

A climate roadmap 2050 for the Stockholm region – old and new platforms to be used

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- Stockholm region – the context
- Regional energy and climate facts
- Climate mitigation roadmap 2050
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Overview Stockholm County / region

26 cities and municipalities of very different character
= both metropolis and countryside

	Region	whereof Stockholm
Inhabitants	2.2	0.95
Workplaces	1.15	0,6
Housing units	1.1	0.45
Cars	0.9	0.35



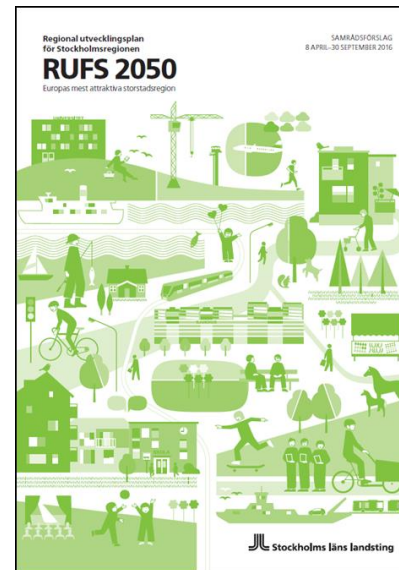
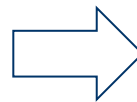
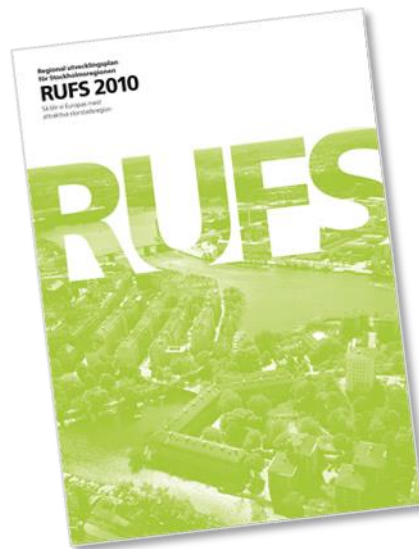
All figures in million



Regional Development Plan for the Stockholm Region

Vision:

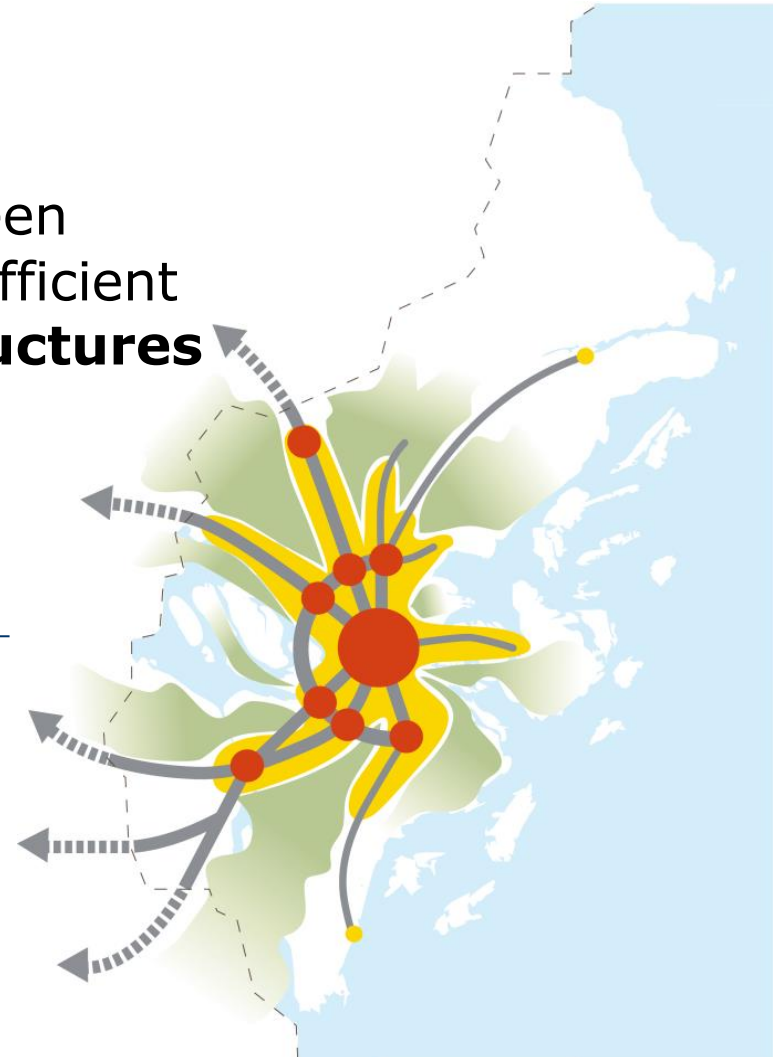
Europe's most attractive metropolitan region
- including to be a leader in climate mitigation!

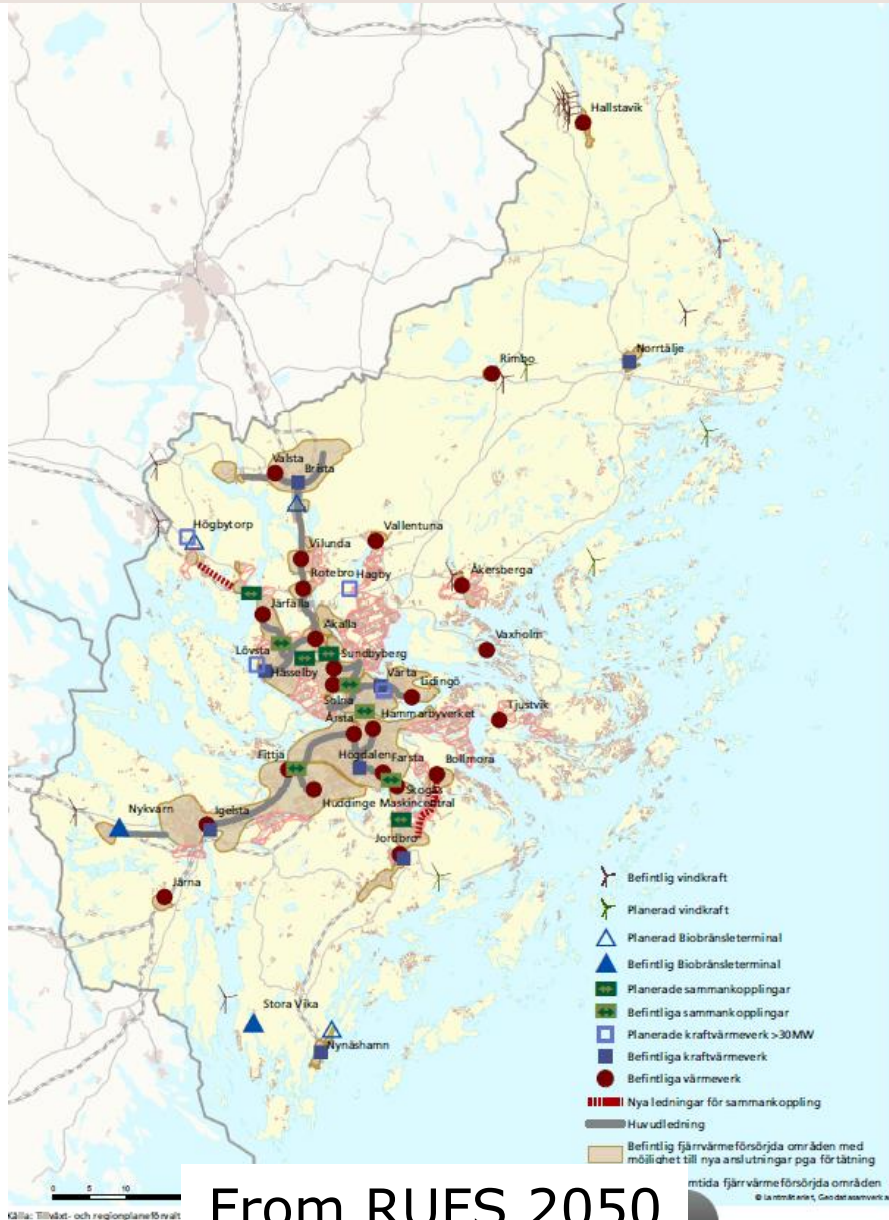


Regional Development plan for the Stockholm Region

Spatial vision: Dense, cohesive green structure, good accessibility, resource efficient and polycentric => **climate smart structures**

	2015	- - - →	2030
Population	2.2		2.6
Jobs	1.1		1.4





Energy system

Total energy use 49 TWh
(year 2013)

... whereof

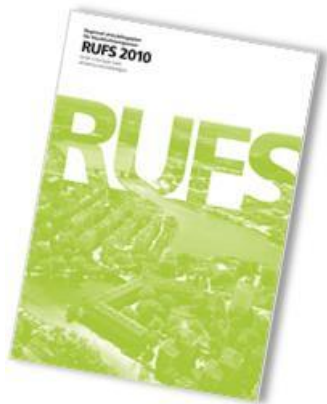
District heating 13 TWh of
total 28 TWh for heating
85% fossil free

Transport 13 TWh
85% fossil driven

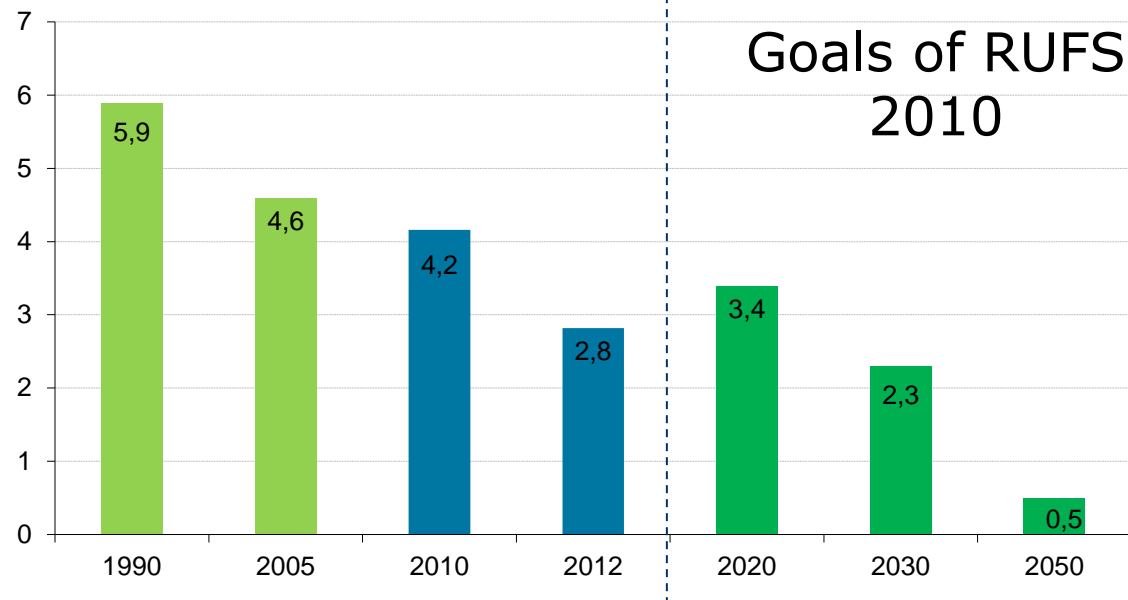
Electricity 21 TWh
98% fossil free

From RUF5 2050

How are we doing?



GHG-emissions per capita and year
(tons CO₂e)



We are going in the right direction, especially in phasing out fossil energy from heating and electricity.

Energy and climate goals in RUFSS 2050

- A region without net CO₂ eq emissions in 2050
- Until 2030
 - Direct emissions 2.3 t CO₂ eq per cap/year (today 2.8)
 - 50% cut of indirect CO₂ emissions (today: ca. 10 t)
 - Reduction of energy use from 49 to 40 TWh/year
 - Share of RES: 75% (today 59%)

Assignment in Stockholm County Council Budget 2014

“... start producing a **regional climate roadmap** on how to be without green house gas emissions by 2050 in the Stockholm region. ... and as a part of developing the new regional development plan.”

⇒ Spatial structures

⇒ Transition of energy and technical systems



Climate mitigation roadmap 2050

“Checks and balances” on how to reach climate goals

- European Commission: Roadmap of decarbonisation 2050
- Sweden will have a climate law and a national roadmap
- City of Stockholm with roadmap 2050

= Complex long-term task



The contents of the roadmap 2050

- Clear system borders -> scope 1&2
- Creation of acceptance and political leadership
- Work with different sectors at the same time -> path description and cost efficiency as a major focus
- Including land use -> regional plan
- Transparent follow-up and evaluation
- Using existing and creating new alliances
- Working with the global climate footprint

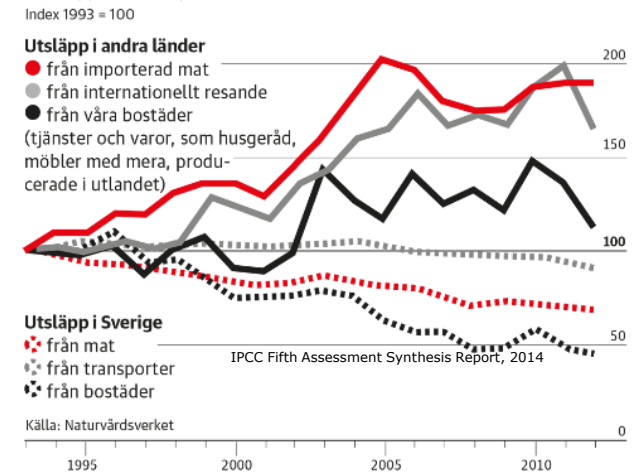
Roadmap 2050



Ways to a climate
neutral region

Energy and climate footprint

- Emissions due to consumption, travel, food etc. have increased in Sweden and in the Stockholm region ~ 10-15 t/cap*year?
- **Swedish “generation goal” = take global responsibility**
- Politically controversial where to draw system borders (scope 3)



Major challenges

- System borders and perspective
- Creating legitimacy, understanding, engagement
- Suggesting the right things in the right time
- Finding new ways and solutions for the transport sector
- Establishing climate-smart spatial structures

THANK YOU FOR LISTENING!