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Quarterly emissions to air by industry
SEEA in Sweden

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Quarterly statistics since 2015, time series starts 2008

- A lot of interest from analysts, researchers, journalists
- One of the few environmental statistics that are published more often than yearly
- Big change from earlier situation when there was a lag of nearly 2 years
- Based on quarterly and monthly energy statistics, as well as the quarterly national accounts data and the data from the yearly SEEA emission accounts.

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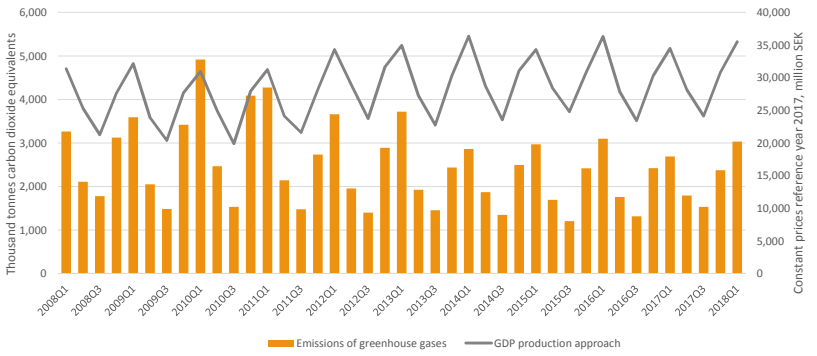
Emissions of GHG from the Swedish economy increase 3.4 % first quarter of 2018 compared with 2017. Mainly from electricity and heat production. Emissions from manufacturing industry are stable, Economy has grown with 2.8%.



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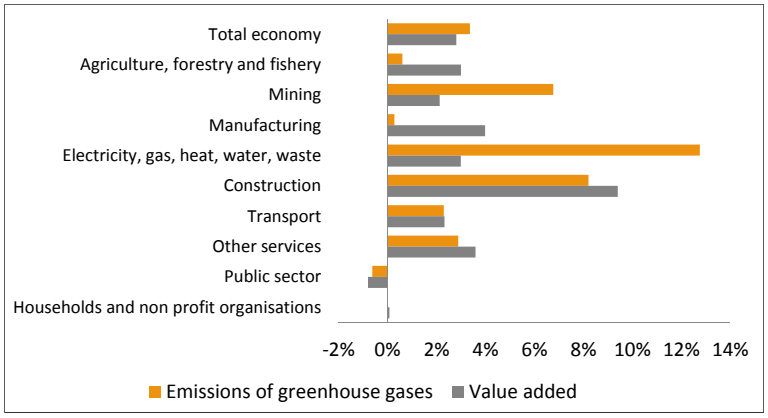
1st quarter 2018 compared to 2017



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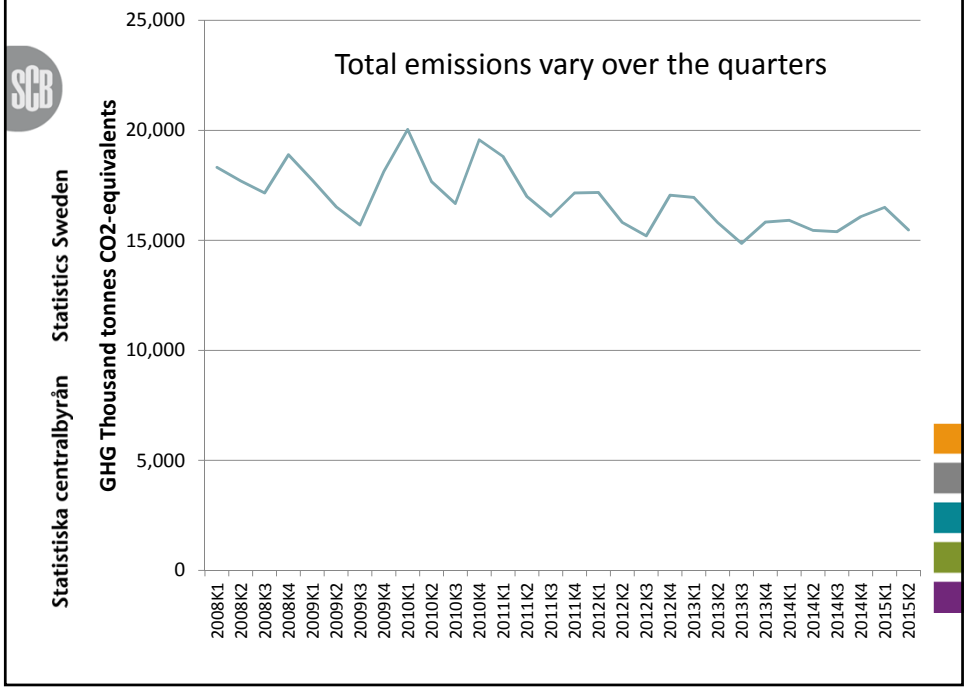
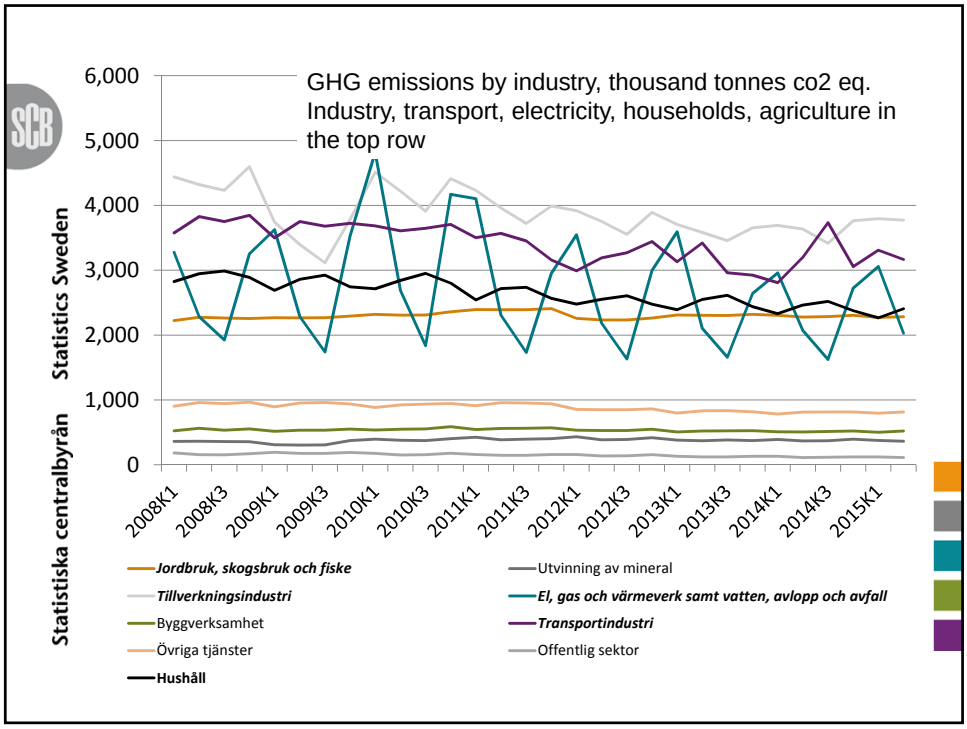
Results are published in

- Press release: sum of green house gases (fossil CO_2, CH_4, N_2O and F-gas)
- www.scb.se/MI1301
- Database: greenhouse gases and other emissions to air




GHG emissions by industry, thousand tonnes co2 eq.
Industry, transport, electricity, households, agriculture in the top row
6,000
5,000
4,000
3,000
2,000
1,000
0
2008K1
2008K3
2009K1
2009K3
2010K1
2010K3
2011K1
2011K3
2012K1
2012K3
2013K1
2013K3
2014K1
2014K3
2015K1
Jordbruk, skogsbruk och fiske
Utvinning av mineral
Tillverkningsindustri
El, gas och värmeverk samt vatten, avlopp och avfall
Byggverksamhet
Transportindustri
Övriga tjänster
Offentlig sektor
Hushåll
Statistics Sweden
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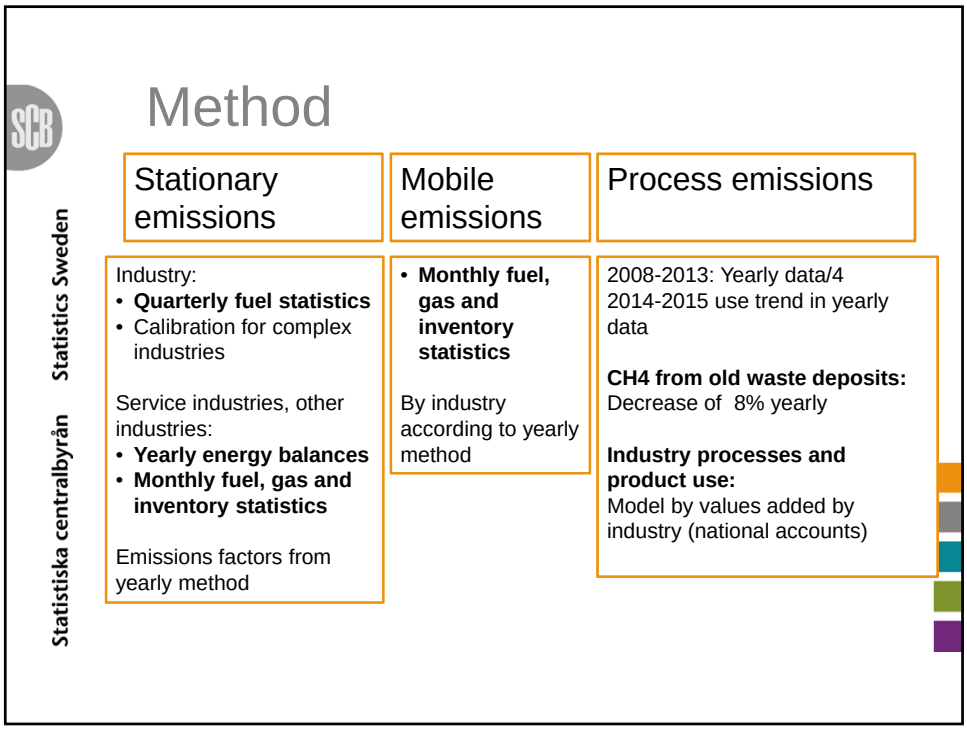
Method
Stationary emissions
Mobile emissions
Process emissions
Industry:
• Quarterly fuel statistics
• Calibration for complex industries
Service industries, other industries:
• Yearly energy balances
• Monthly fuel, gas and inventory statistics
Emissions factors from yearly method
• Monthly fuel, gas and inventory statistics
By industry according to yearly method
2008-2013: Yearly data/4
2014-2015 use trend in yearly data
CH4 from old waste deposits:
Decrease of 8% yearly
Industry processes and product use:
Model by values added by industry (national accounts)
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Quality assessment

- Good fit with yearly official statistics from SEEA (by industry) and by territory calculations (for UNFCCC)
- Amount of data from quarterly or monthly statistics for GHG emissions:

Bransch	Medel 2014K3-2015K2
A01-A03 agriculture, forestry and fishing	23%
Q86 health sector	32%
C27 industry electrical apparatus	34%
C22-C23 rubber and plastic industry	40%
C24-C25 steel- and metal industry	47%
B05-B09 mineral industry	62%
C19-C21 refineries, chemicals	67%
Total/Mean by industry	**74%**
D35-E39 electricity, gas and heat	77%

- Other industries have 89% or higher

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Conclusions

- Quarterly statistics increase the general knowledge about the underlying factors for the emissions
- Weather and economic cycles show in the trends
- Emissions can decrease through fuel changes and more efficient fuel use.
- Industries vary in the relation economic output and emissions