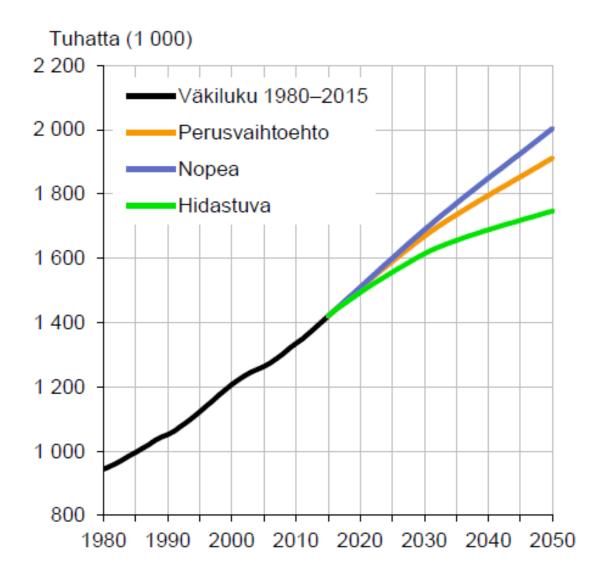
→ Detailed Planning (municipalities)

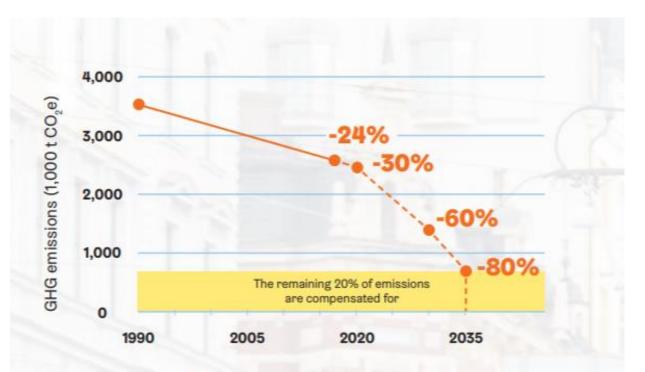




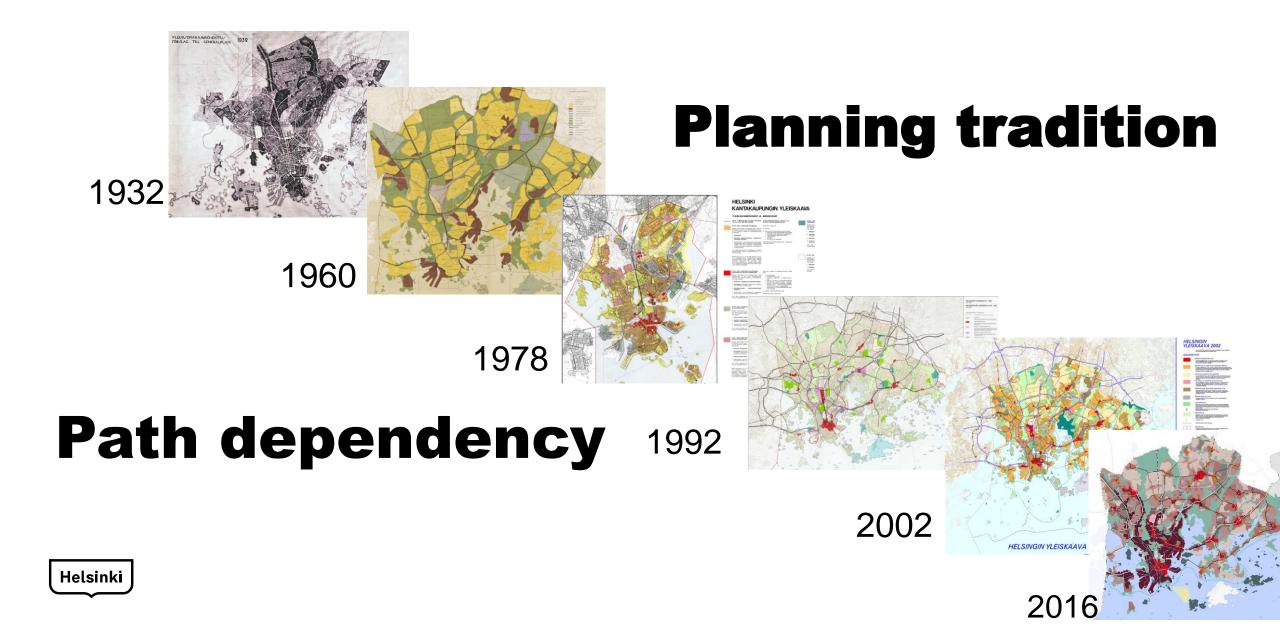


Need for systemic change is obvious





The development of Helsinki's emissions from 1990 and climate goals for the coming years. Developing emissions in accordance with the goals in the future requires that Helen reduces the specific emissions from district heating by **74%** (2015–2035).



Systems of the city - traffic







Systems of the city - energy





