

# System of Environmental Economic Accounting



System of  
Environmental  
Economic  
Accounting

# Energy and air emission accounts in the Netherlands

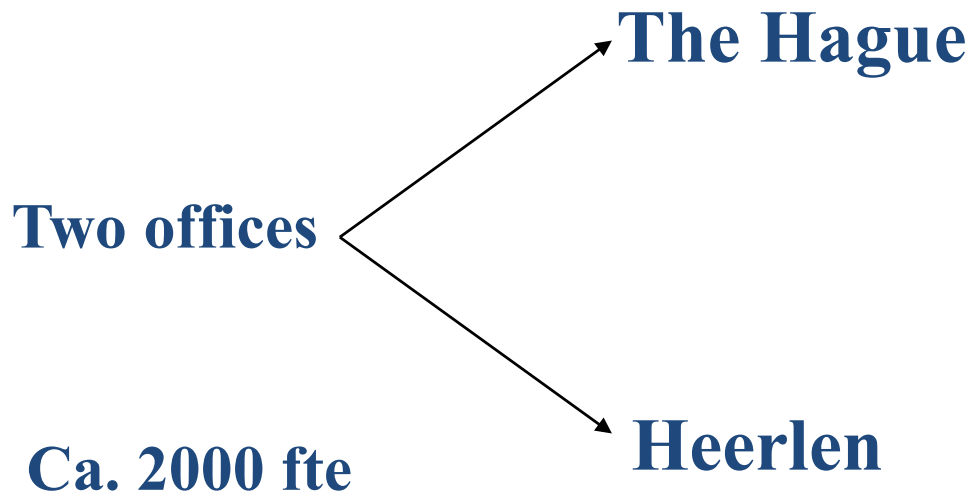


United Nations

# Content

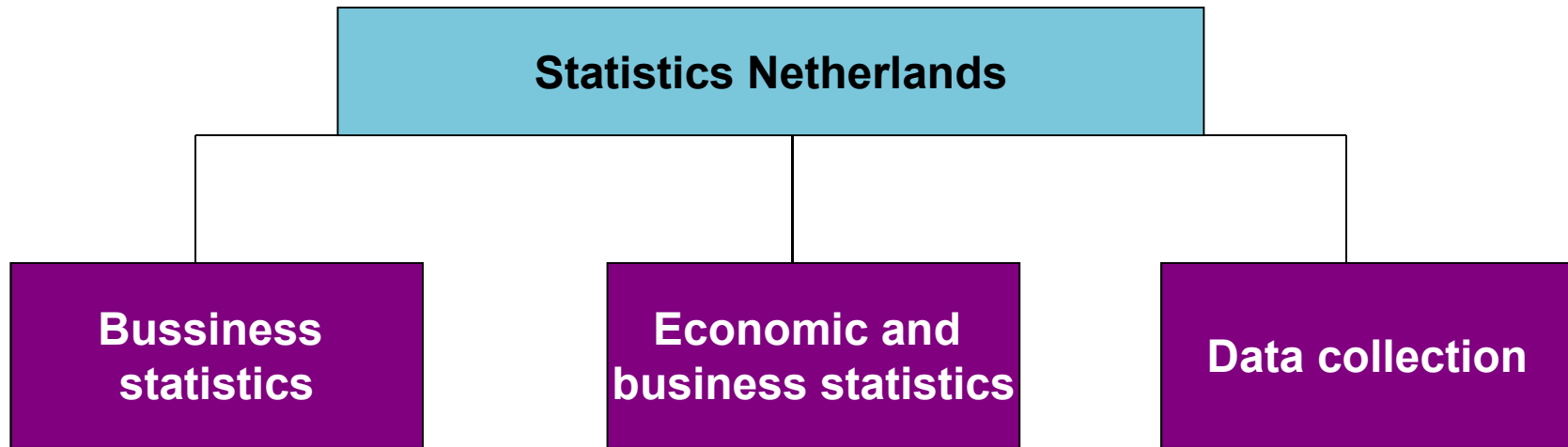
- Statistics Netherlands
- Legal base
- Energy accounts
- Air emission accounts

# Statistics Netherlands



**Mission Statistics Netherlands:**  
*'To compile and publish undisputed, coherent, current statistical information that is relevant for the society, policy makers and science.'*

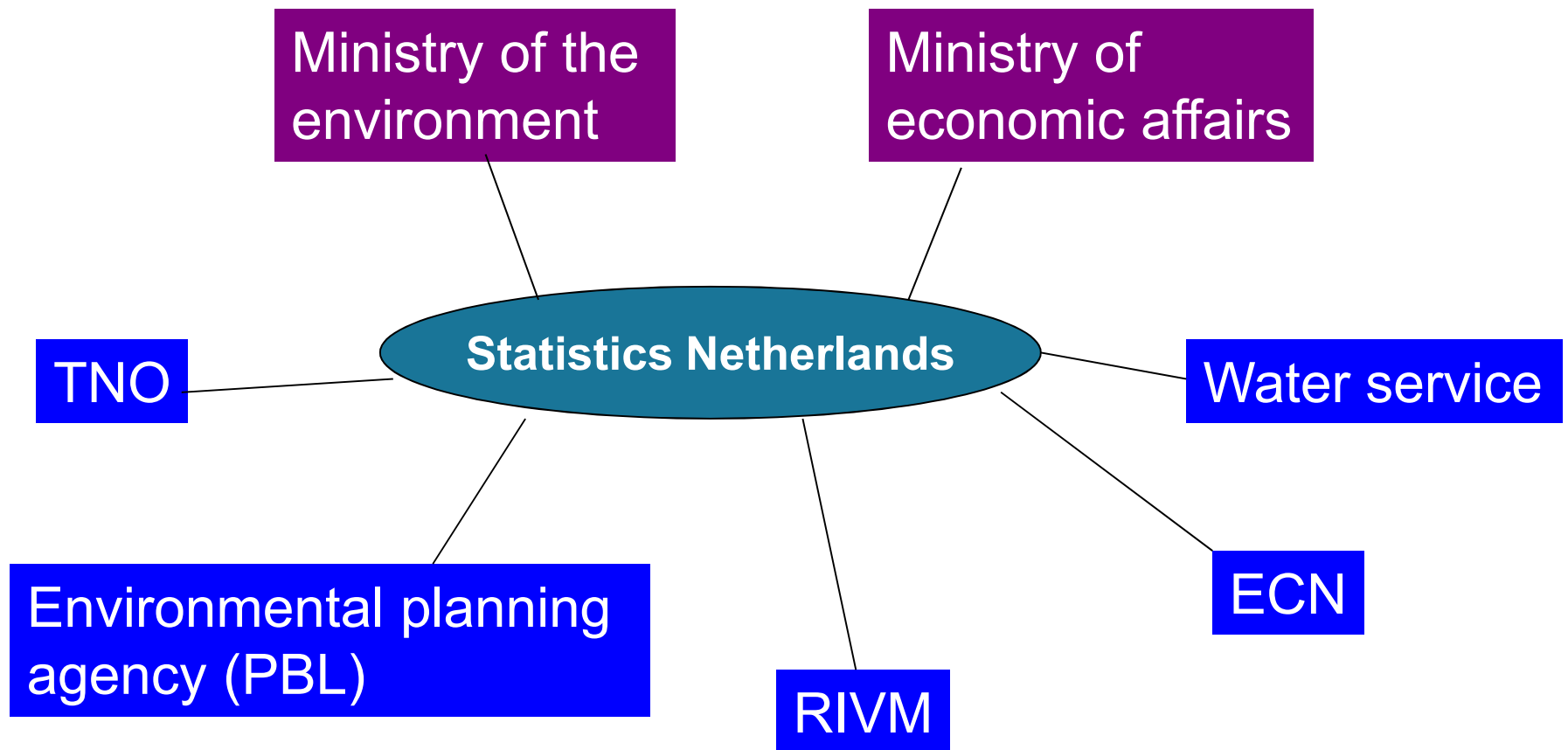
# Environmental and energy statistics



*Including*  
**Environmental statistics**  
**Energy statistics**  
**Transport statistics**  
**Agricultural statistics**

*including*  
**National Accounts**  
***Environmental accounts***

# Other national institutes involved



# Organisation of the environmental accounts



- Department of National accounts: ca. 90 fte
- Environmental accounts: 10 fte (2016)
- Activities: compilation, publication and development
- **No surveys:** integration of existing statistics and accounts

# Present status



## Physical flow accounts

- Energy accounts
- Water flow accounts
- Material flow accounts
- Air emission accounts
- Water emission accounts
- Waste accounts

## Asset accounts

- Subsoil accounts for natural gas and crude oil

## Monetary accounts

- Environmental protection expenditure
- Environmental taxes and subsidies
- Environmental goods and service sector



# Legal base on environmental accounting in Europe



1) **Regulation No 691/2011**, passed July 2011, covers 3 modules:

- Air emissions accounts
- Environmentally related taxes by industry
- EW-Material Flow Accounts

→ First data transmission: September 2013, from 2008 onwards

2) **Regulation No 538/2014**, passed in 2014 , covers 3 modules:

- Energy flow accounts
- Environmental goods and service sector
- Environmental expenditure

→ First data transmission: 2017, from 2014 onwards

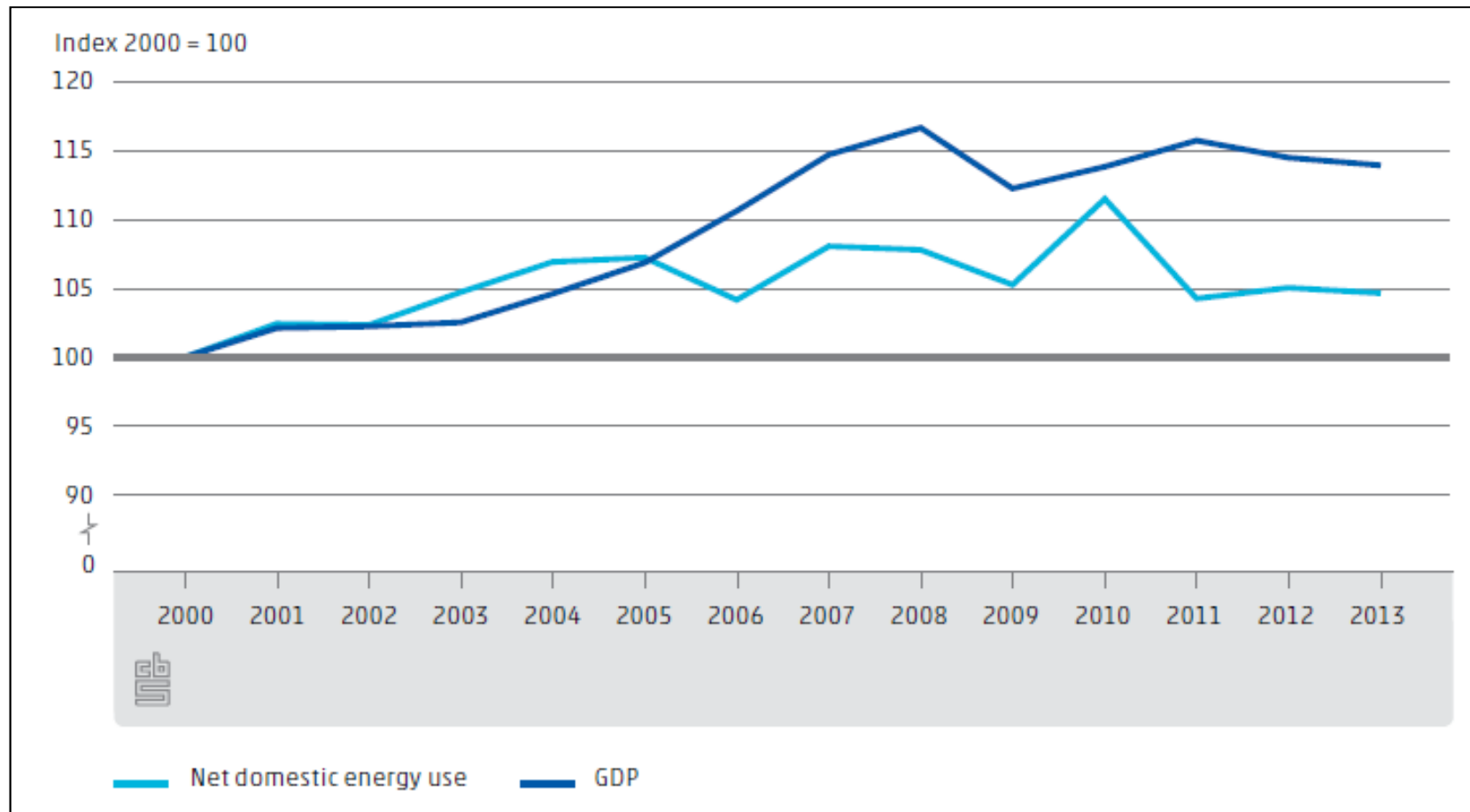
# Energy flow accounts in the Netherlands



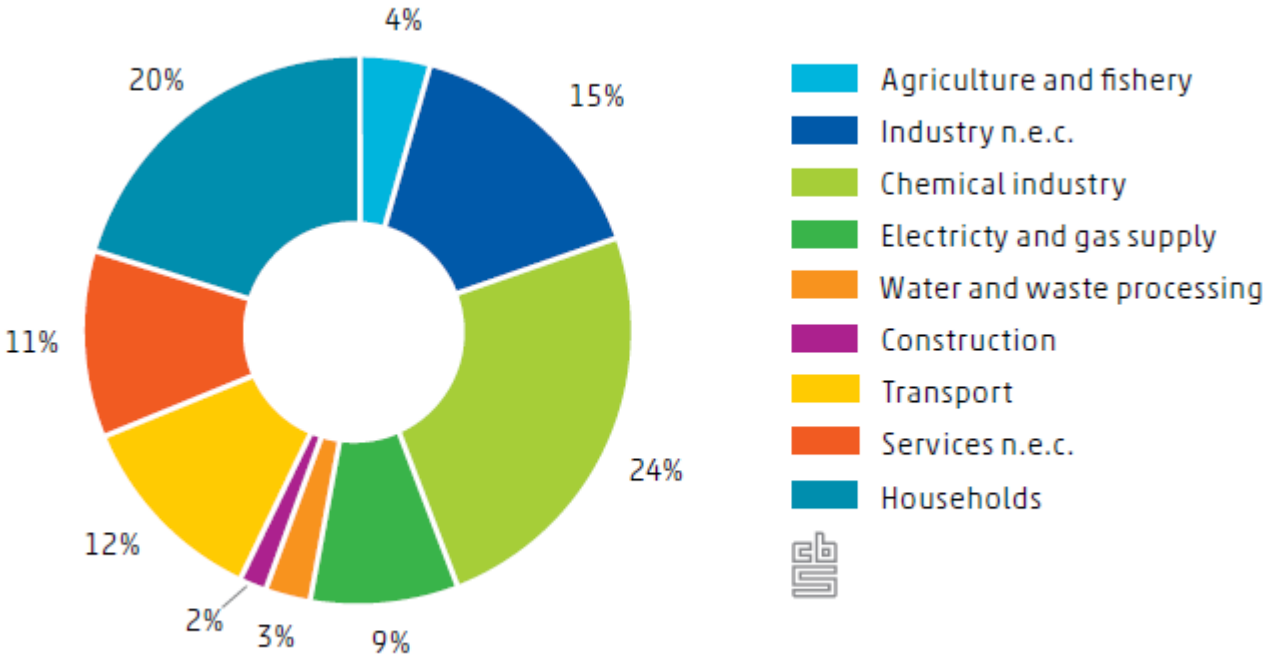
# Energy flow accounts in the Netherlands

- Revised in 2012 according to SEEA-CF guidelines
  - PEFA tables: new module for EU legal base
    - Supply and use tables (Tables A and B)
    - Emission relevant energy use (Table C)
    - Bridge tables
  - Prime data source: Dutch energy balances plus NA
  - 2016-2017: PEFA builder
  - Classification:
    - 64 industries
    - 30 energy carriers
- Indicators

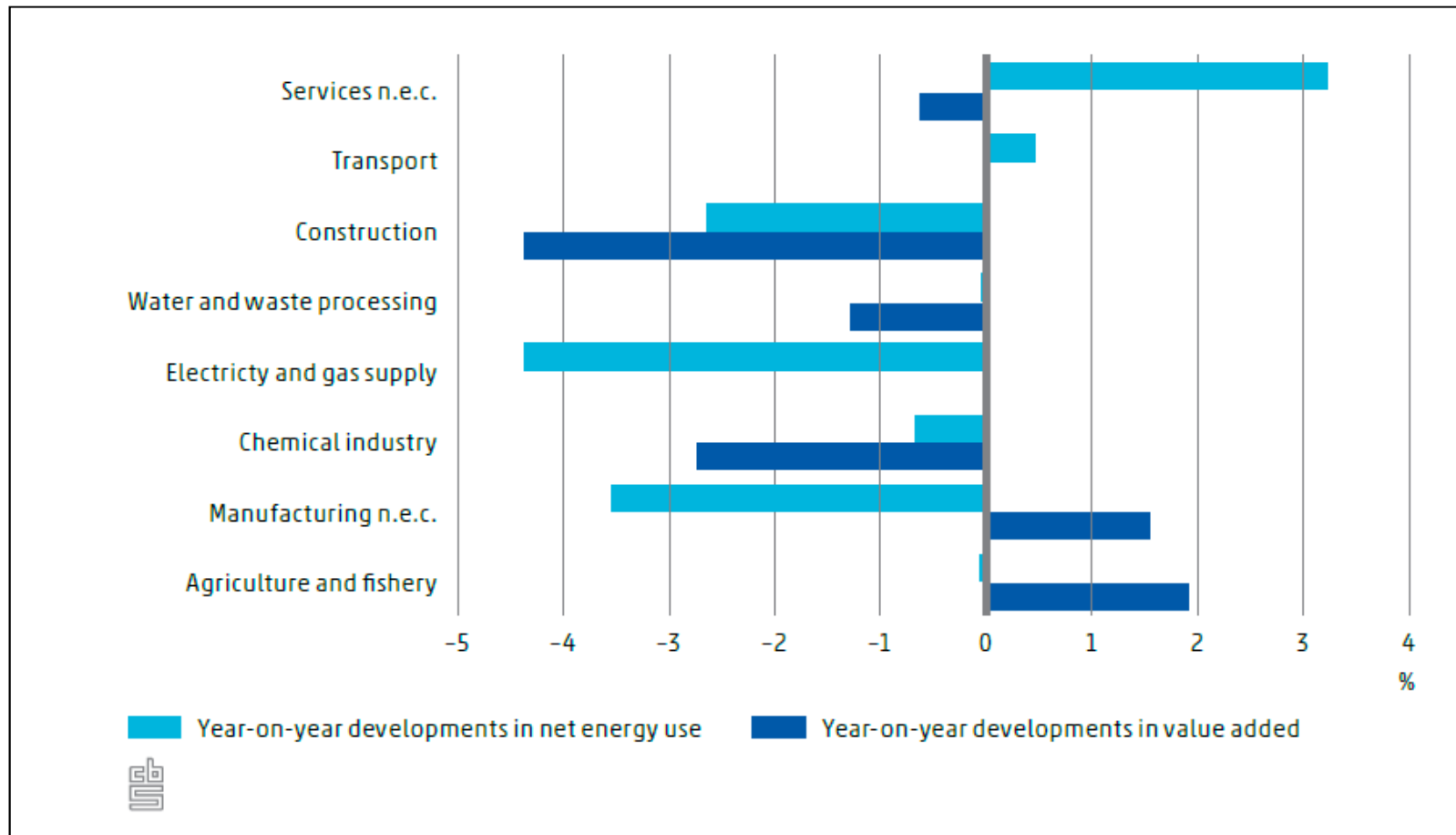
# Energy use by companies



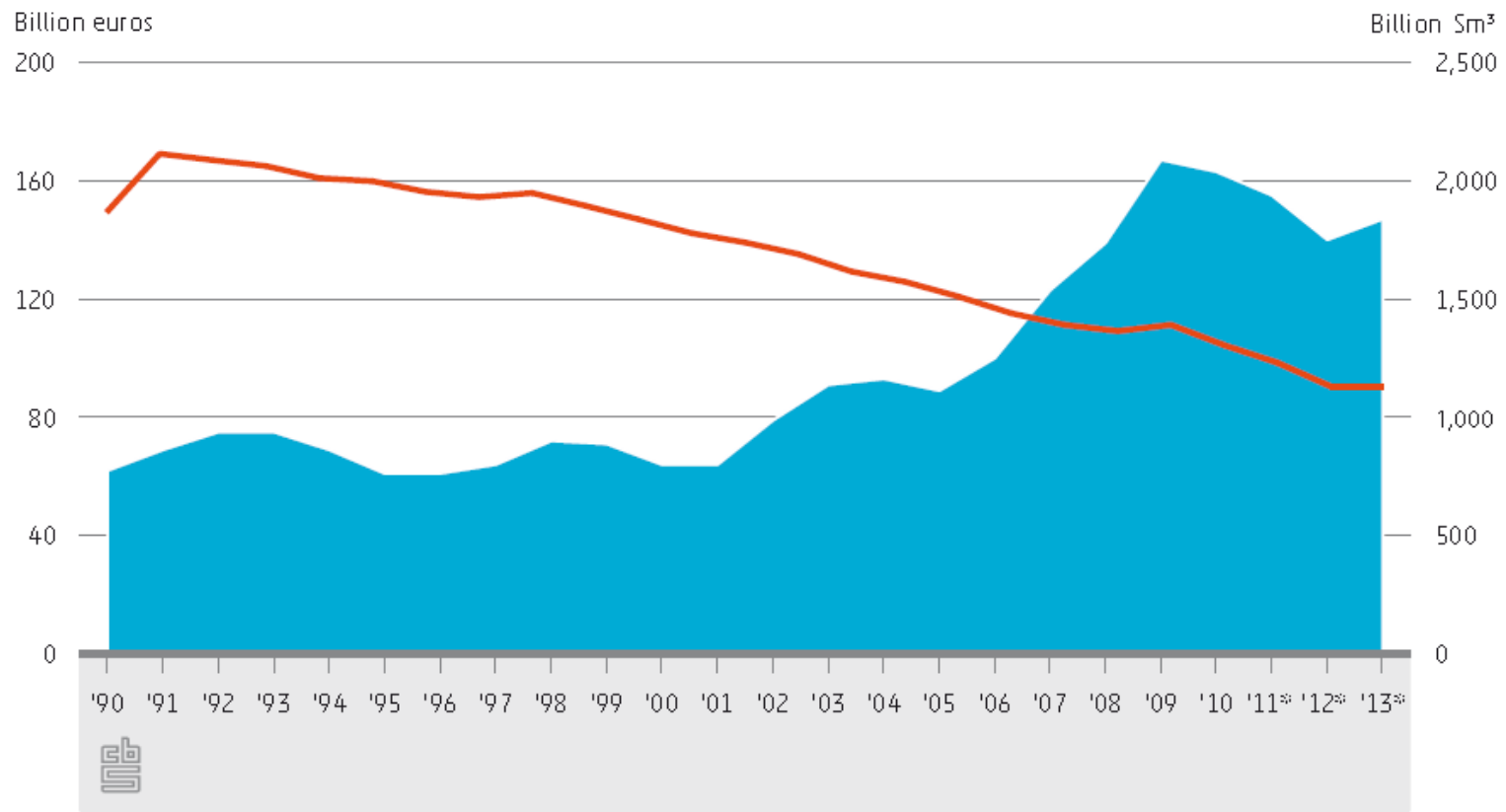
# Net energy use in 2013 per sector



# Changes in net energy use and value added per sector over the period 2011-2012



# Natural gas resources in the Netherlands in physical and monetary terms



- Opening stock values of gas resources (left axis)
- Remainder of expected producible resources of natural gas on 1 January (right axis)

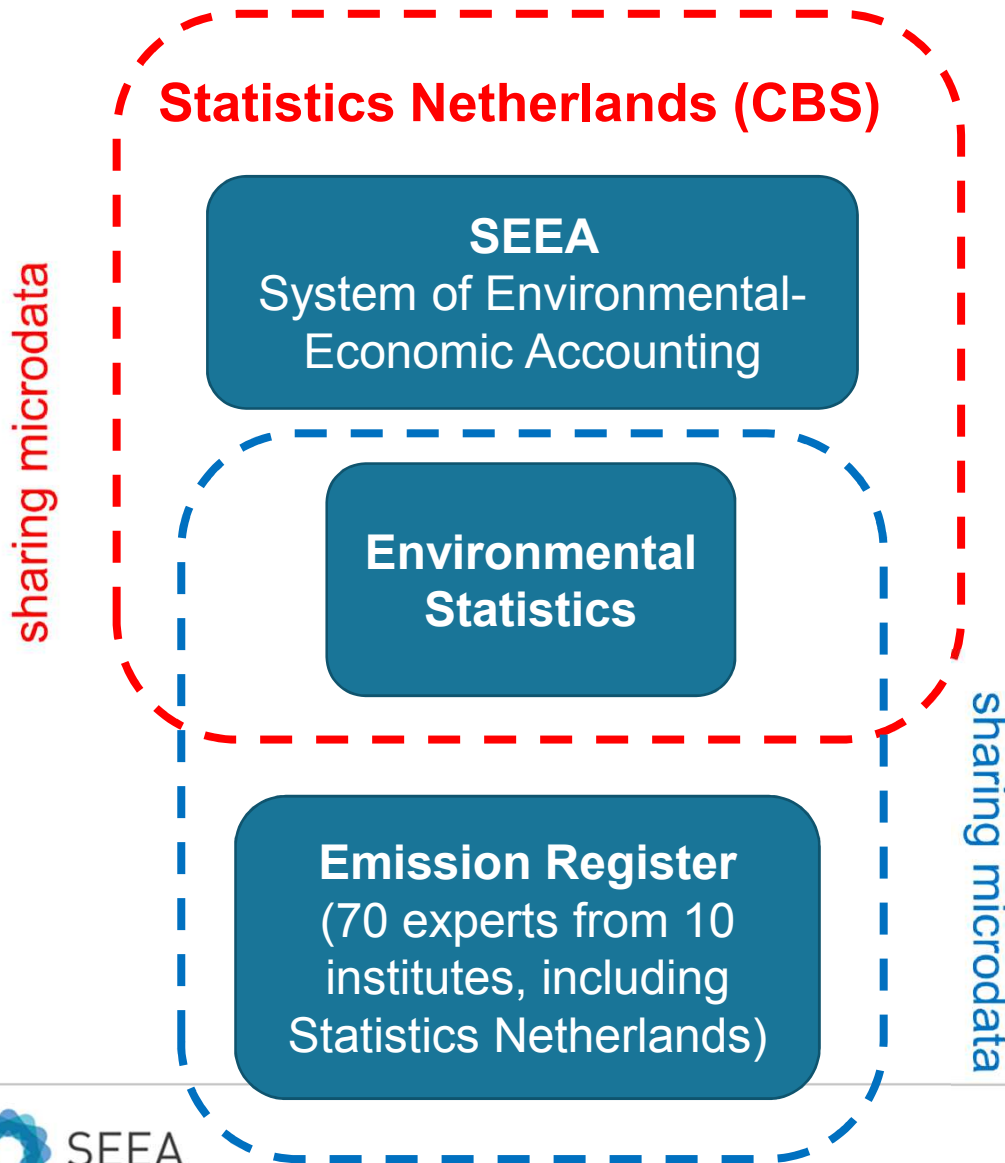
Sources: TNO / Ministry of Economic Affairs, 1988-2013 and Statistics Netherlands (2013); <http://statline.cbs.nl>.

# Air emission accounts in the Netherlands





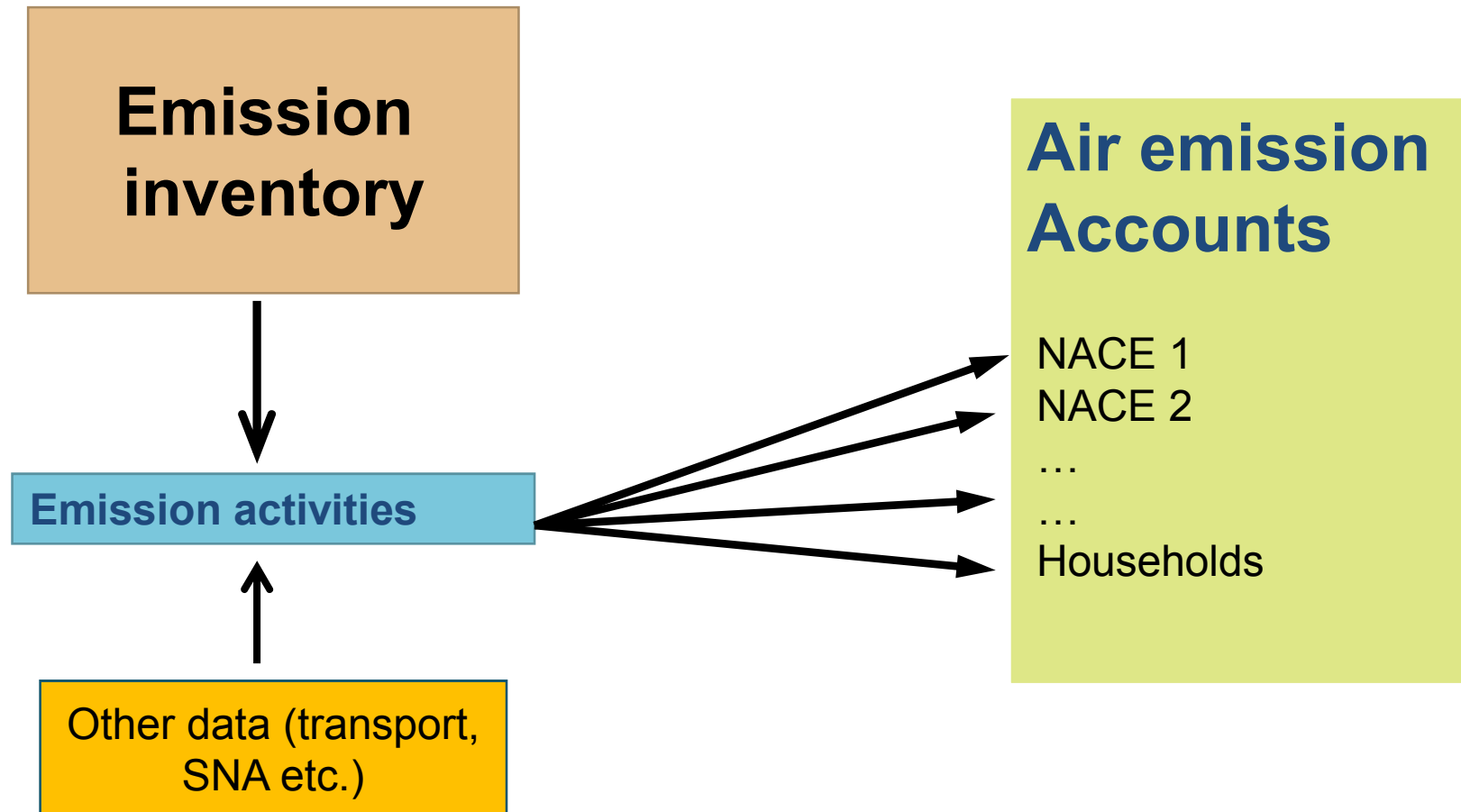
# Organisational setting



## Dissemination

- Official statistics at [www.cbs.nl](http://www.cbs.nl)
- Emission data at [www.prtr.nl](http://www.prtr.nl)
- Policy indicators at Environmental Data Compendium, e.g., [www.compendiumvoordeleefomgeving.nl/indicatoren/en0165-Greenhouse-gas-emissions.html?i=41-205](http://www.compendiumvoordeleefomgeving.nl/indicatoren/en0165-Greenhouse-gas-emissions.html?i=41-205)

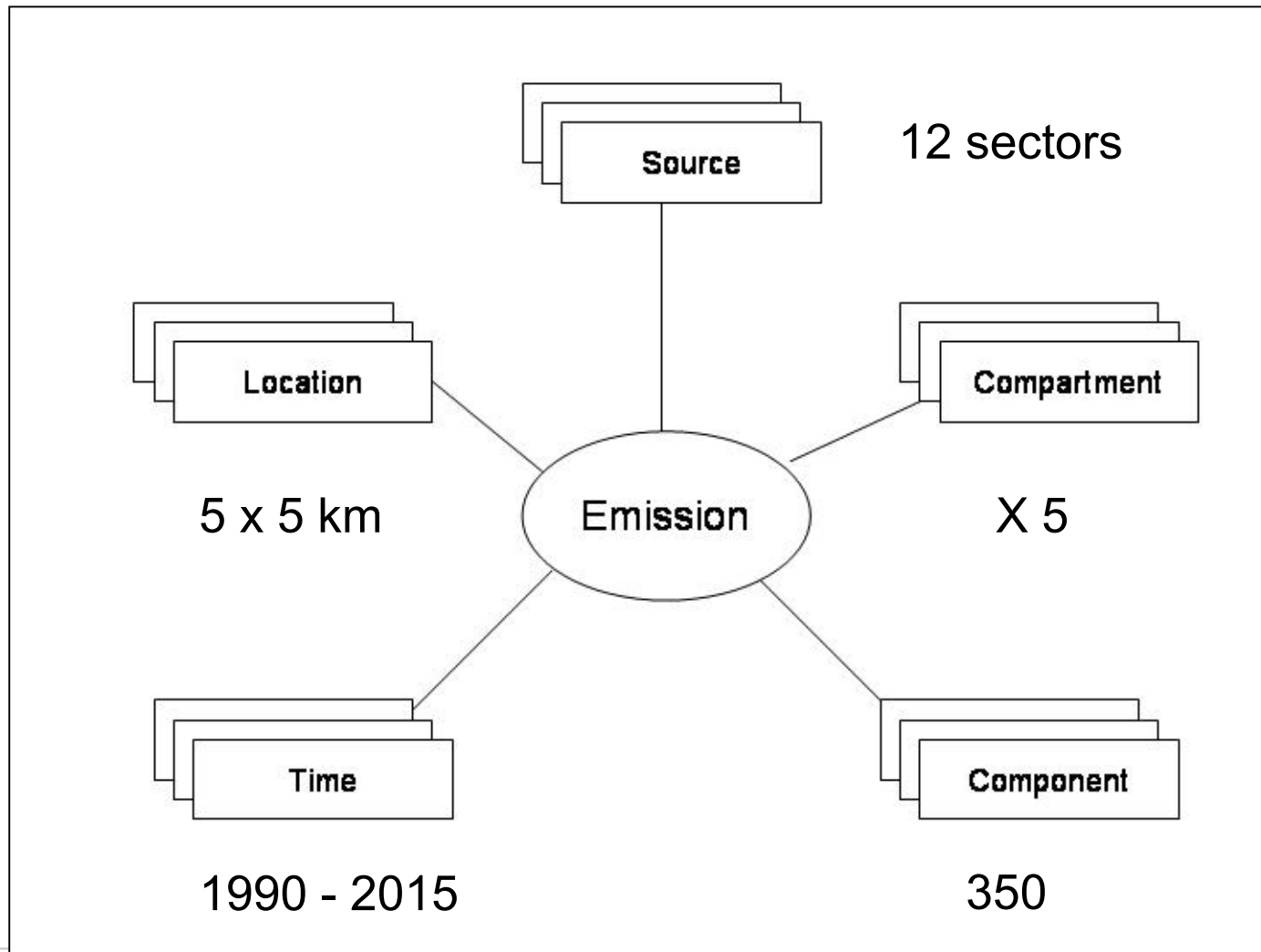
# Compilation



# General outline of the Dutch Emission Inventory system (PRTR)

- Contains annual emission data on more than **350 pollutants** to air, soil and water
- Covers the **whole process** of collection, processing and reporting of emission data in the Netherlands
- Emissions of diffuse as well as point sources are collected in one **central database**
- Data for all **international reports** can be withdrawn from the system: Greenhouse gasses monitoring (UNFCCC), EU Water Framework Directive, EU PRTR Directive etc.

# Dimensions of emissions in the central database



## Introduction

General introduction PRTR  
How to use this site  
How to interpret the emissiondata

## Top 10 Graphics

-- choose a graphic

## Top 10 Maps

the Netherlands  
 Postalcode   
-- choose map

## Top 10 Sources

-- choose top 10 sources

## Make your graphic or map

Select pollutants, sources ...

## Documentation

All documents  
Search in documents  
Glossary  
Related links

## Release of pollutants to air, water and soil in the Netherlands

This website shows the yearly releases (emissions) of the most important pollutants in the Netherlands. You can explore the emission data through various channels, such as maps, graphs and tables. But you can also download all the details into your own database. [More about the use of this website ...](#)

## Up to date

The data shown in this website is updated 2 to 3 times a year. The current release shows emissions for 1990, 1995, 2000, 2005, 2006 and 2007. The 2007 emissions are preliminary data and not yet shown in the maps. We expect to add an extra year to the point sources (2007) in October 2008.

Please send us an [update-mail](#) if you want to be informed on website updates.

## The Netherlands Pollutant Release & Transfer Register

Since 1974 a number of [organisations](#) have been working closely together in this pollutant register (PRTR) project to collect and formally establish the yearly releases of pollutants to air, water and soil in the Netherlands. Results of this project serve to underpin the national environmental policy. Data is in this way also provided for the many environmental [reports](#) reports to international organisations such as the European Union and the United Nations, e.g. the National Inventory Report for the Kyoto Protocol. [More about the Netherlands PRTR .....](#)

**Tour**

**EmissieRegistratie**

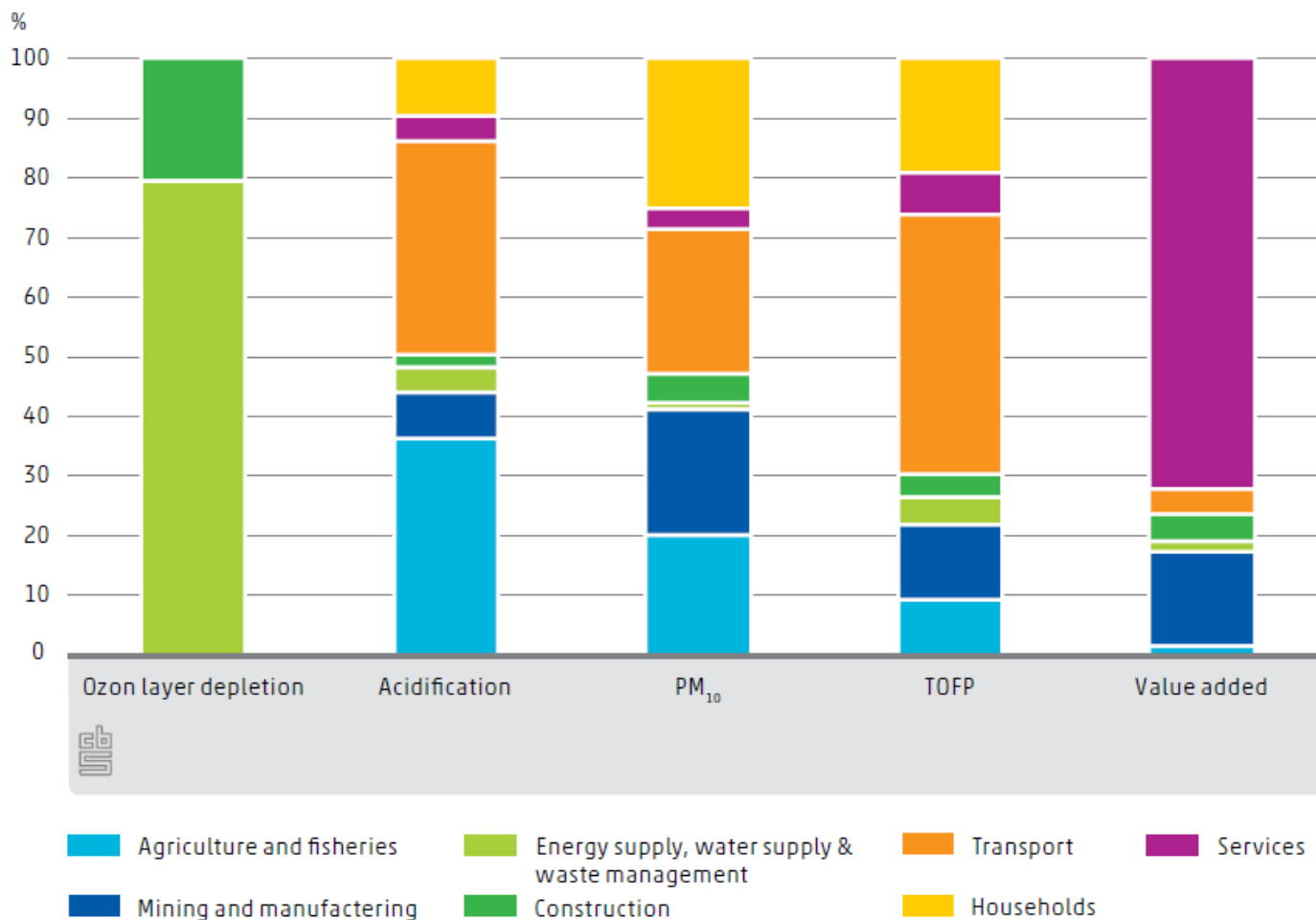
Make your own graphic or map...

1a Select pollutant, compartment and year

# Integration

- Point sources: emission inventory
- Diffuse sources (activity x emission coefficient)
  - Residence principle
    - International transport and tourism
      - Vehicles: transport statistics (kms driven abroad and in NL)
      - Inland shipping
      - International shipping: National accounts data
      - Air transport: KLM annual report + grossing up based on production statistics
  - NACE/ISIC:
    - Energy accounts used
    - Behind energy accounts is Dutch energy statistics

### 3.4.2 Contributions to value added and environmental themes in 2013



# Bridge table

	2001	2005	2010	2011	2012	2013*
	<b>Mton CO<sub>2</sub> equivalents</b>					
1. Stationary sources <sup>1)</sup>	184	180	183	169	168	168
2. Mobile sources on Dutch territory	40	41	41	42	41	41
3. Mobile sources according to IPCC	38	39	38	39	37	36
4. Short cyclic CO <sub>2</sub>	8	11	14	14	14	13
<b>5. Total, IPCC (excl. LULUCF)<sup>2)</sup> = 1+3-4</b>	<b>213</b>	<b>208</b>	<b>208</b>	<b>194</b>	<b>191</b>	<b>192</b>
6. Land Use, Land-Use Change and Forestry (LULUCF)	3	3	3	3	3	3
<b>7. Total, IPCC (incl. LULUCF) = 5+6 (Kyoto-protocol)</b>	<b>215</b>	<b>211</b>	<b>211</b>	<b>197</b>	<b>195</b>	<b>195</b>
<b>8. Actual emissions in the Netherlands = 1+2</b>	<b>224</b>	<b>221</b>	<b>224</b>	<b>211</b>	<b>209</b>	<b>210</b>
9. Residents abroad	26	26	25	25	26	26
10. Non-residents in the Netherlands	6	7	7	7	7	7
<b>11. Total emissions by residents = 8+9-10</b>	<b>243</b>	<b>241</b>	<b>243</b>	<b>229</b>	<b>228</b>	<b>228</b>



# Quarterly CO<sub>2</sub> emissions

## Source data:

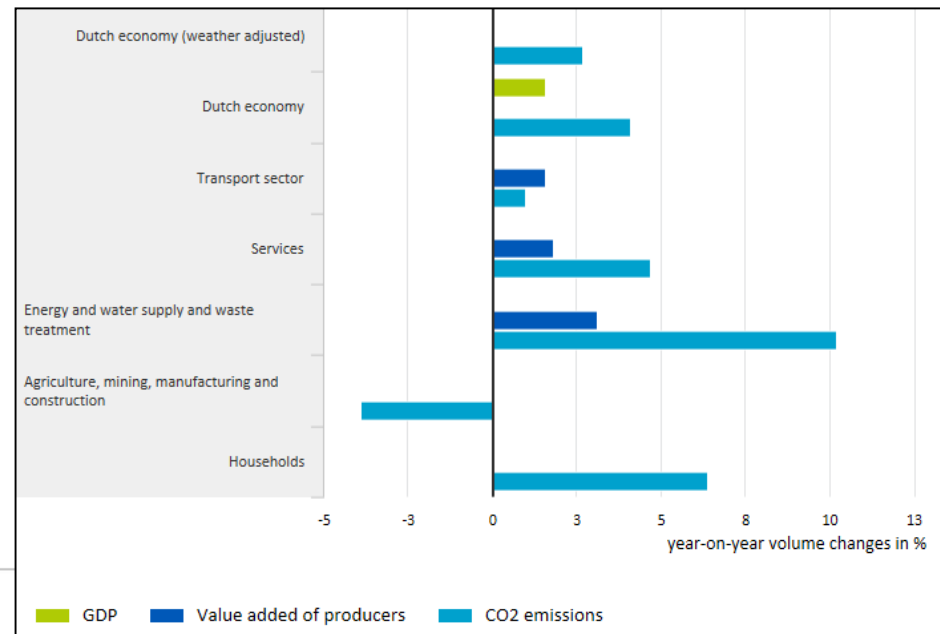
- Monthly energy data
- National accounts data
- Other



## Changes in CO<sub>2</sub> emissions, second quarter of 2015



### Nederlandse CO<sub>2</sub>-uitstoot gestegen door consument



DA

## Slide 25

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**DA1** Optie is om ergens op de slide de volgende hyperlink toe te voegen:

[http://www.unece.org/fileadmin/DAM/stats/pr/Netherlands\\_press\\_release.pdf](http://www.unece.org/fileadmin/DAM/stats/pr/Netherlands_press_release.pdf)

Bijvoorbeeld door krantenknipsels iets op te tillen en daaronder te plaatsen.

Denneman, A.I.M., 20/08/2015

# Dissimination

- Statline (electronic database)
  - <http://statline.cbs.nl/statweb/?LA=en>
- Website
  - <https://www.cbs.nl/en-gb/society/nature-and-environment>
- Data for Eurostat + reports
- Several publications
  - Annual publication on environmental accounts
  - Publication on green growth



