

Sustainable urban planning and system thinking

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AALTO

Systems Thinking in Sustainable Living Environment

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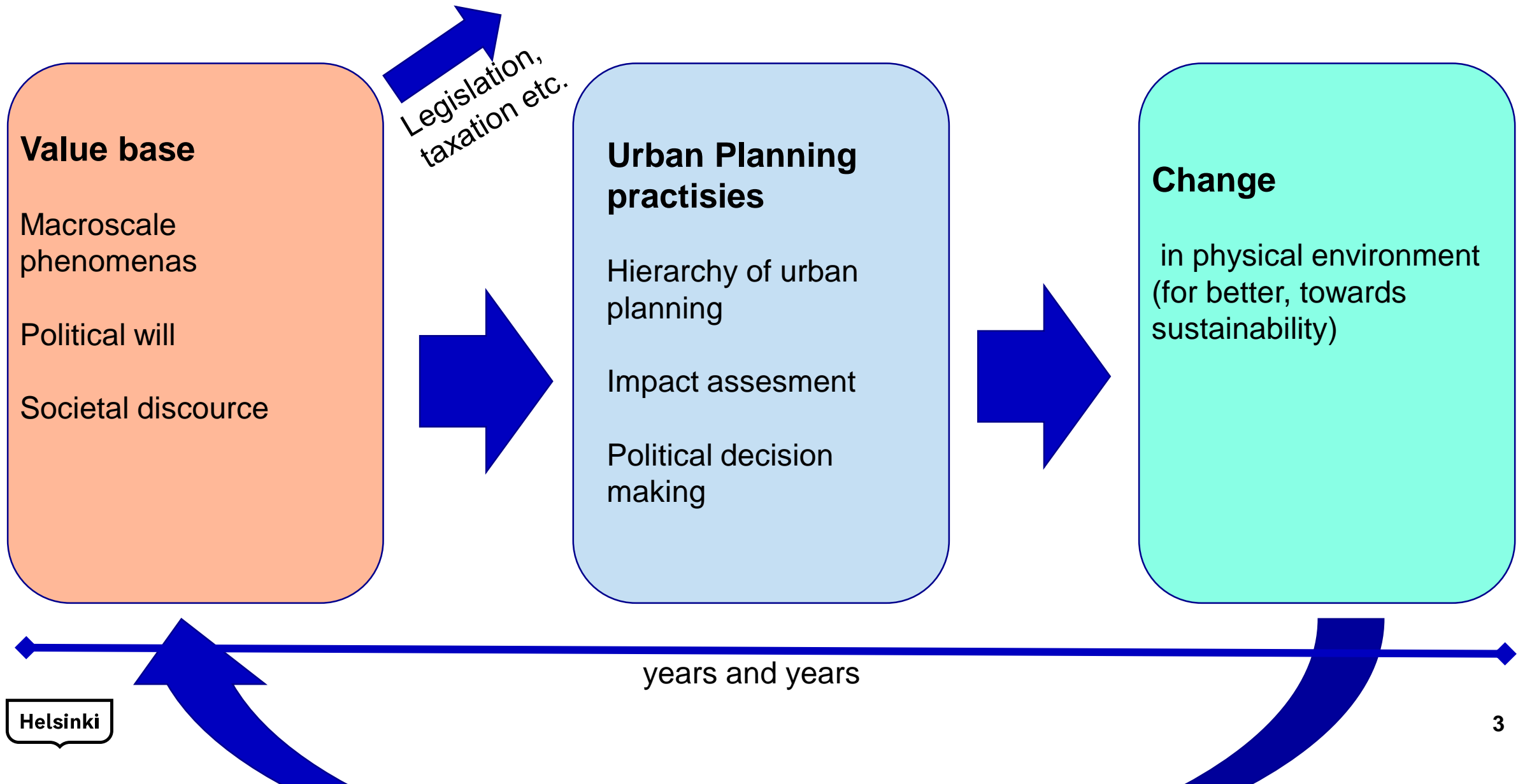
Helsinki



Relevance

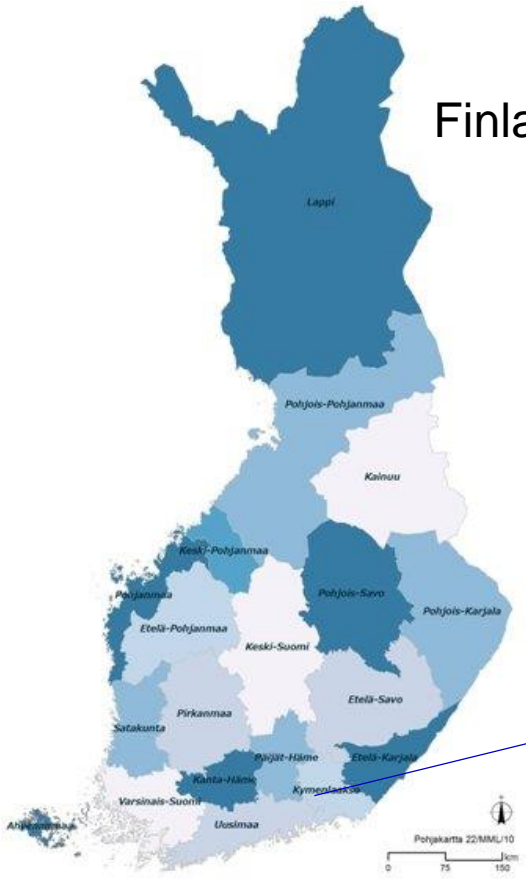
- Urban planning is a system as it self
- Urban planning needs systemic change
- Urban planning has a tendency towards path dependency
- Urban planning is about planning layers of technical systems

Urban Planning in wider societal (socio-systemic) context

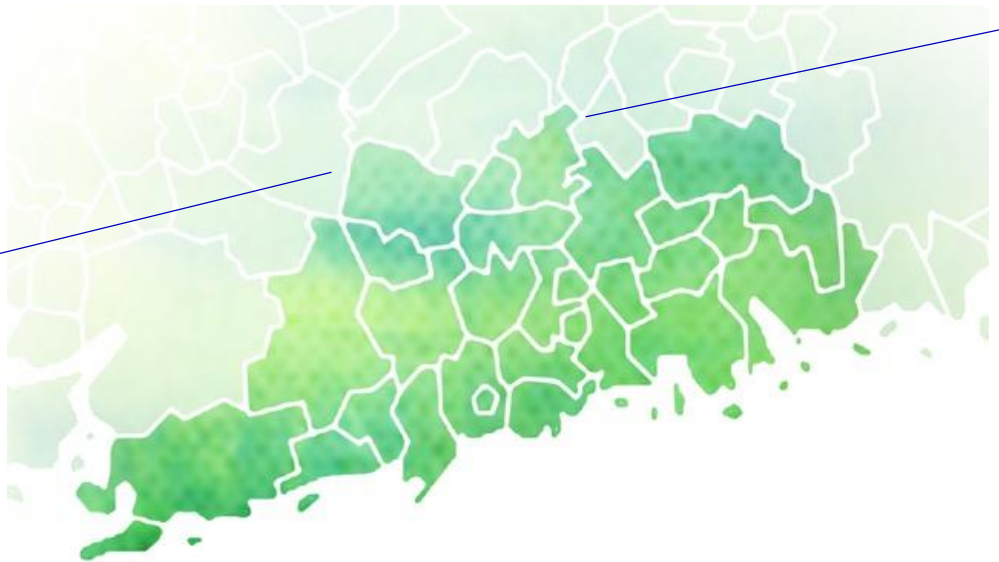


Systems of borders / governmental areas

Finland



Helsinki Uusimaa Region



Helsinki Metropolitan Area

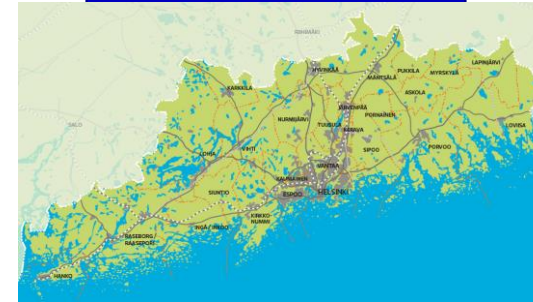


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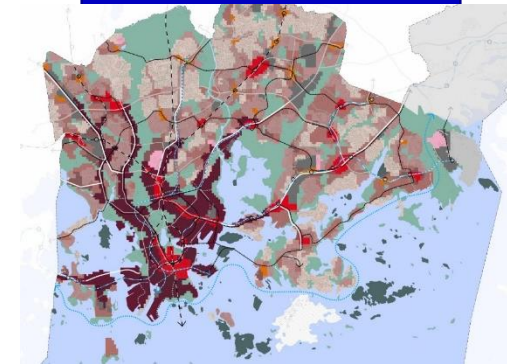
Finnish (hierarchical) Planning System

Land use and building act

→ Regional Planning
(Helsinki Uusimaa Regional Council)



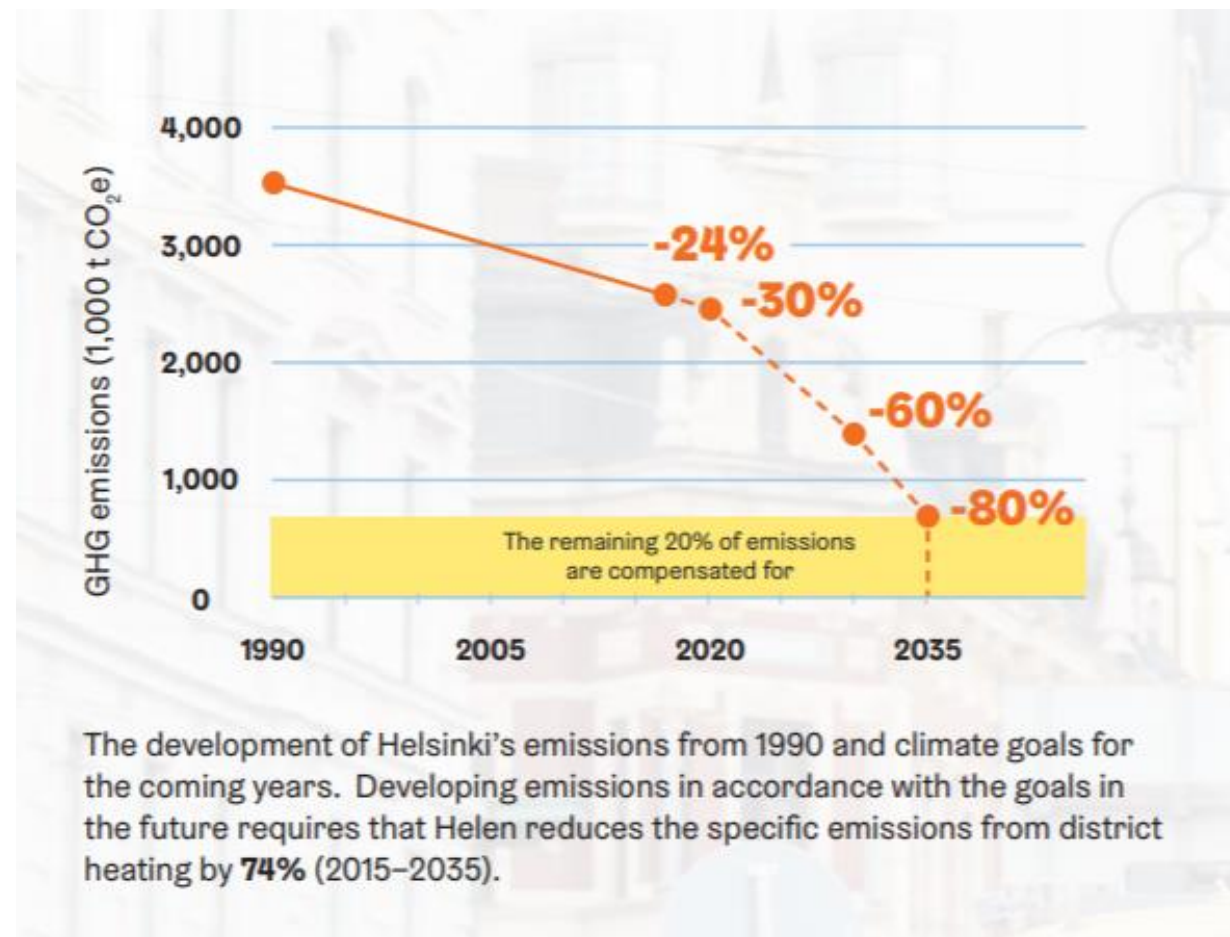
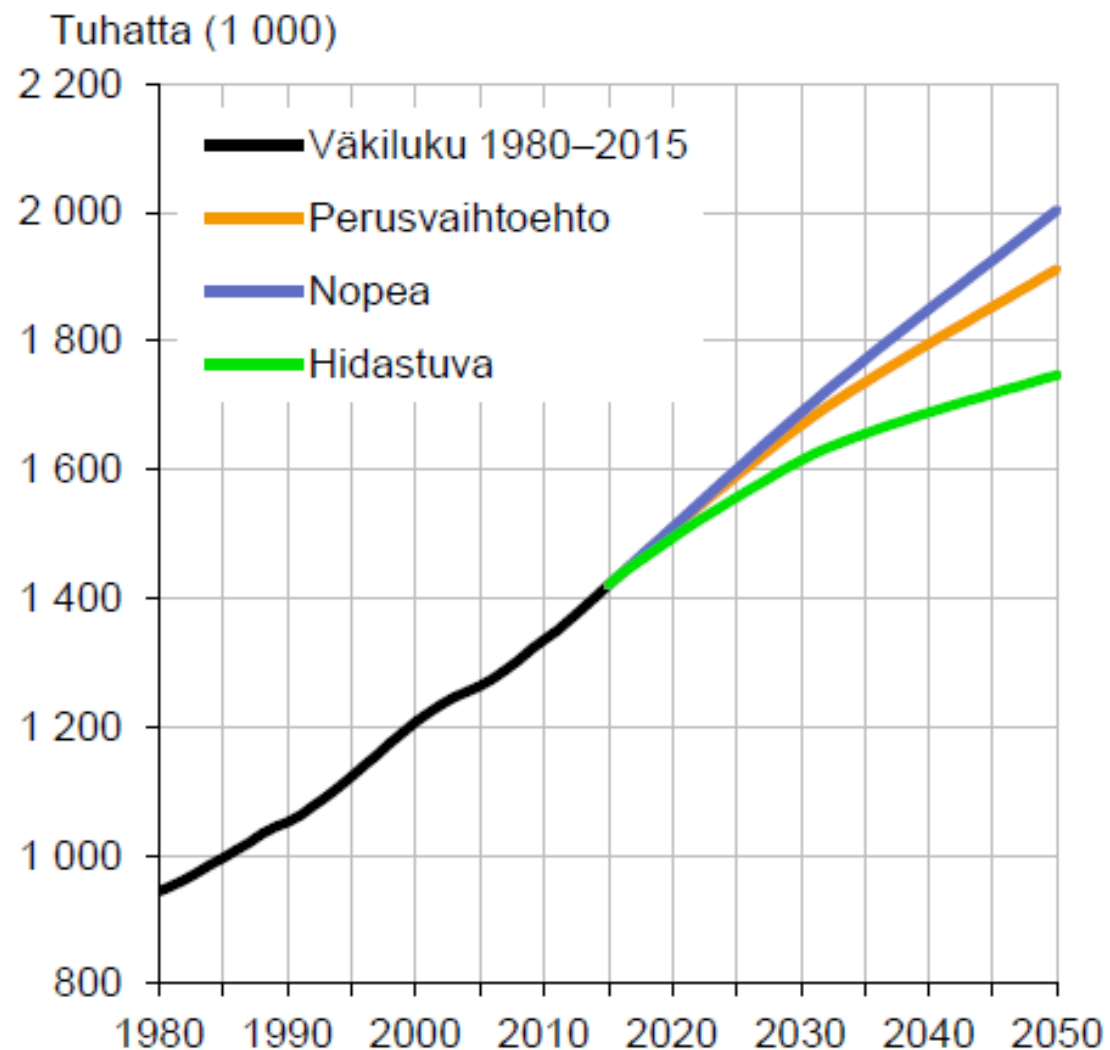
→ General Planning
(municipalities)



→ Detailed Planning
(municipalities)



Need for systemic change is obvious

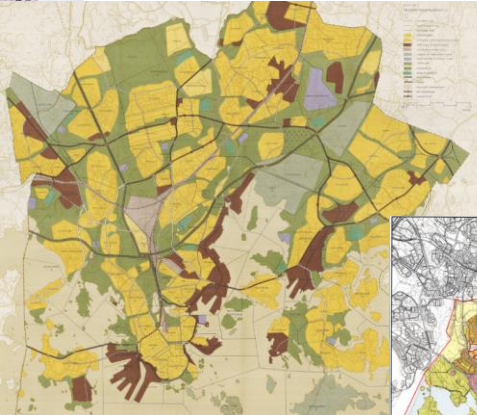


Planning tradition

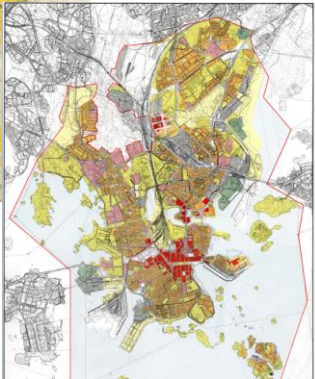
1932



1960



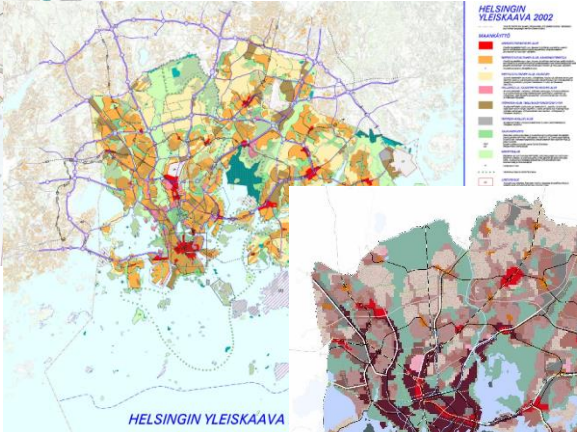
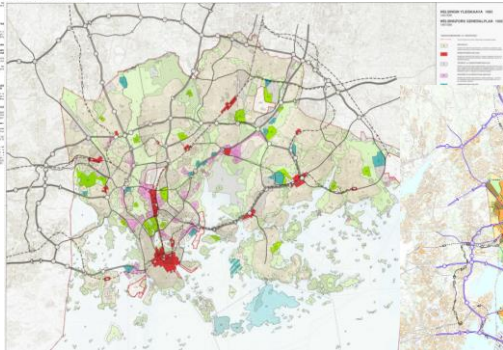
1978



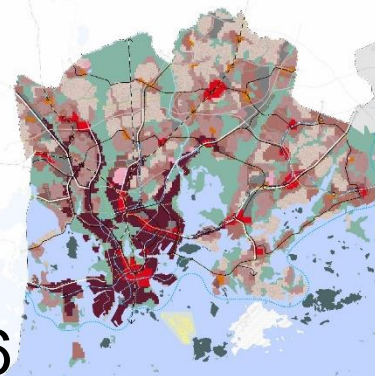
1992



2002



2016



Path dependency

Helsinki

Systems of the city - traffic



Systems of the city - energy

