Stockholm 2040 a fossil fuel free city

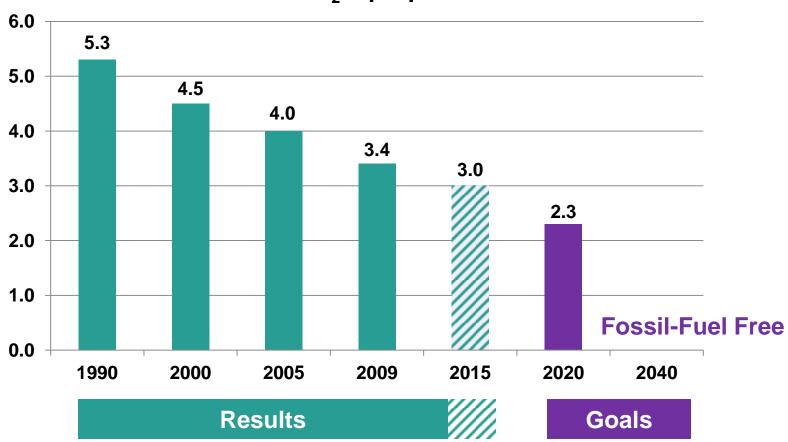


2016-03-17

The Capital of Scandinavia

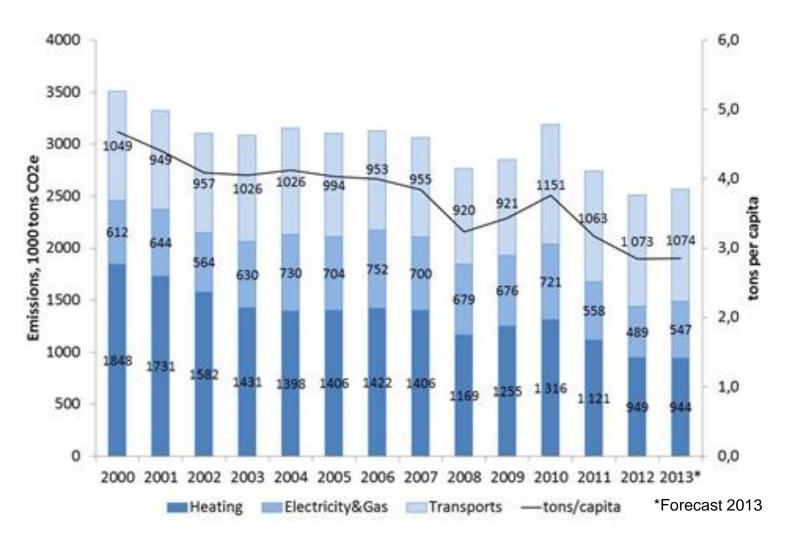


Goals and results

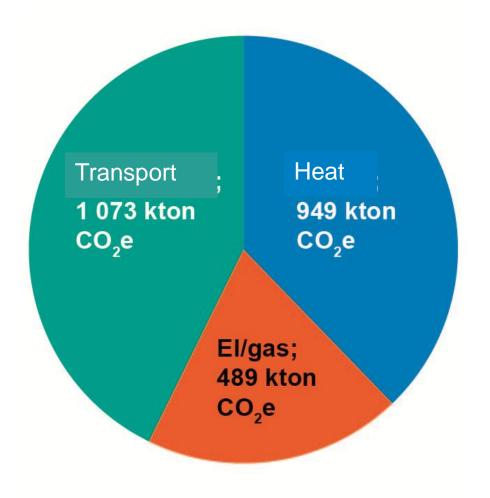


 $CO_2 eq/cap$

Annual emissions reductions



Emissions per sector 2012



Fossil fuel dependency:

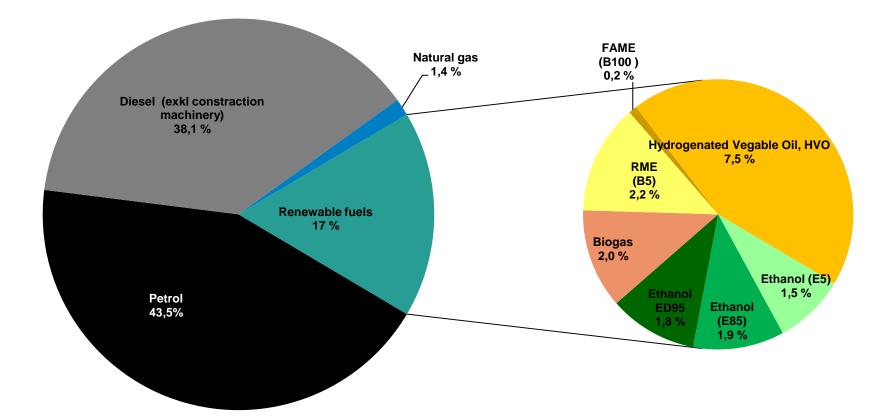
Heat< 20%

Electricity: <20%

Transport: 89%

Reducing emissions from transport

The road transport sector Fossil fuels still dominate (83%



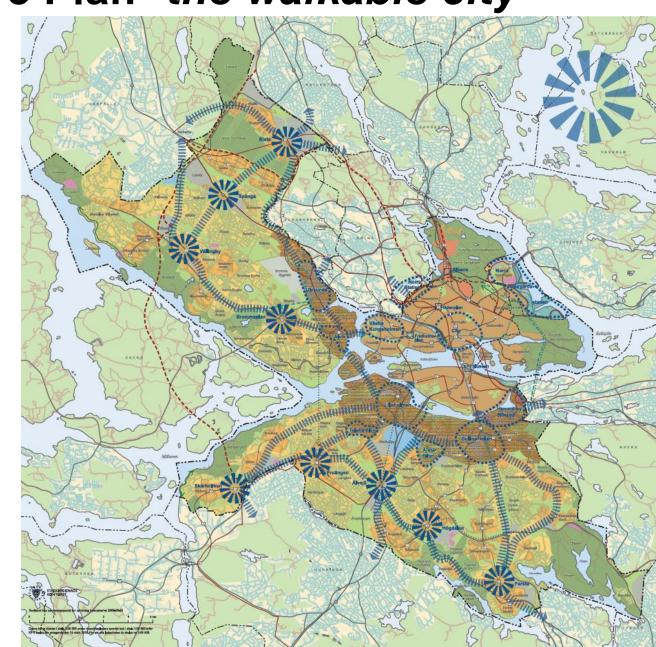
Fossil free transport sector

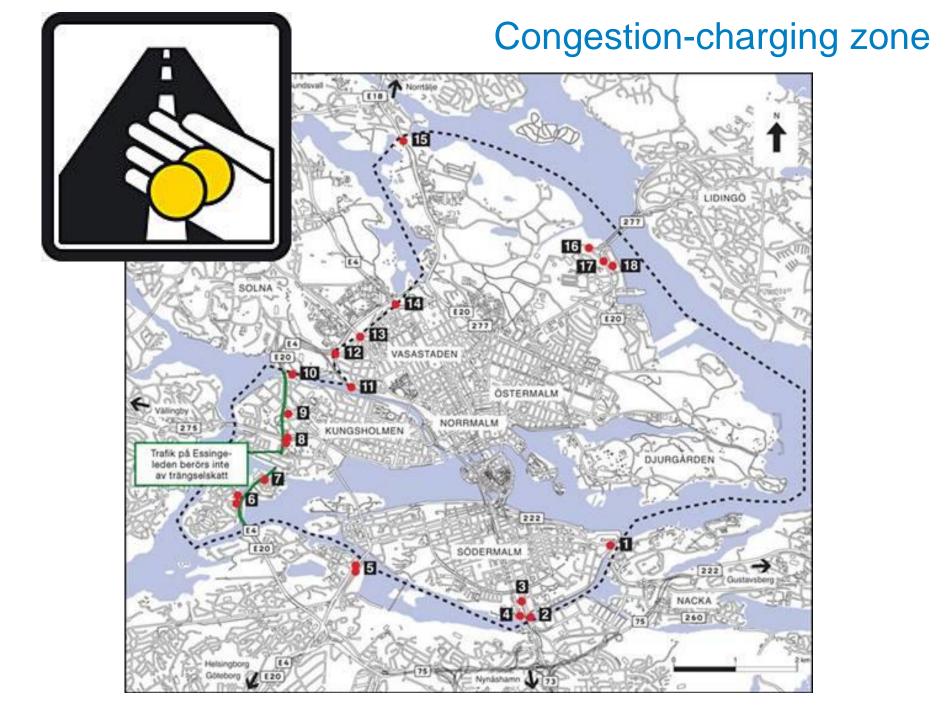
- Smarter ways of mobility
 - Walking
 - Cycling
 - Public transport
 - Better Good logistics
- More efficient vehicles
- Renewable fuels incl. electricity



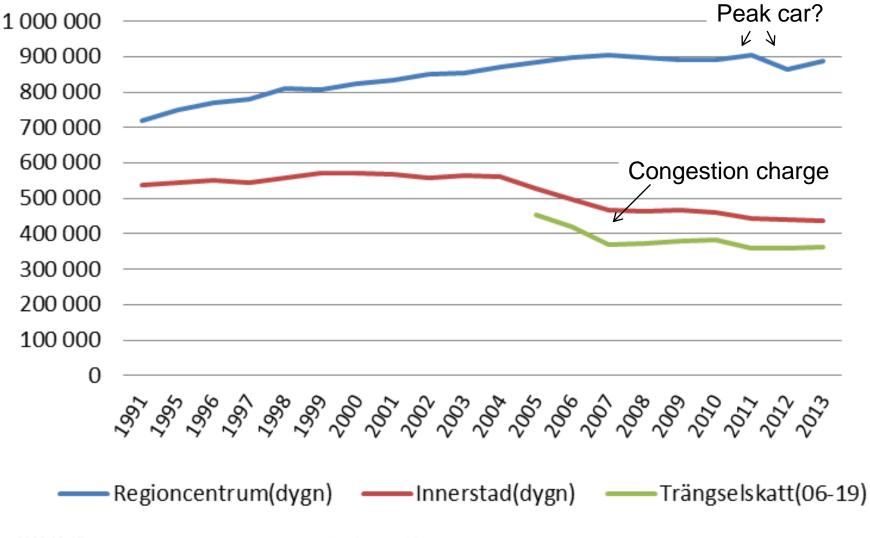
The Structure Plan -the walkable city-

- Build along existing infrastructure and new PT
- Increase densities supports PT
- Mixed use development for cycling and walking
- 140.000 new dwellings to 2030





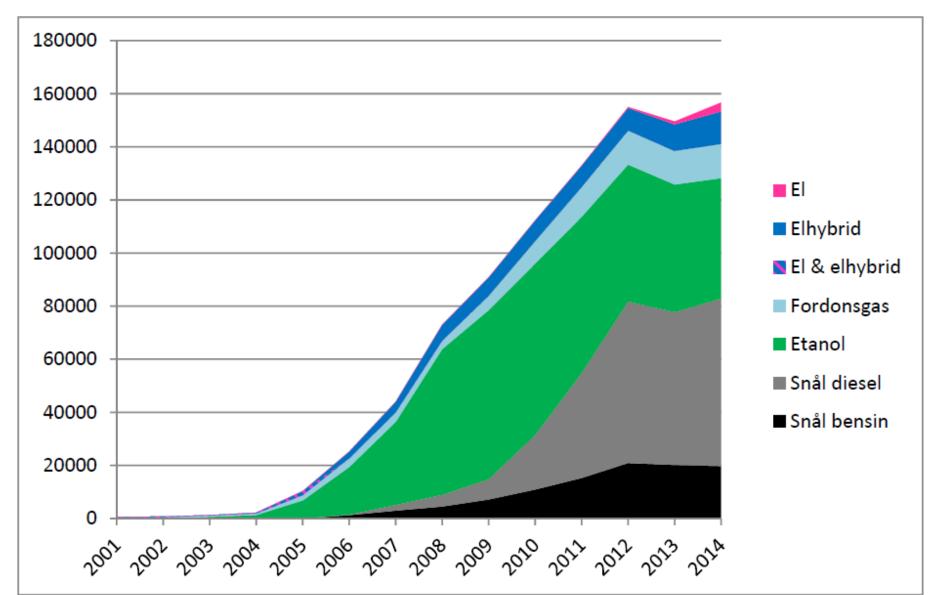
Reducing car traffic



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20 % clean cars 18 % renewable fuels



Busses 63 % renewable fuel (2014)

EN HELT VANLIG MATAFFÄR, Bortsett från allt det goda.

B

Sofia

UEY 1758

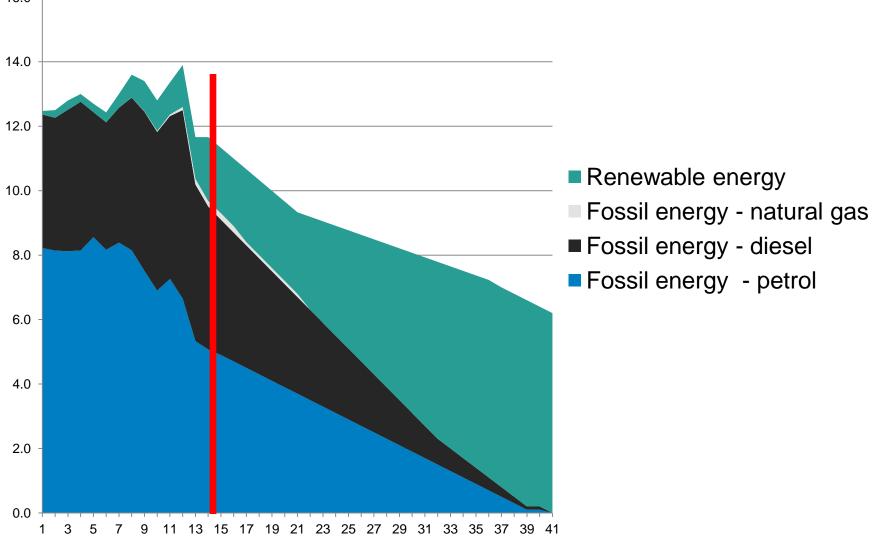


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Trucks 3 % renewable fuels



Fossil free road transport sector 2040

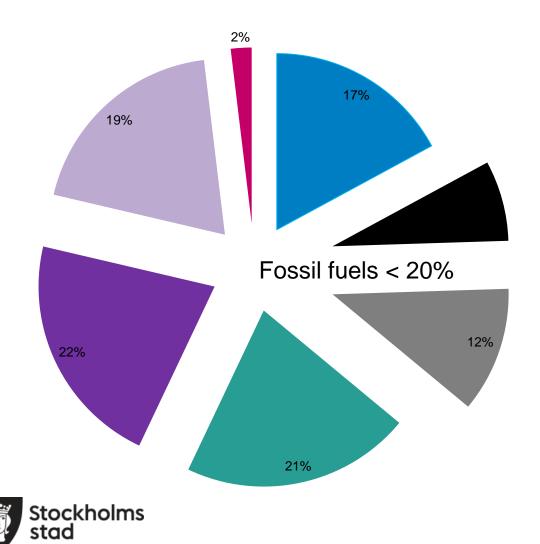


Energy for heating, hot water and cooling in buildings



Buildings

heating, hot water cooling and building electricity



- Electricity
- Fossil oil
- Coal
- Biofuels
- Waste
- Waste heat and seawater

Other

Combined heat and power

- 80 of all building space connected
- <20 % fossil fuel</p>
- District cooling

Energy efficiency in buildings

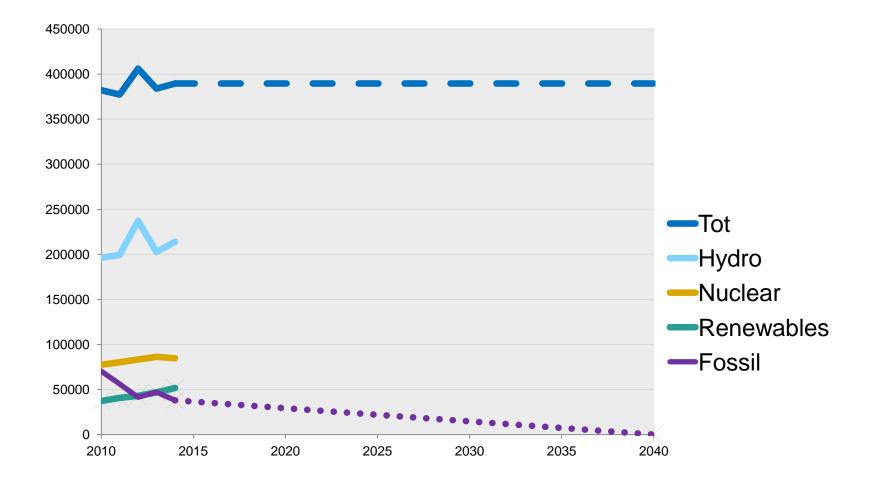
Building on city owned property:

- National building code: 80 kwh/m2(heat, hot water and building electricity)
- When building on Stockholm owned land: 55 kwh/m2
- City owned buildings: 10 % improvement from 2016-2020; 30 % for major renovations

Fossil free heating and cooling of buildings

- Get rid of the last coal and oil. Ready 2020-2030.
 - Phase out Coal fired CHP-plant
 - Use substitutes for fossil oil for cold-spells
- Reduce fossil-based plastics going to incineration in CHP

Fossil free electricity (Nordic mix)



Roadmap 2040

- Forecast for fossil energy use
- Measures to change to renewable fuels
- Process from now to 2040 and how successive decisions need to be taken.
- Propose decisions to the City Council







Gustaf Landahl City of Stockholm Gustaf.landahl@stockholm.se