Wim van der Maas, Laurens Brandes,
Onno Knol & Bert Leekstra

The Netherlands PRTR-System and Quality Control by the Public

Netherlands Environmental Assessment Agency

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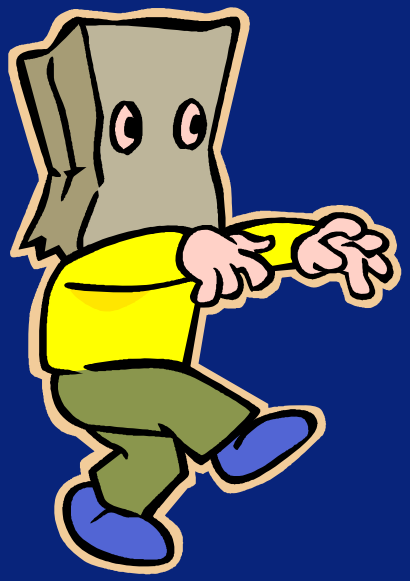
The Netherlands PRTR-System and Quality Control by the Public



Netherlands Environmental Assessment Agency

Wim van der Maas, Laurens Brandes,
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The Netherlands PRTR-System and Quality Control by the Public

1. PRTR in the Netherlands
2. www.prtr.nl and Aarhus
3. QA/QC by the public
4. The information pyramid
5. Planned improvements

Netherlands Pollutant Release & Transfer Register

Since 1974

The national emissions to air, water and soil of 350 pollutants

Two datasets per year (t-2 in March, t-1 in July)

Formal approved by the partners:

- Environmental Assessment Agency (PBL)
- Statistics Netherlands (CBS)
- Institute for Inland Water Management and Waste Water Treatment
- *the Netherlands Organisation for Applied Scientific Research (TNO).*

On behalf of three Ministries

- Housing, Spatial Planning and the Environment (VROM)
- Transport, Public Works and Water Management (V&W)
- Agriculture, Nature and Food Quality (LNV)

Netherlands Environmental Assessment Agency

Tasks of the Netherlands Environmental Assessment Agency:

- Overall coordination of the process
  - (70 emission experts, 10 institutes)
- Infrastructure (websites, databases)
- Spatial allocation of the national emissions
- Report emissions to the Dutch government, EU UNFCCC (LCP, EPER/E-PRTR, NIR, IIR etc.)
  - One exception: Cap & trade emission reports
- Report emissions to the public
  - www.prtr.nl
  - www.emissieregistratie.nl
  - emissieregistratie@mnp.nl

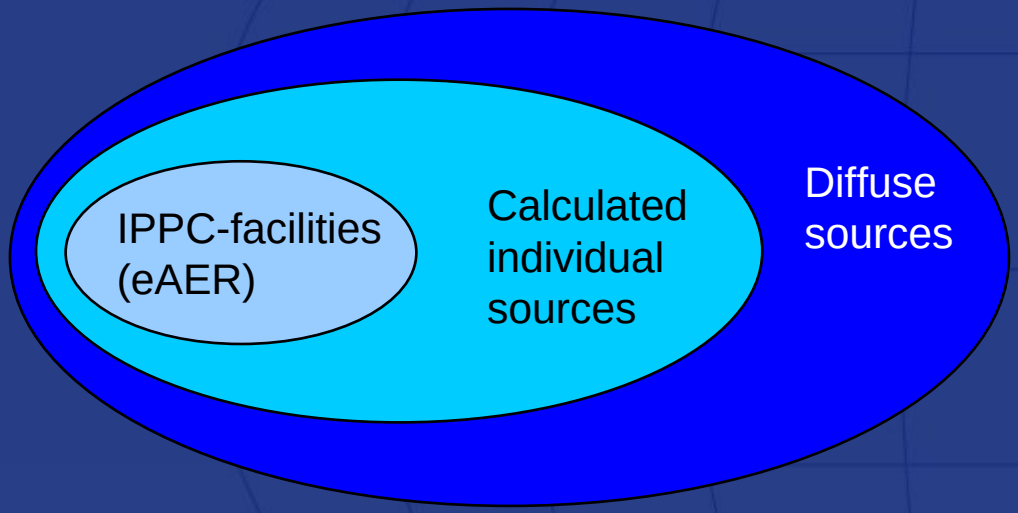
Netherlands Environmental Assessment Agency

Data in the PRTR

Emissions of 800 point sources (IPPC facilities, eAER's)

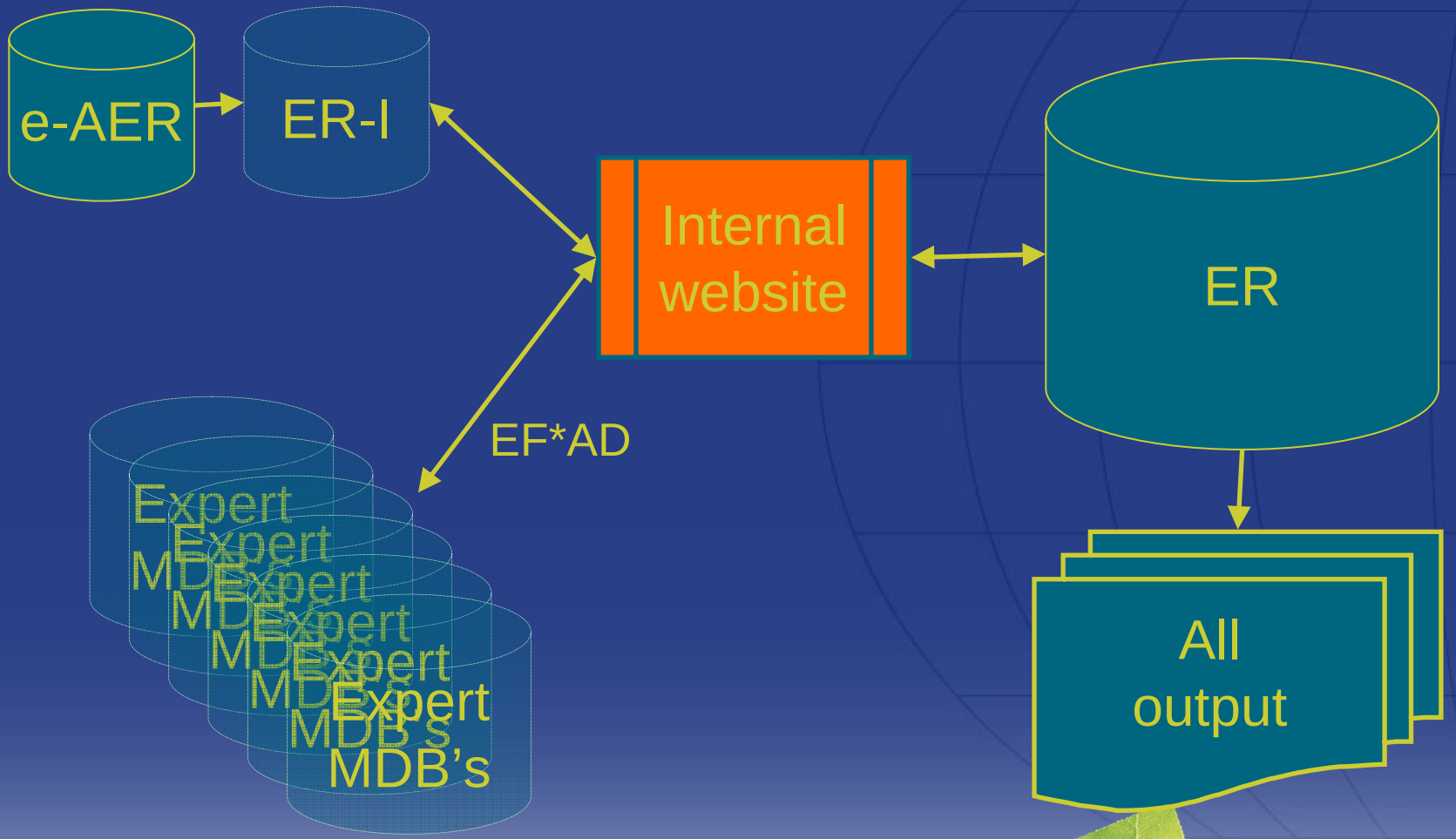
1200 source categories with national totals and activity levels

Divided into 55 work packages (14 emission experts)



Netherlands Environmental Assessment Agency

Dataflow



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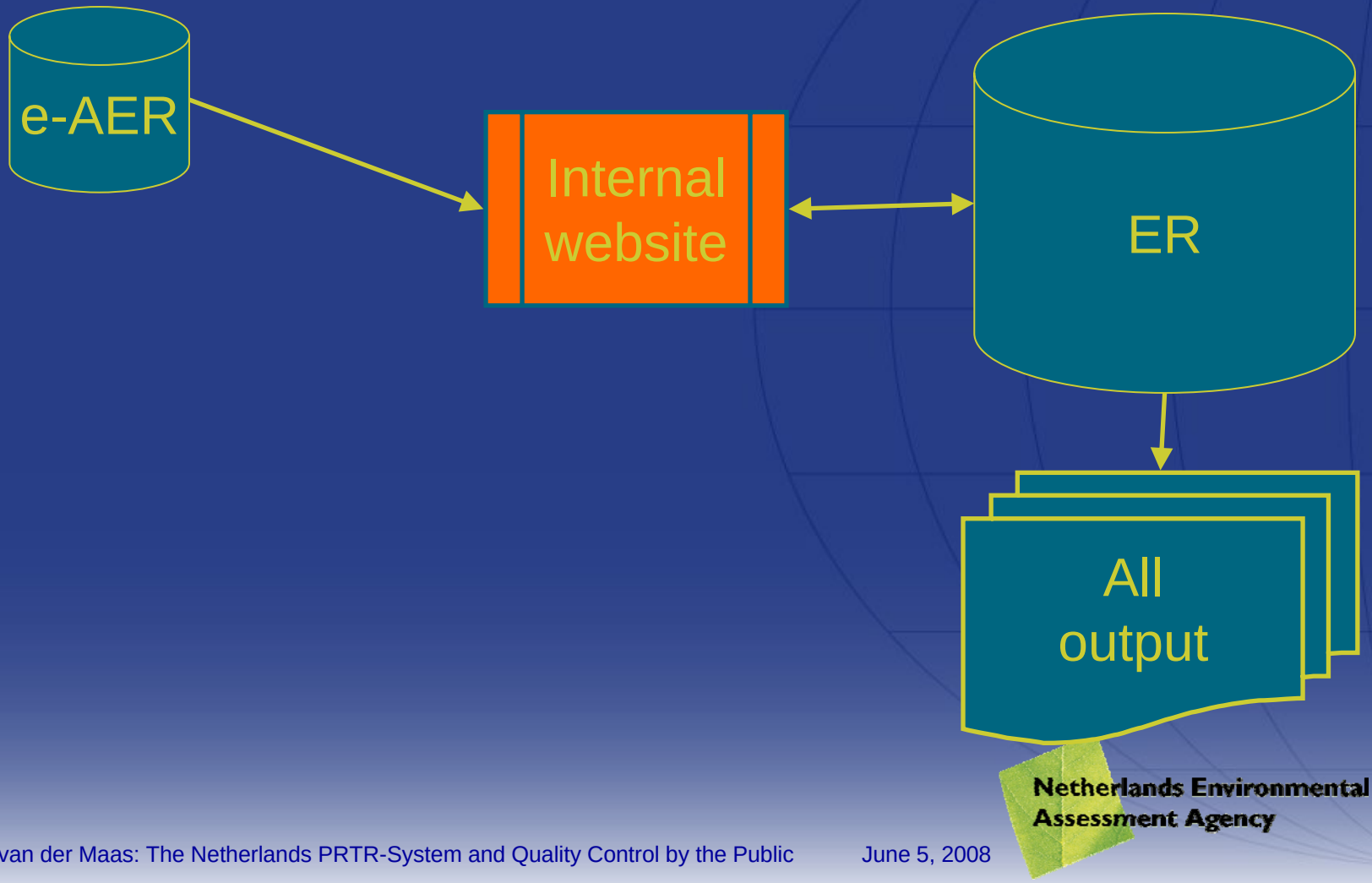
Dataflow


e-AER
Internal website
ER
All output
Netherlands Environmental Assessment Agency

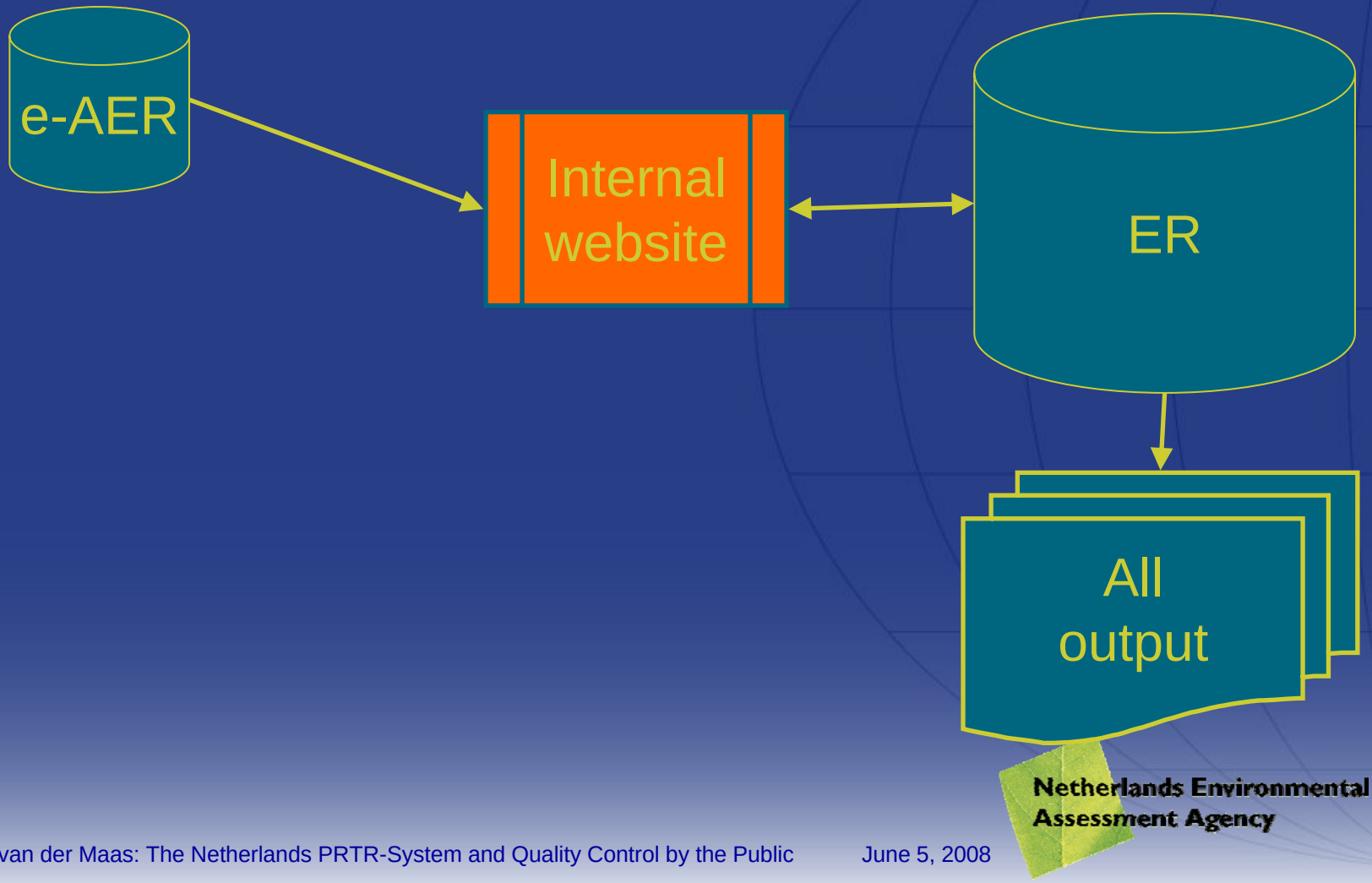
Internal website

- Only accessible by ER-partners (extranet)
- Down- en Uploads by the Emission Experts
  - Version control
  - Only the expert can upload it's work package
  - Many automated checks during uploads
  - As many down- and uploads as wanted
  - Automated logging of all uploads

- EmissionExplorer for overall checks
  - After an upload every partner can check 'the whole picture'
  - To compare with previous datasets
  - To analyses trends

Netherlands Environmental Assessment Agency

Dataflow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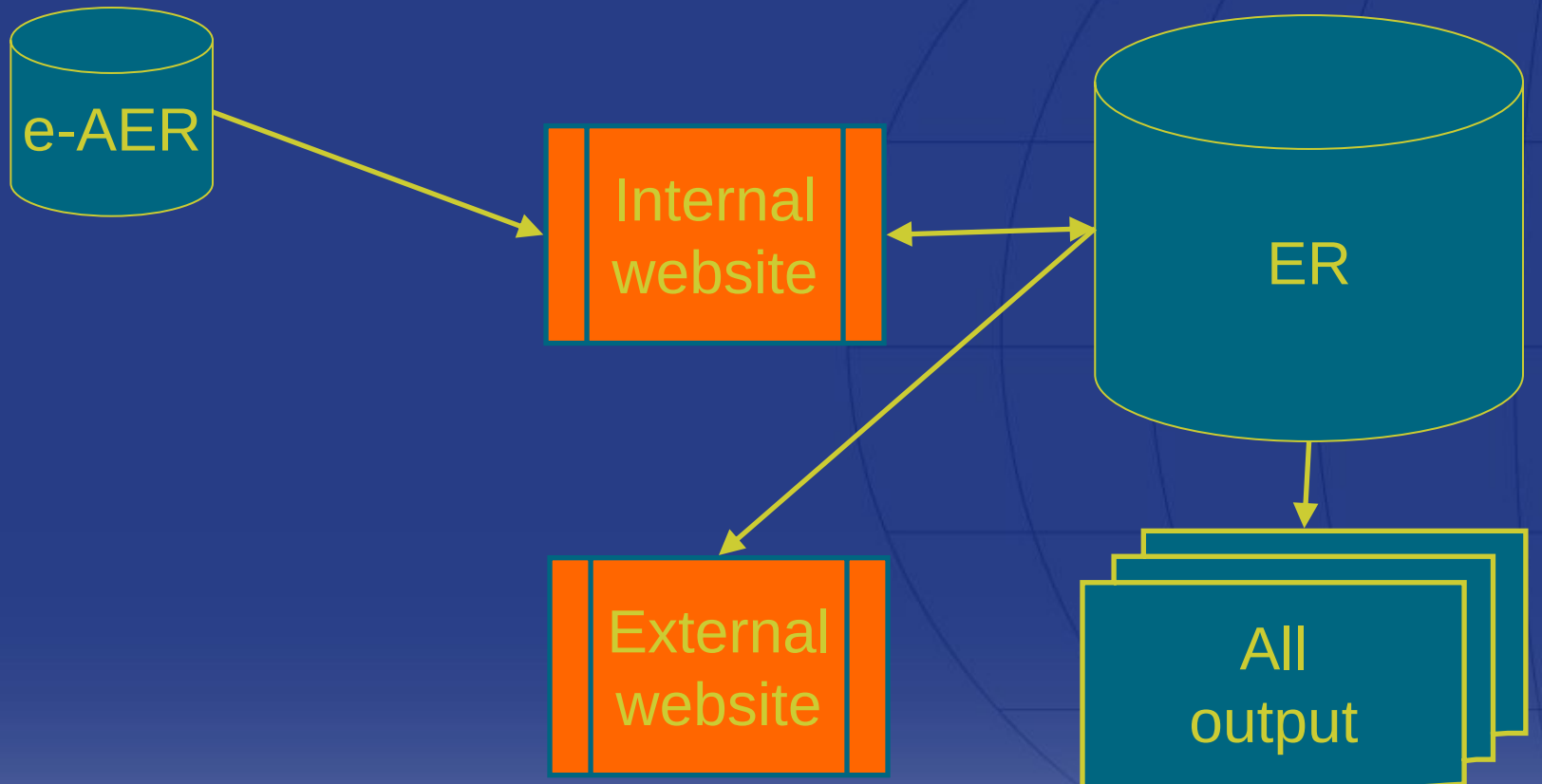

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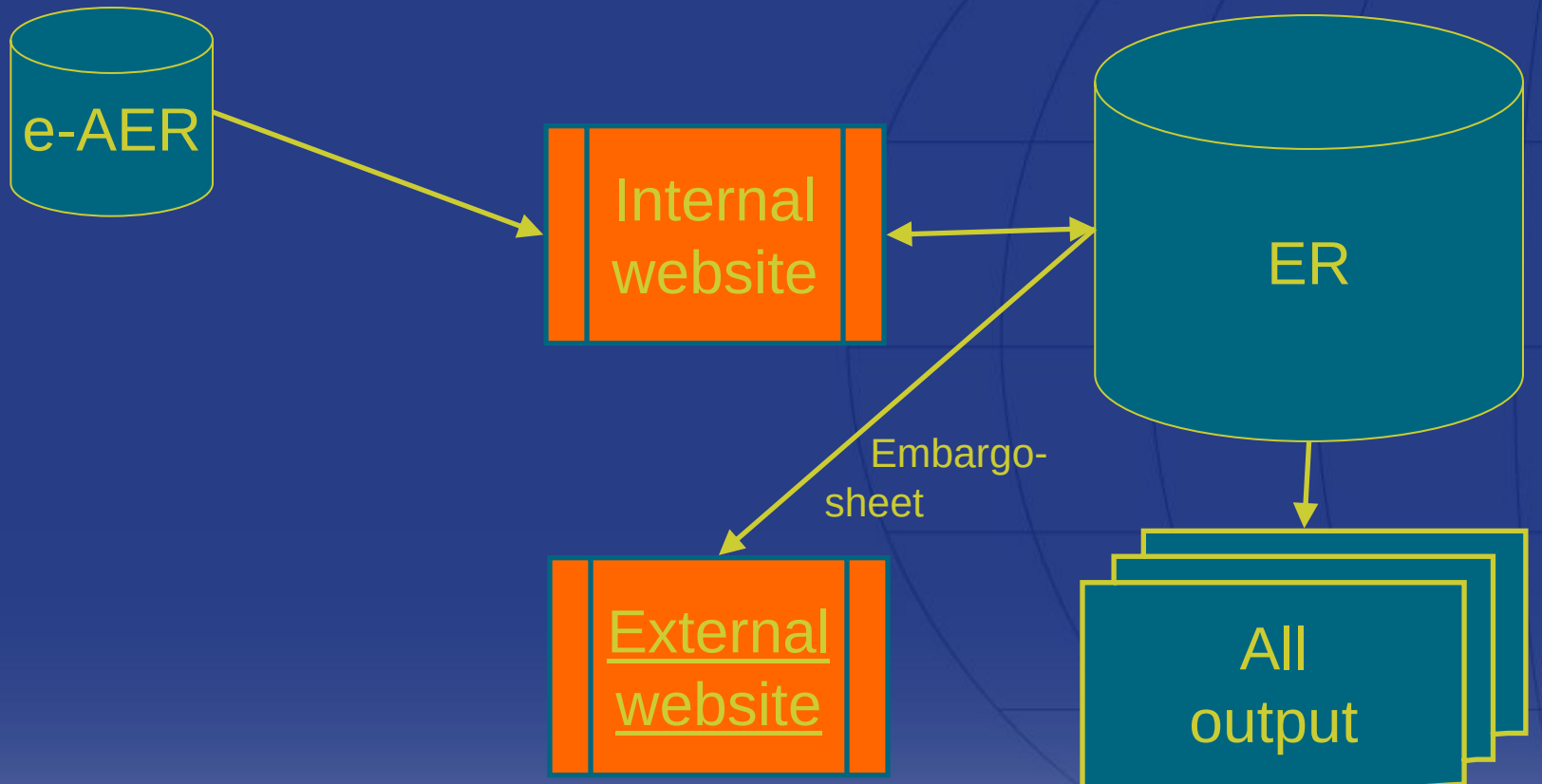
Dataflow



Netherlands Environmental Assessment Agency

Public website

To inform the public about emission-sources in their neighborhood (and, by doing that, increasing the involvement of the public in the validation of emission data)

- Bilingual
- Unique integration of point sources and diffuse emissions
- Integrated compartments (air, air IPCC, soil, water indirect (emission) and direct (load))
- Maps per emission source, 5*5 km grid, per community (municipalities), water catchment area etc.
- Emission Explorer light, only one dataset, no activity data
- Methodologies used
- Detailed exports

Netherlands Environmental Assessment Agency

Spatial allocation of diffuse emission

- National emission – E-PRTR facilities = diffuse emission
- Activity data for each emission source
  - Point sources for SME → 66,000 with NACE + number of employees
  - Line sources (road, waterways) and use (car kilometre etc.)
  - Area sources (land use maps 500*500 meter, water catchment area etc) and amount of crop, cow, sheep,type and amount of houses, population density
- GIS system to overlay the different spatial elements (which point sources and which percentage of a road lays inside a province, 5*5 km^2 grid cel etc.)
- For each emission source

Netherlands Environmental Assessment Agency

www.prtr.nl

Netherlands Environmental Assessment Agency

PRTR | Pollutant Release & Transfer Register

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Top 10 graphics
-- choose a graphic

Top 10 maps
the Netherlands
Postalcode
-- choose map

Make your graphic or map
Select pollutants, sources ...

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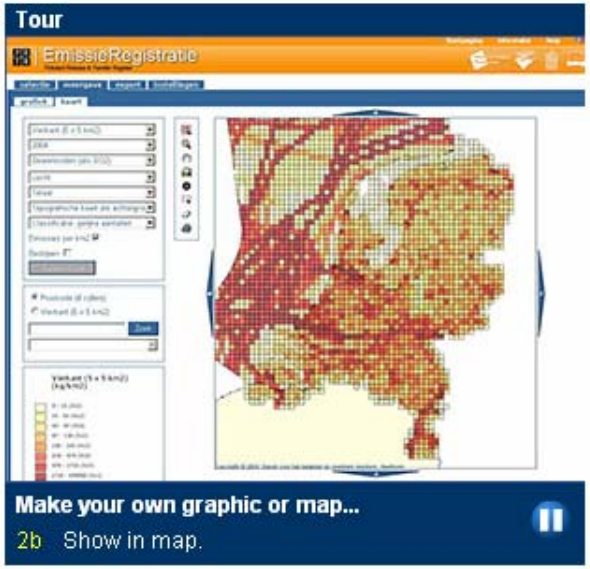
Related links

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, 2004, 2005 and 2006 The 2006 emissions are preliminary data and not yet shown in the maps. We expect to add an extra year in August 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 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 ....

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General explanation of the Emission Register project

Contents

Scope of the project

The Emission Register contains the yearly releases of more than 350 pollutants to air, soil and water The Emission Register project covers the whole process of collecting, processing and reporting of the emission data in the Netherlands. The emission from individual point sources (companies or facilities) and the diffuse emissions, calculated from national statistics by the so called task forces) are stored into one central database.

Top

Goal

Goal of the project is to agree on one national data set for emissions that meets the following criteria: transparent, complete, comparable, consistent and accurate. This data set is stored in a central database, from which all the national and international reporting is done.

Top

History

The first steps for the establishment of an integrated Pollutant Release and Transfer Register (PRTR) were taken in the

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How to use this site

This website shows the yearly releases (emissions) of the most important pollutants in the Netherlands. You can view these emissions, for example, on a map, graph or table. But you can also download all the details into your own database. The Dutch Pollution Release and Transfer Register (PRTR) is an emission register with a very large amount of data. For a number of years this included hundreds of components, more than a thousand emission sources and hundreds of individual facilities. Emissions to air, water (direct and indirect via the sewage treatment plants) and soil are available per province, community, water boards and grid cells of 5 x 5 square kilometres, yielding a total of tens of millions of emissions.
You can explore this information by clicking on one or more of the following links:

- Pre-select graphs and maps
- Make your graphic or map and select the pollutants and emission source of your choice
- Use export to download all the details in your own database

Pre-select graphs and maps

The selection "Direct to map" offers you general maps of the most important emissions, e.g. emission to air per community. This map shows the total emissions in the Netherlands for one compound and the last year. You can select other compounds, years or source of the emission. Use the button [Refresh map] to show the new selection. Click on an icon in the box to the left to select the function to use in the map: to zoom in or out, move, print or ask with for the emission details
N.B. The selection of sources and components is limited. However you can expand this selection with the Tab [Selections - general] and [Selection - sector/activity]

Make your graph or map

With Select pollutants, sources ... you can select the emissions (to air or water) you want shown, along with the compounds and emission source. Use the following steps to make a selection:

1. Go to the tab 'Selection - General' and choose one or more compounds, one ore more years and the compartment
2. Go to the tab 'Selection - Sources' and select one ore more Sectors, Sub sectors, Sources or individual Facilities
3. Go to the tab 'Show - Graphic', and scroll down to view the table and to copy your selection to Excel
4. Go to the tab Show - Map and select the spatial level, year etc. and Press [Refresh map]

You can skip the tab Selection - Sources. In this case only the total of the Netherlands is shown.

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Important information about the use of emissiondata

This page explains the various limitations in the quality of our emission data.

- Embargosheet: why some data are not shown
- Methodologies used to determine emission
- Uncertainties in the emissions presented

Embargosheet

In some cases the emissions of a certain compound are incomplete, or we don't have a clear picture of the allocation in the Netherlands. This embargo sheet shows these exceptions. The symbol ✔ indicates no limitations, The symbol ⊗ implies that no information is shown at all from this compounds at this level, while ⚠ indicates some restrictions, further explained - as a tooltip - when you point the symbol.

Stof	NL total	NL per (sub) sector	NL per emissionsource	Allocated total	Allocated per (sub)sector	Allocated per emissionsource	Facilities
Greenhouse gasses to air	✔	✔	⚠4	⚠1	⚠1	⚠1+4	✔
Greenhouse gasses to air (IPCC)	✔	✔	⚠4	⊗	⊗	⊗	n.v.t.
NEC air pollutants	✔	✔	✔	⚠1+2+3	⚠1+2+3	⚠1+2+3	✔
EMEP air pollutants	⚠2	⚠2	⚠2	⚠1+2+3	⚠1+2+3	⚠1+2+3	✔
Priority substances to air	⚠2	⚠2	⚠2	⚠1+2+3	⚠1+2+3	⚠1+2+3	✔
All pollutants to water	✔	✔	✔	✔	✔	✔	⚠5
N- en P-total to soil	✔	✔	✔	⚠6	⚠6	⚠6	n.a.
Cu,Cd,Zn en Pb to soil	✔	✔	✔	⚠6	⚠6	⚠6	n.a.

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Ammoniak from agriculture
Accidification
Greenhouse gasses IPCC
Emission to air per sector
Load to water
Load to water nutrients
Load to water pesticides
Load to water heavy metals
Emissions to water

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Greenhouse gasses to air (IPCC)	✔	✔	⚠4	⊗	⊗	⊗	n.v.t.
NEC air pollutants	✔	✔	✔	⚠1+2+3	⚠1+2+3	⚠1+2+3	✔
EMEP air pollutants	⚠2	⚠2	⚠2	⚠1+2+3	⚠1+2+3	⚠1+2+3	✔
Priority substances to air	⚠2	⚠2	⚠2	⚠1+2+3	⚠1+2+3	⚠1+2+3	✔
All pollutants to water	✔	✔	✔	✔	✔	✔	⚠5
N- en P-total to soil	✔	✔	✔	⚠6	⚠6	⚠6	n.a.
Cu,Cd,Zn en Pb to soil	✔	✔	✔	⚠6	⚠6	⚠6	n.a.

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Greenhouse gasses to air (IPCC)	✔	✔	⚠4	⊗	⊗	⊗	n.v.t.
NEC air pollutants	✔	✔	✔	⚠1+2+3	⚠1+2+3	⚠1+2+3	✔
EMEP air pollutants	⚠2	⚠2	⚠2	⚠1+2+3	⚠1+2+3	⚠1+2+3	✔
Priority substances to air	⚠2	⚠2	⚠2	⚠1+2+3	⚠1+2+3	⚠1+2+3	✔
All pollutants to water	✔	✔	✔	✔	✔	✔	⚠5
N- en P-total to soil	✔	✔	✔	⚠6	⚠6	⚠6	n.a.
Cu,Cd,Zn en Pb to soil	✔	✔	✔	⚠6	⚠6	⚠6	n.a.

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PRTR | Pollutant Release & Transfer Register

1. Select | 2. Show | 3. Export | Settings

2a. Graph | 2b. Map

◉ Absolute ○ Relative Year of reference 1990 Ok

◉ Show only current selection ○ Add new selection

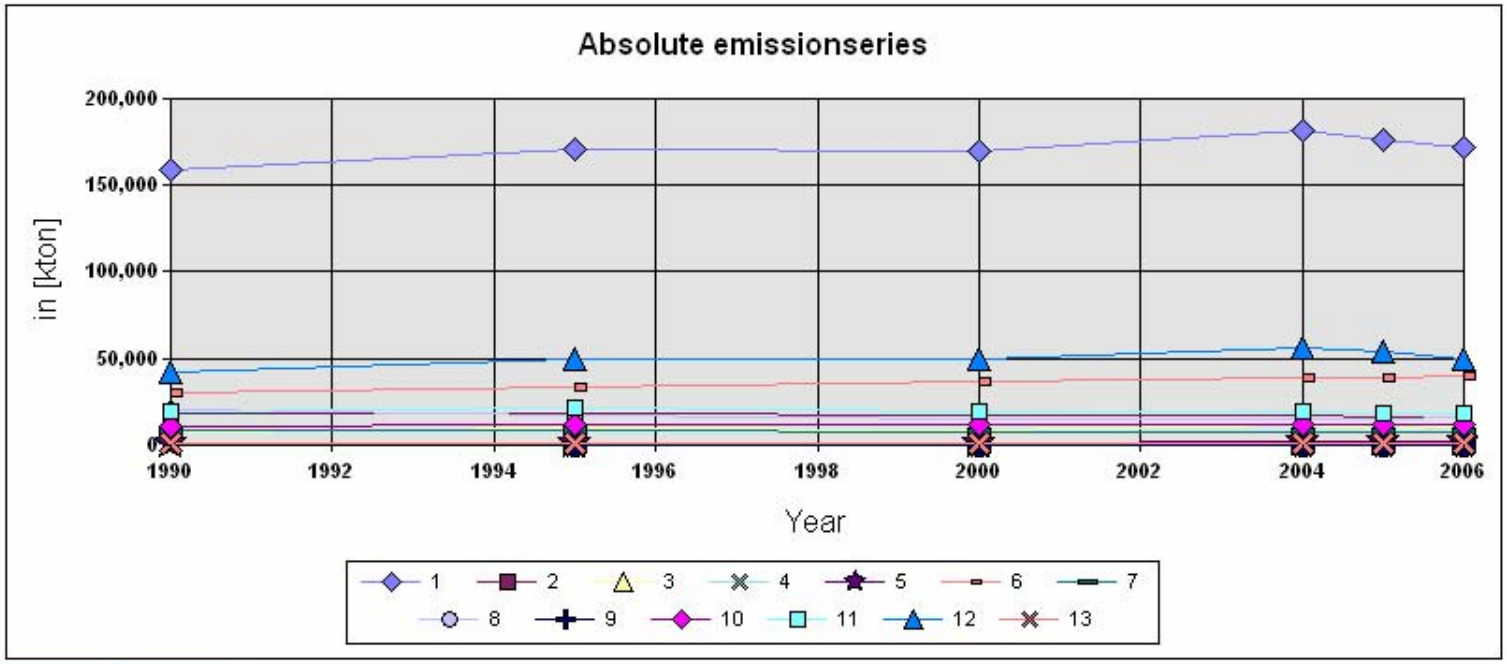
Selection

Pollutant: Carbon Dioxide

Year: 1990,1995,2000,2004,2005,2006

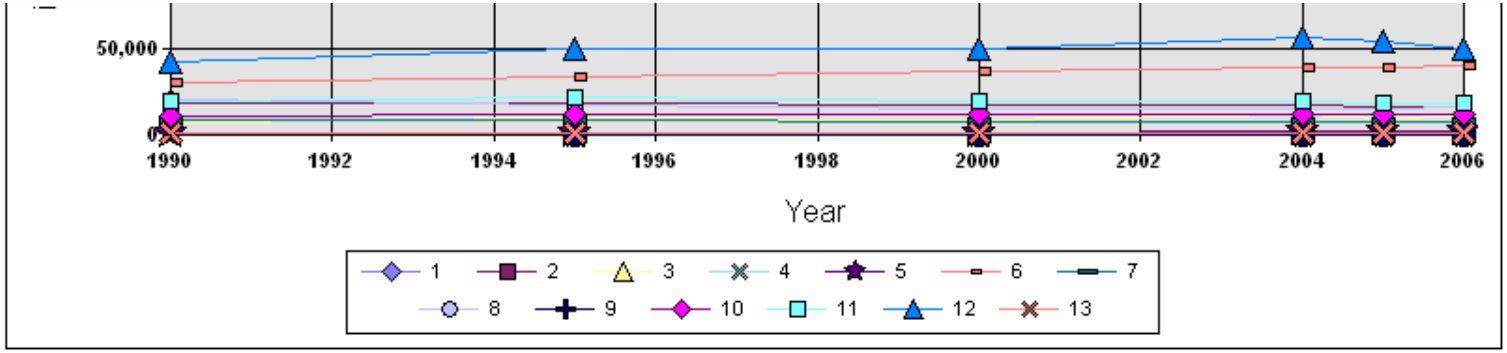
Compartment: Air IPCC

Change selection



Remove | To Excel

#		Sector/Activity	Theme	Pollutant	Unit	Sectortype	Sector	1990	1995	2000	2004	2005	2006	Activity	Facility	Compart
1	☐	Total		Carbon Dioxide	kton			159400	170600	169600	181100	175900	172400			Air IPCC
12	☐	Energy production		Carbon Dioxide	kton	Sector	Energy production	41670	49380	50150	56710	53980	49810			Air IPCC
6	☐	Transport		Carbon Dioxide	kton	Sector	Transport	30490	33490	36770	38720	38990	39790			Air IPCC



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12	☐	Energy production		Carbon Dioxide	kton	Sector	Energy production	41670	49380	50150	56710	53980	49810			Air IPCC
6	☐	Transport		Carbon Dioxide	kton	Sector	Transport	30490	33490	36770	38720	38990	39790			Air IPCC
11	☐	Consumers		Carbon Dioxide	kton	Sector	Consumers	19650	21110	19400	19250	18350	17980			Air IPCC
8	☐	Chemical industry		Carbon Dioxide	kton	Sector	Chemical industry	20960	16850	15470	15520	15570	16320			Air IPCC
2	☐	Other industries		Carbon Dioxide	kton	Sector	Other industries	18340	18100	17110	16860	16560	16090			Air IPCC
10	☐	Refineries		Carbon Dioxide	kton	Sector	Refineries	11040	11670	12090	12170	12280	11470			Air IPCC
3	☐	Trade and services		Carbon Dioxide	kton	Sector	Trade and services	7599	9746	8578	11480	9899	10650			Air IPCC
7	☐	Agriculture		Carbon Dioxide	kton	Sector	Agriculture	8491	8523	7627	7144	7143	7143			Air IPCC
5	☐	Waste disposal		Carbon Dioxide	kton	Sector	Waste disposal	593	954	1601	2272	2246	2264			Air IPCC
13	☐	Construction		Carbon Dioxide	kton	Sector	Construction	557	769	704	920	811	836			Air IPCC
4	☐	Sewage and waste water treatment		Carbon Dioxide	kton	Sector	Sewage and waste water treatment		11	43	24	61	63			Air IPCC
9	☐	eng: drinkwatervorrziening		Carbon Dioxide	kton	Sector	eng: drinkwatervorrziening		29	37	19	17	17			Air IPCC

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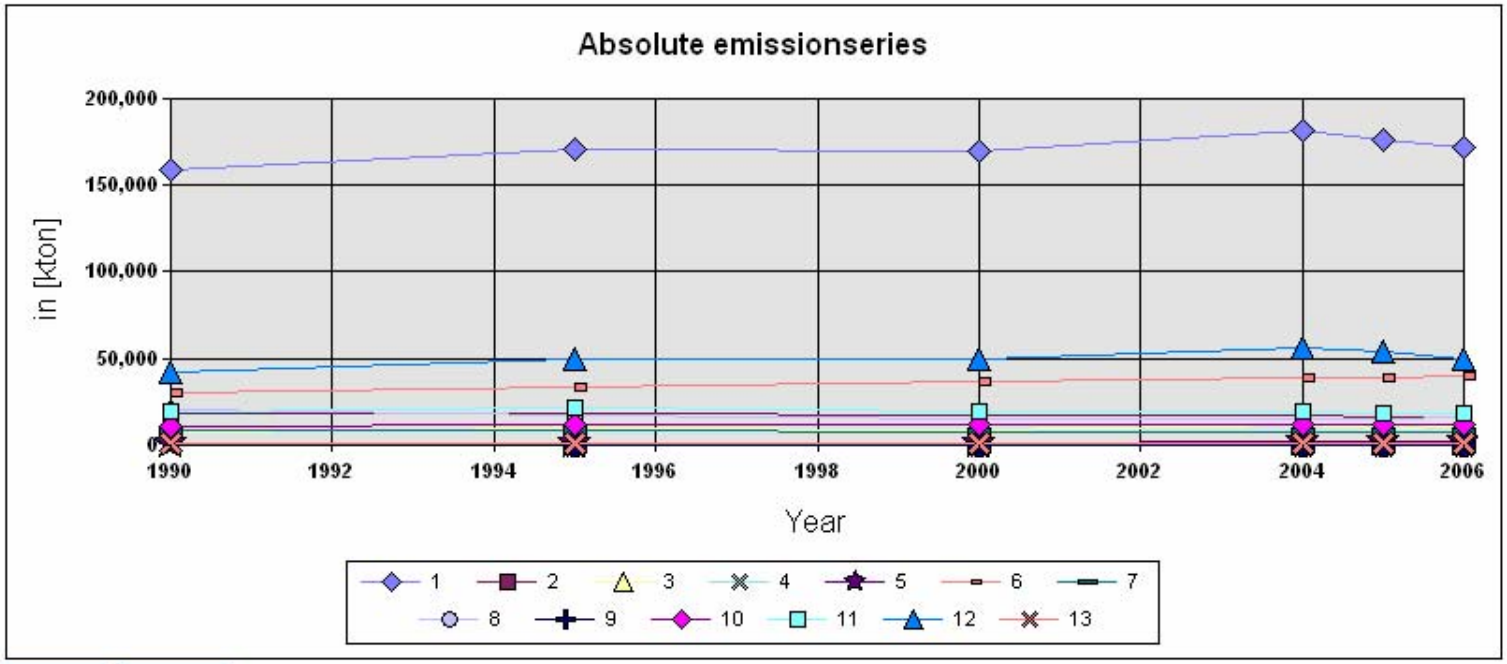

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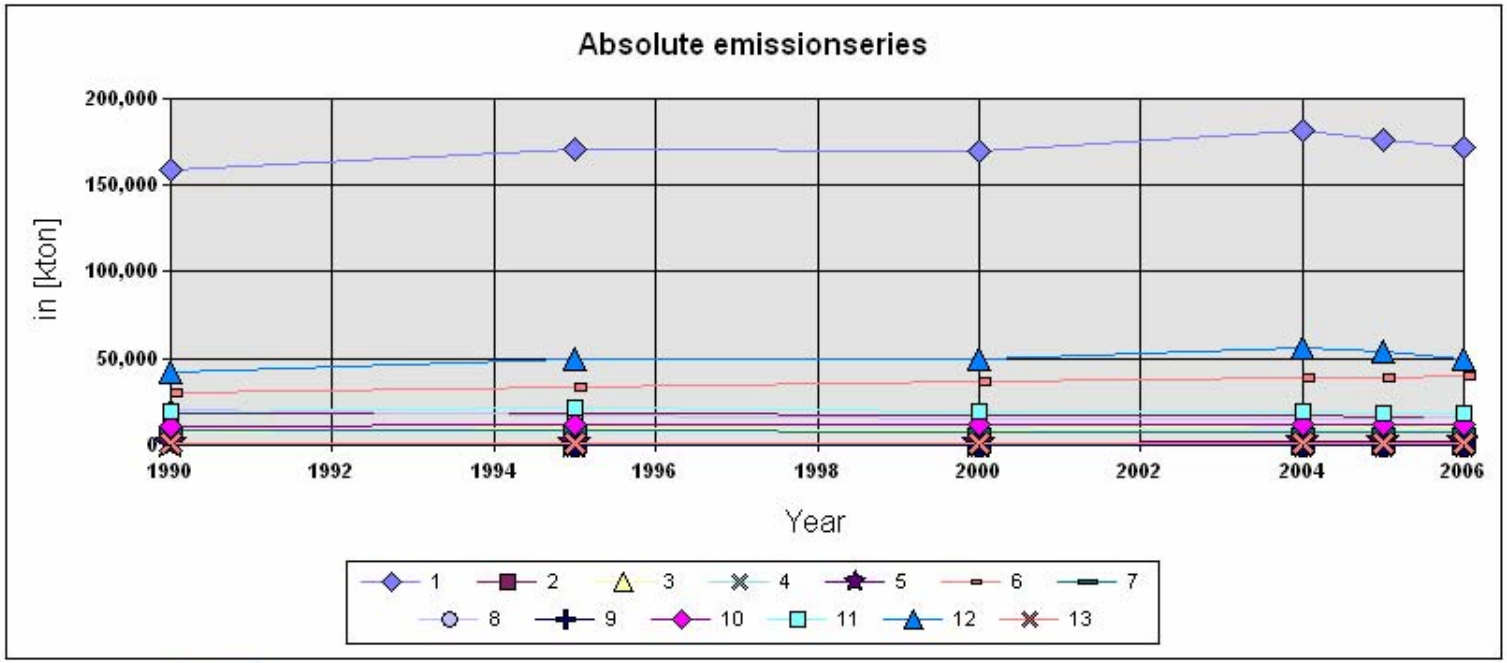

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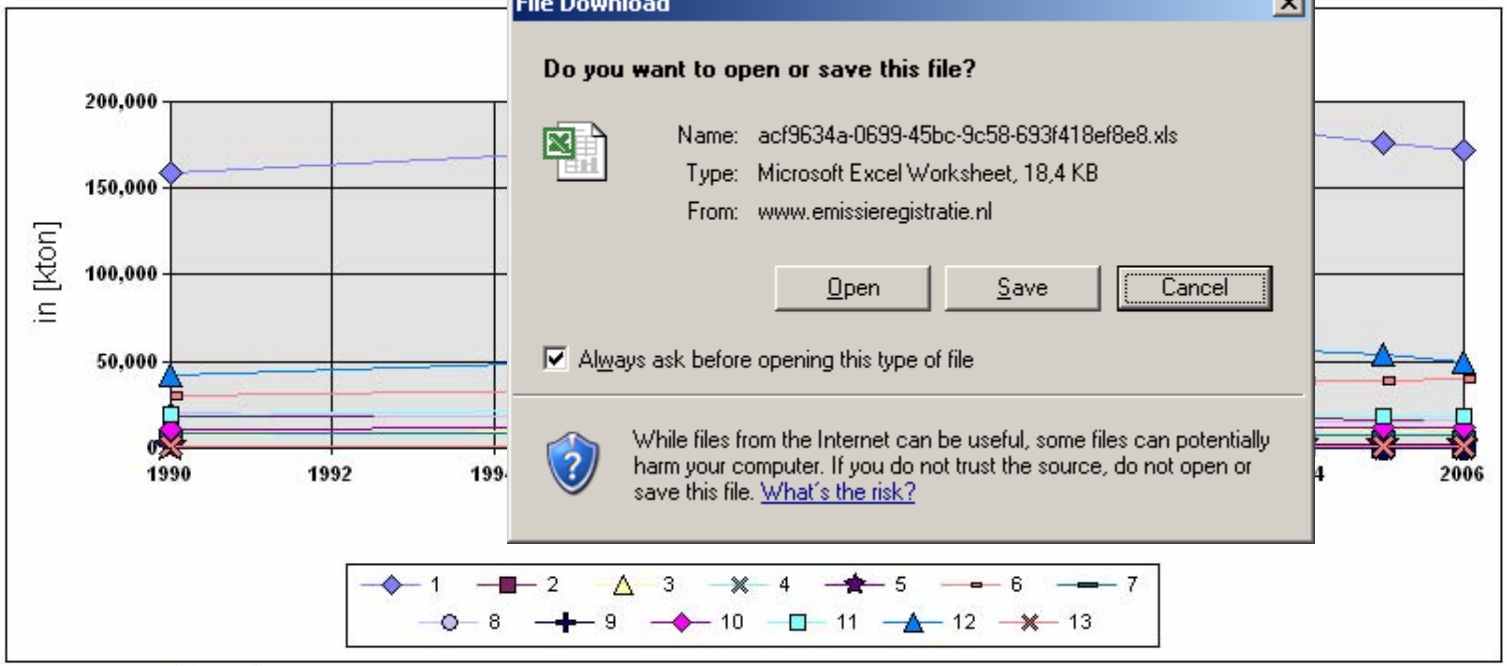

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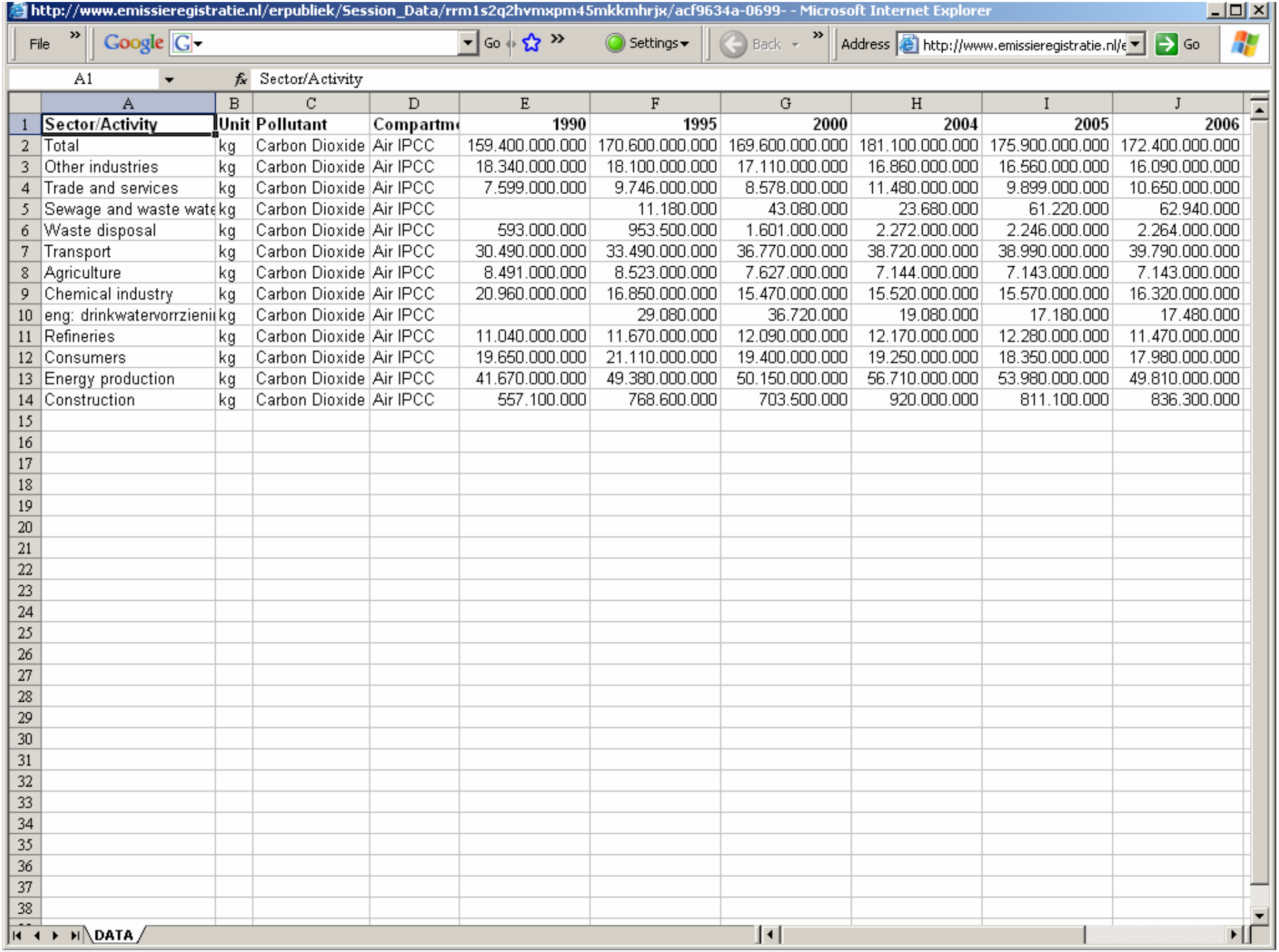

	A	B	C	D	E	F	G	H	I	J
1	**Sector/Activity**	**Unit**	**Pollutant**	**Compartme**	**1990**	**1995**	**2000**	**2004**	**2005**	**2006**
2	Total	kg	Carbon Dioxide	Air IPCC	159.400.000.000	170.600.000.000	169.600.000.000	181.100.000.000	175.900.000.000	172.400.000.000
3	Other industries	kg	Carbon Dioxide	Air IPCC	18.340.000.000	18.100.000.000	17.110.000.000	16.860.000.000	16.560.000.000	16.090.000.000
4	Trade and services	kg	Carbon Dioxide	Air IPCC	7.599.000.000	9.746.000.000	8.578.000.000	11.480.000.000	9.899.000.000	10.650.000.000
5	Sewage and waste wate	kg	Carbon Dioxide	Air IPCC		11.180.000	43.080.000	23.680.000	61.220.000	62.940.000
6	Waste disposal	kg	Carbon Dioxide	Air IPCC	593.000.000	953.500.000	1.601.000.000	2.272.000.000	2.246.000.000	2.264.000.000
7	Transport	kg	Carbon Dioxide	Air IPCC	30.490.000.000	33.490.000.000	36.770.000.000	38.720.000.000	38.990.000.000	39.790.000.000
8	Agriculture	kg	Carbon Dioxide	Air IPCC	8.491.000.000	8.523.000.000	7.627.000.000	7.144.000.000	7.143.000.000	7.143.000.000
9	Chemical industry	kg	Carbon Dioxide	Air IPCC	20.960.000.000	16.850.000.000	15.470.000.000	15.520.000.000	15.570.000.000	16.320.000.000
10	eng: drinkwatervorrzieni	kg	Carbon Dioxide	Air IPCC		29.080.000	36.720.000	19.080.000	17.180.000	17.480.000
11	Refineries	kg	Carbon Dioxide	Air IPCC	11.040.000.000	11.670.000.000	12.090.000.000	12.170.000.000	12.280.000.000	11.470.000.000
12	Consumers	kg	Carbon Dioxide	Air IPCC	19.650.000.000	21.110.000.000	19.400.000.000	19.250.000.000	18.350.000.000	17.980.000.000
13	Energy production	kg	Carbon Dioxide	Air IPCC	41.670.000.000	49.380.000.000	50.150.000.000	56.710.000.000	53.980.000.000	49.810.000.000
14	Construction	kg	Carbon Dioxide	Air IPCC	557.100.000	768.600.000	703.500.000	920.000.000	811.100.000	836.300.000
15										
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DATA

PRTR | Pollutant Release & Transfer Register

◉ Absolute ○ Relative Year of reference 1990 Ok

◉ Show only current selection ○ Add new selection

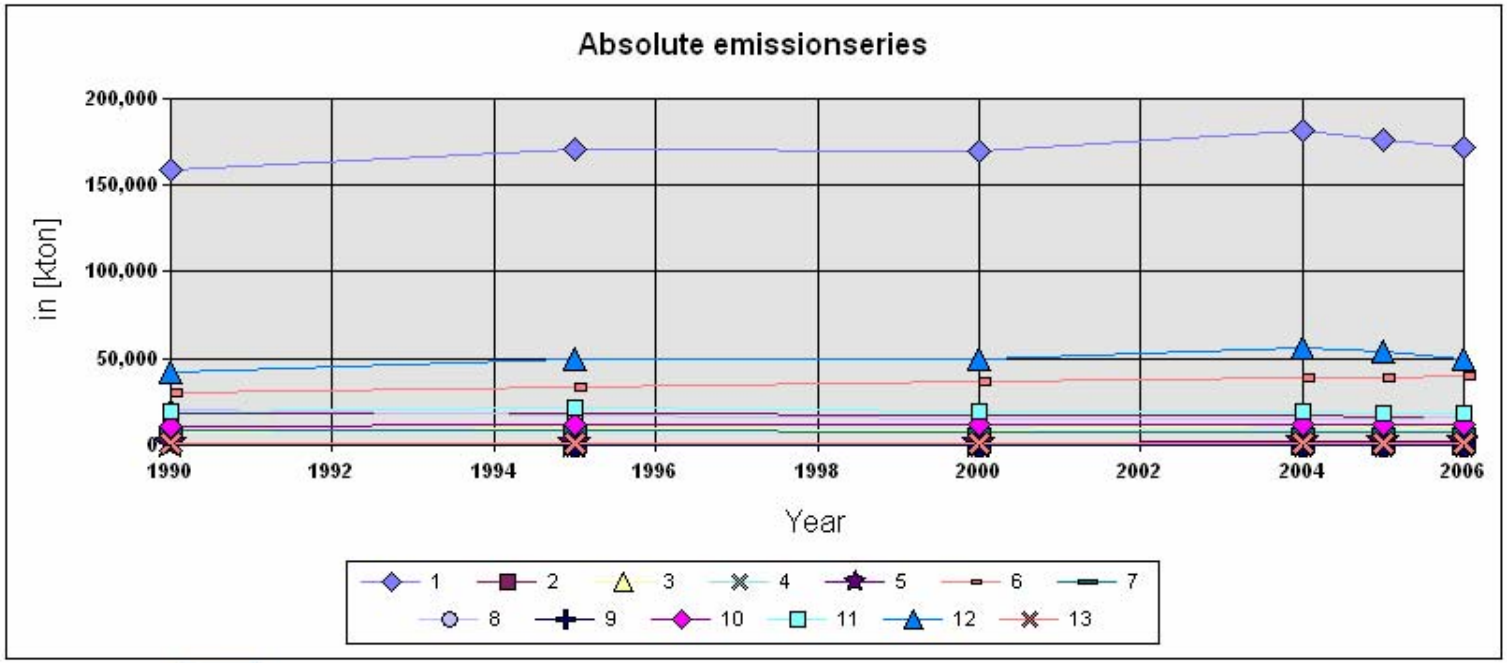
Selection

Pollutant: Carbon Dioxide

Year: 1990,1995,2000,2004,2005,2006

Compartment: Air IPCC

Change selection



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Top 10 graphics
-- choose a graphic

Top 10 maps
the Netherlands
Postalcode
-- choose map

Make your graphic or map
Select pollutants, sources ...

Documentation
All documents
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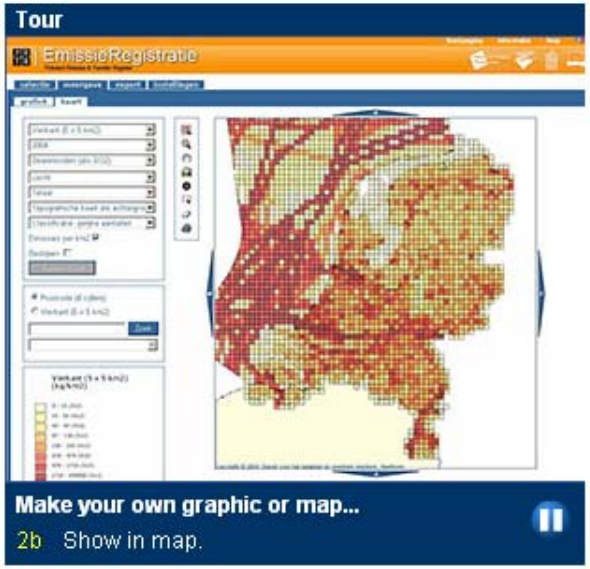
Glossary
Related links

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, 2004, 2005 and 2006 The 2006 emissions are preliminary data and not yet shown in the maps. We expect to add an extra year in August 2008
Please send us an update-mail if you want to be informed on website updates.

The Netherlands Pollutant Release & Transfer Register

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More about the Netherlands PRTR ....

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Air pollutants per 5*5 km2
Point source emissions
Load per surface water
Load per catchment area
Emissions per surface water
Emissions per catchment are
To soil per 5*5 km2

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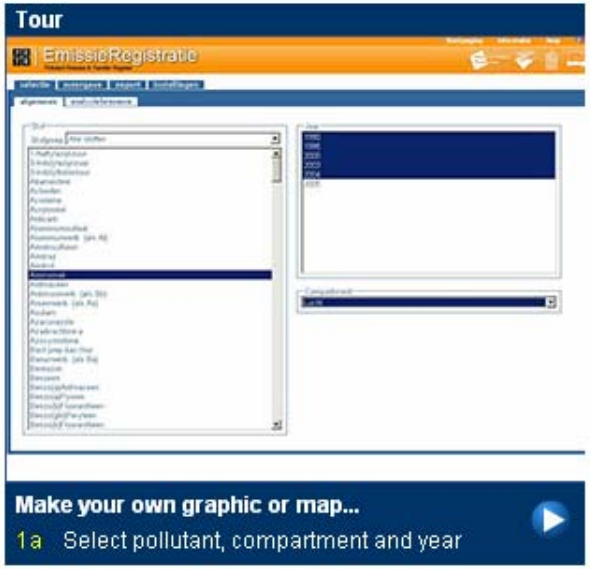

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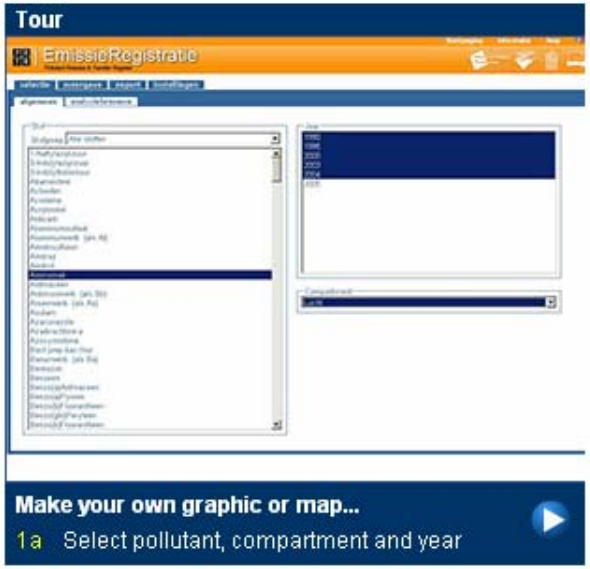

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1. Select | 2. Show | 3. Export | Settings

2a. Graph | 2b. Map

Air

Grid (5 x 5 km2)

2005

Sulphur Oxides (as SO2)

Total

Topgraphic map as backgroundlay

Classification: equal count

Emissions per km2 ☑

Facilities: ☐

Refresh Map | Change selection

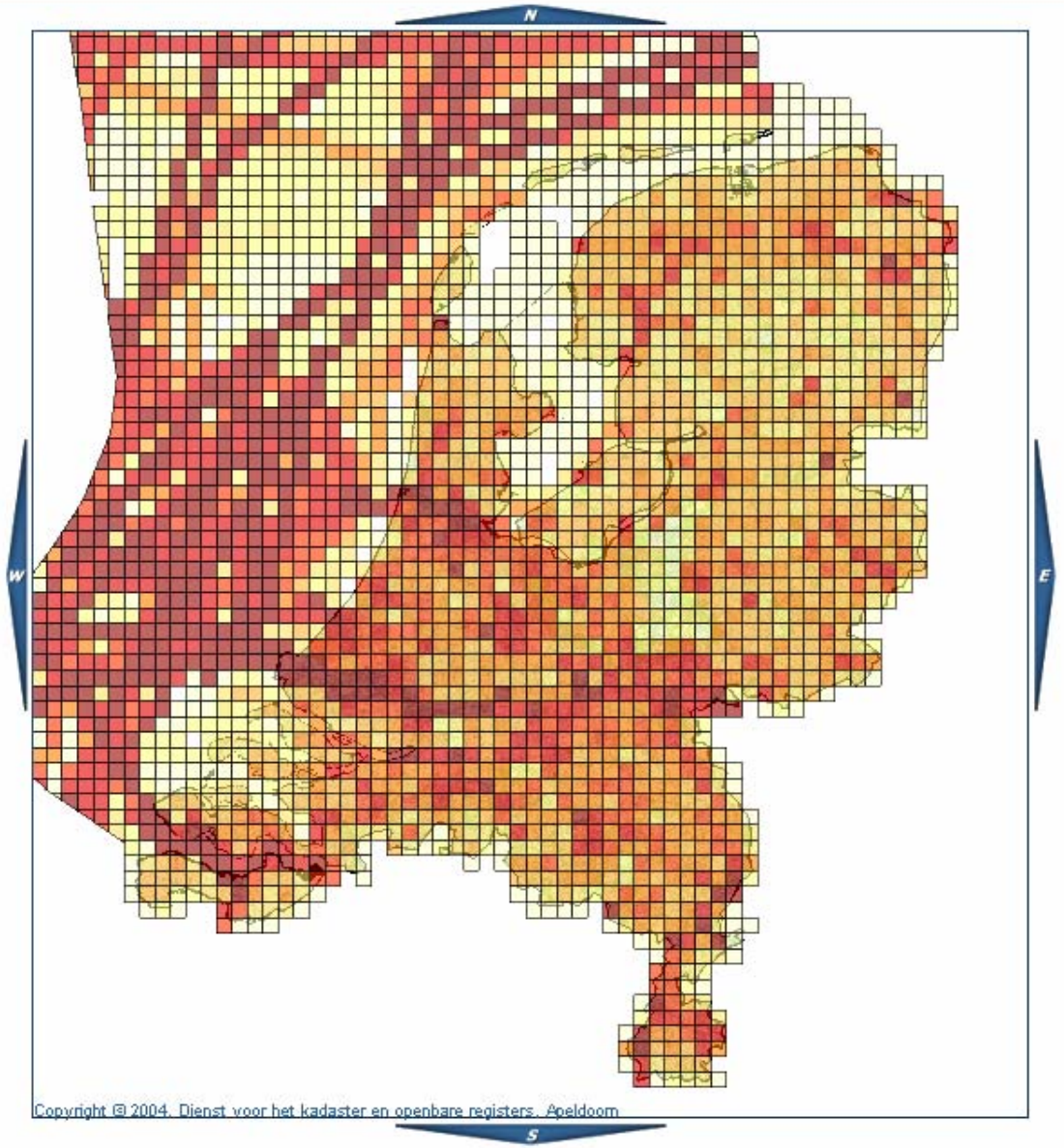
○ Postalcode (4 positions)

○ Grid (5 x 5 km2)

Search

Grid (5 x 5 km2) (kg/km2)

- 0 - 15 (512)
- 15 - 40 (512)
- 40 - 82 (512)
- 82 - 120 (512)
- 120 - 198 (512)
- 198 - 424 (512)
- 424 - 1636 (512)
- 1636 - 801000 (509)



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PRTR | Pollutant Release & Transfer Register

1. Select | 2. Show | 3. Export | Settings

2a. Graph | 2b. Map

Air

Grid (5 x 5 km2)

- Community
- Province
- Grid (5 x 5 km2)
- no geodata layer

Total

Topgraphic map as backgroundlay

Classification: equal count

Emissions per km2 ☑

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Refresh Map | Change selection

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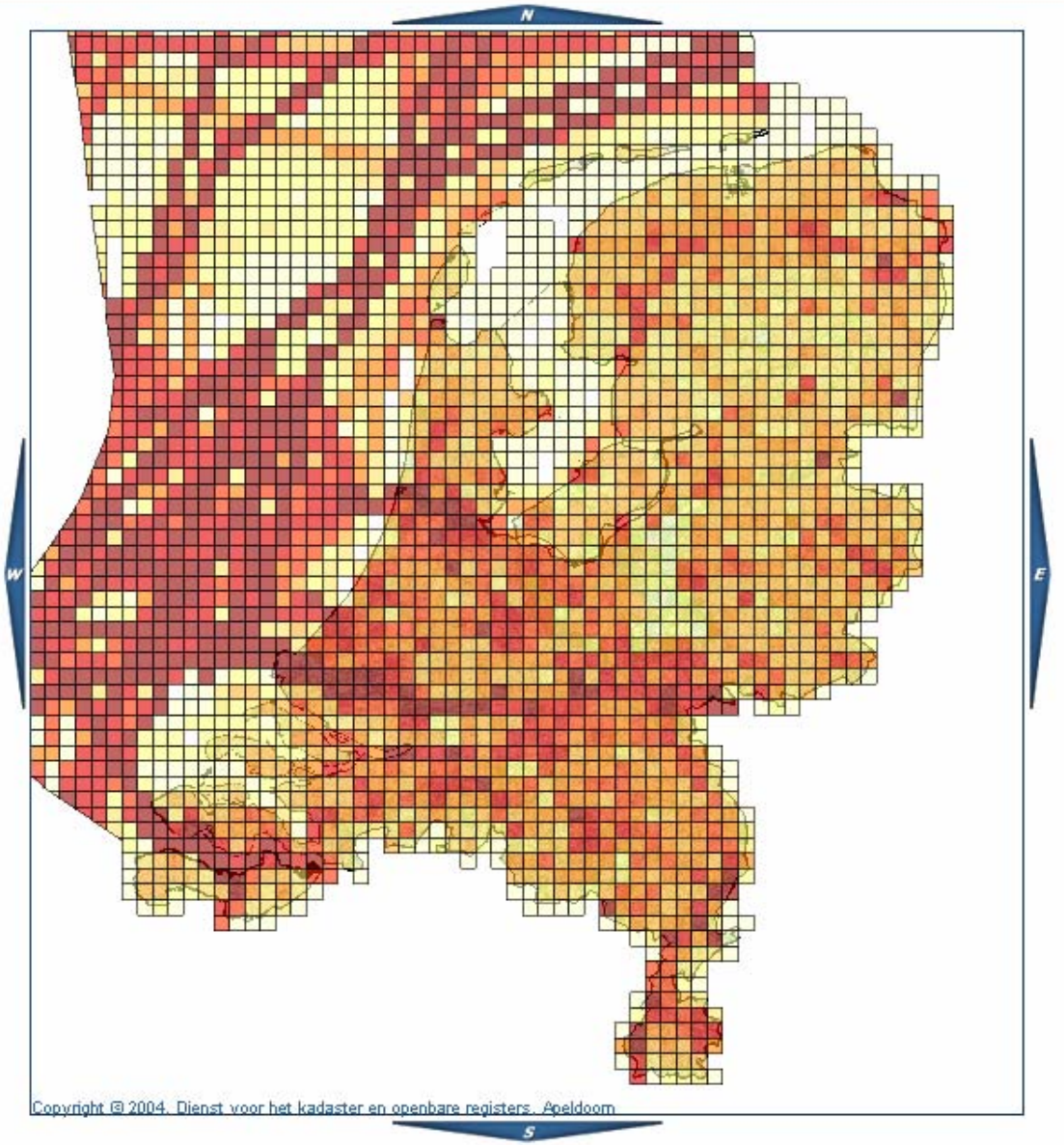

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2a. Graph | 2b. Map

Air

Community

2005

Sulphur Oxides (as SO2)

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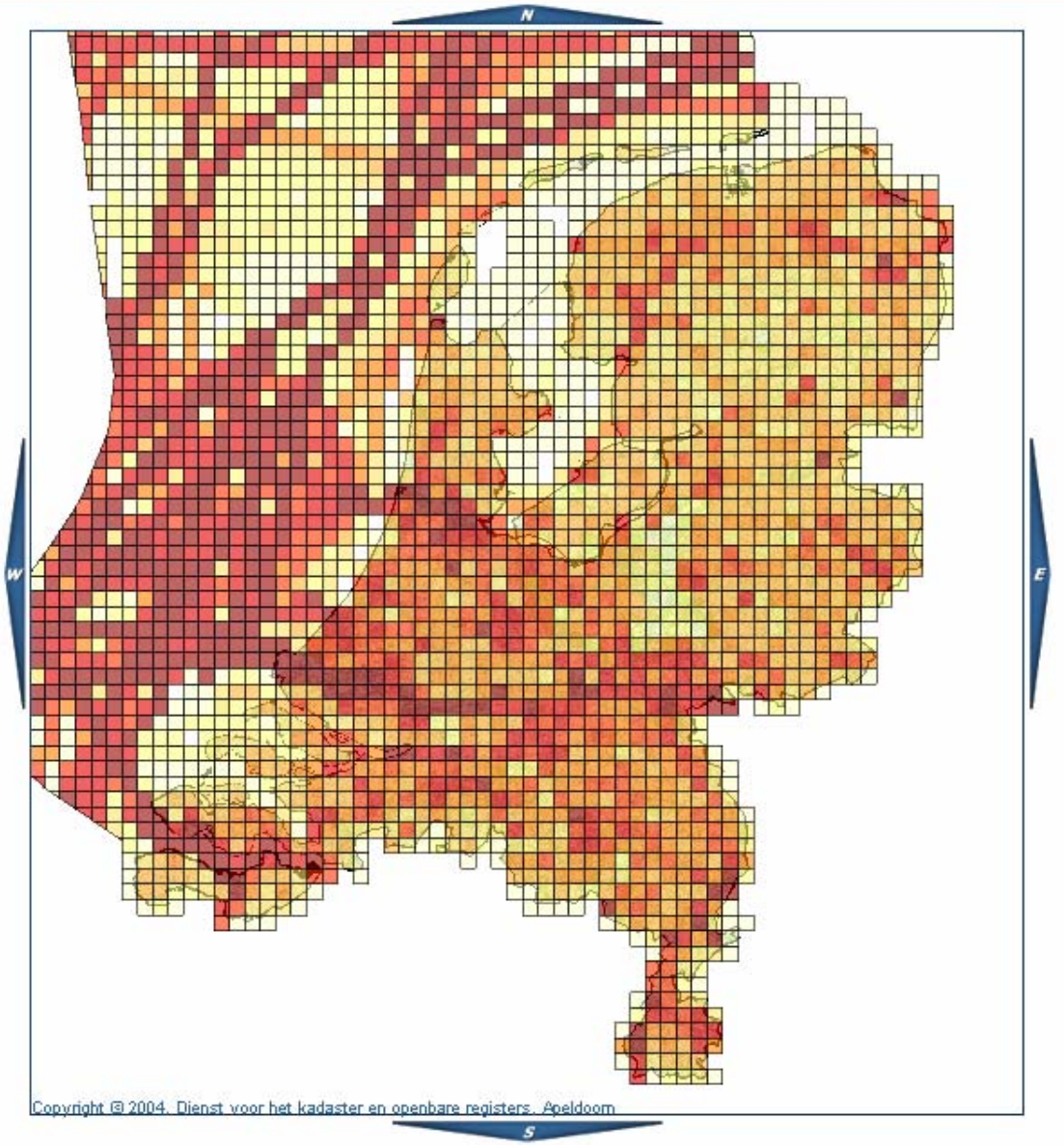

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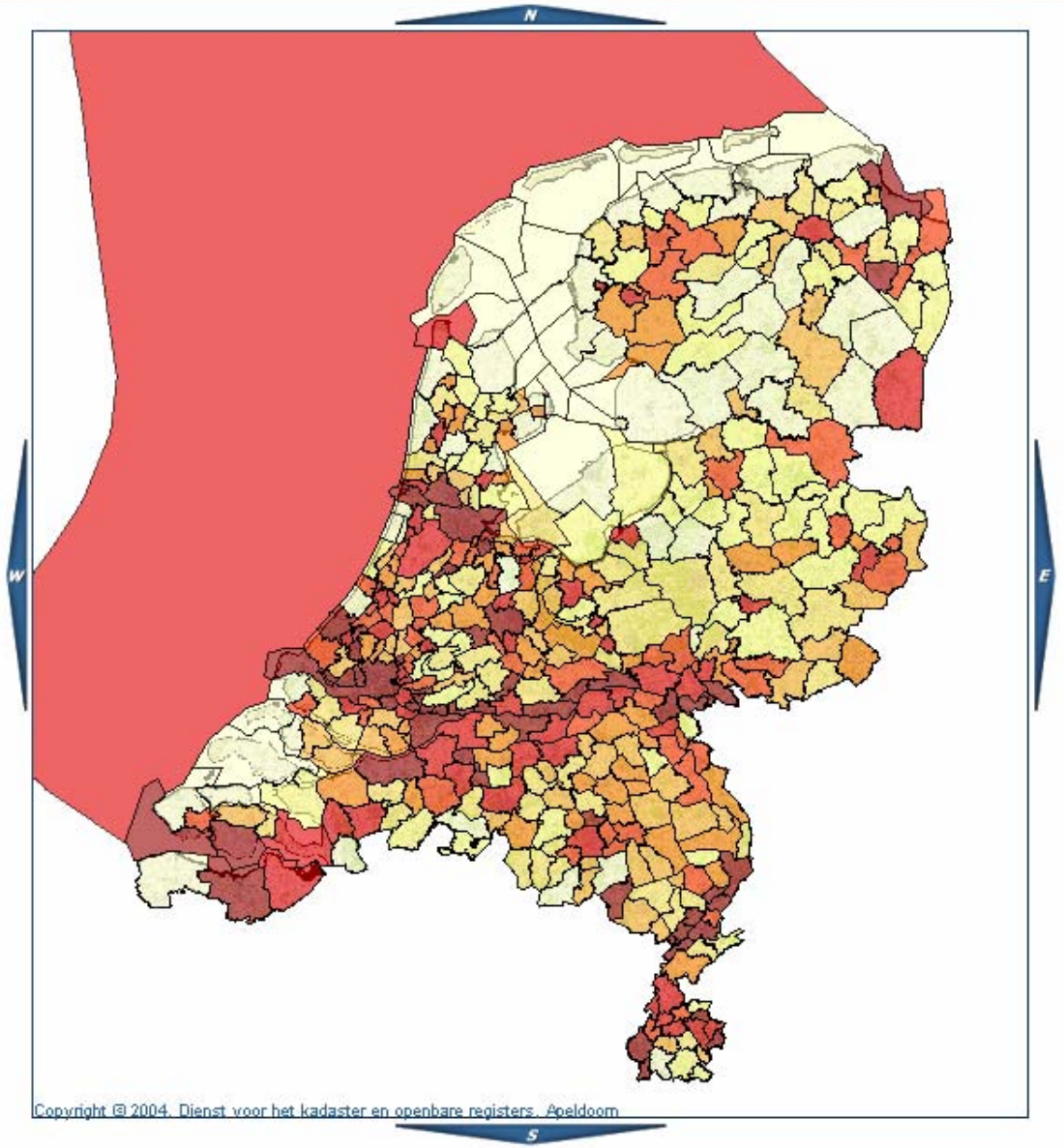
◉ Postalcode (4 positions)

○ Community

Search

Community (kg/km2)

- 0 - 88 (58)
- 88 - 116 (58)
- 116 - 140 (58)
- 140 - 196 (58)
- 196 - 252 (58)
- 252 - 416 (58)
- 416 - 966 (58)
- 966 - 127000 (53)



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Community

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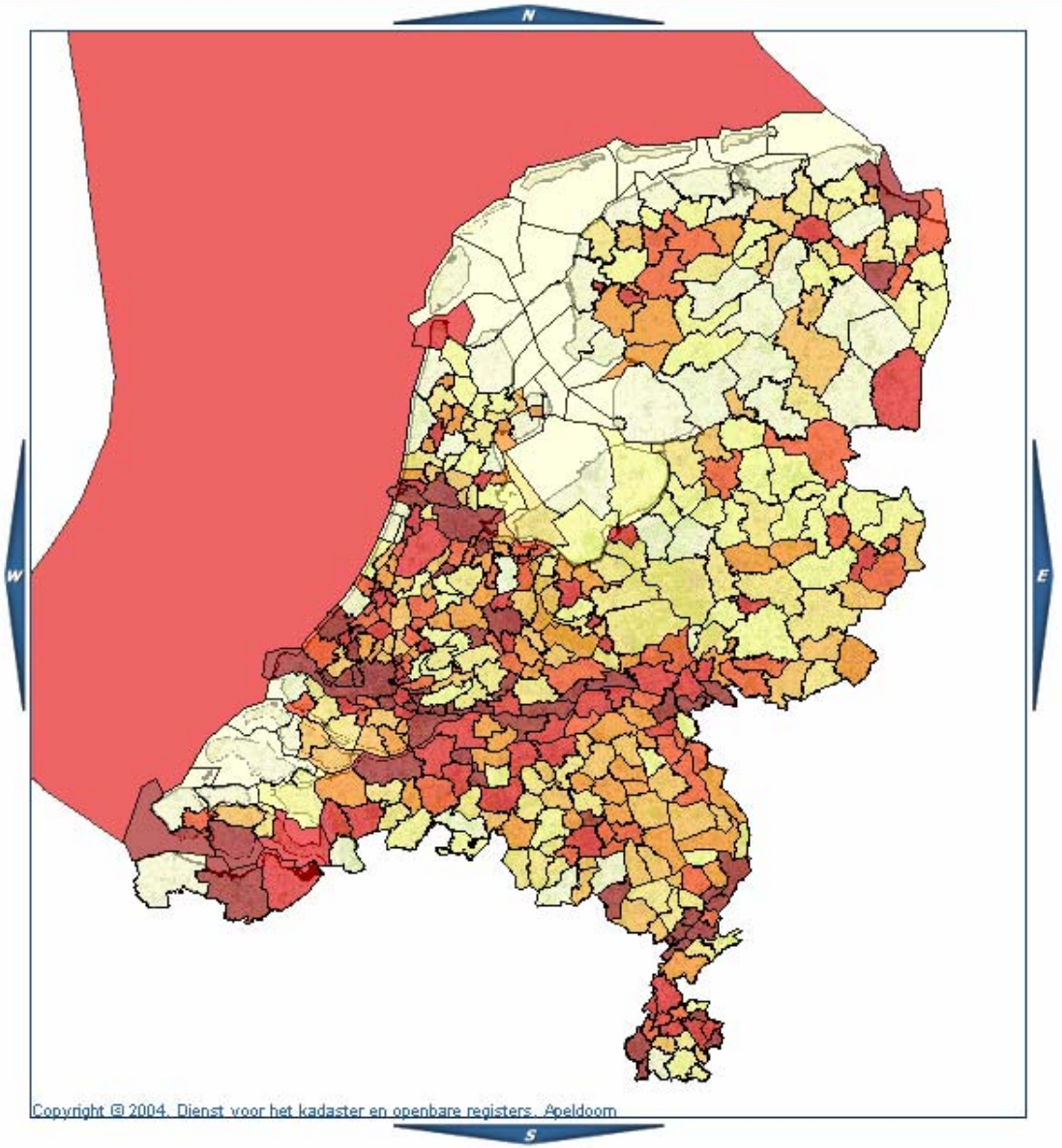

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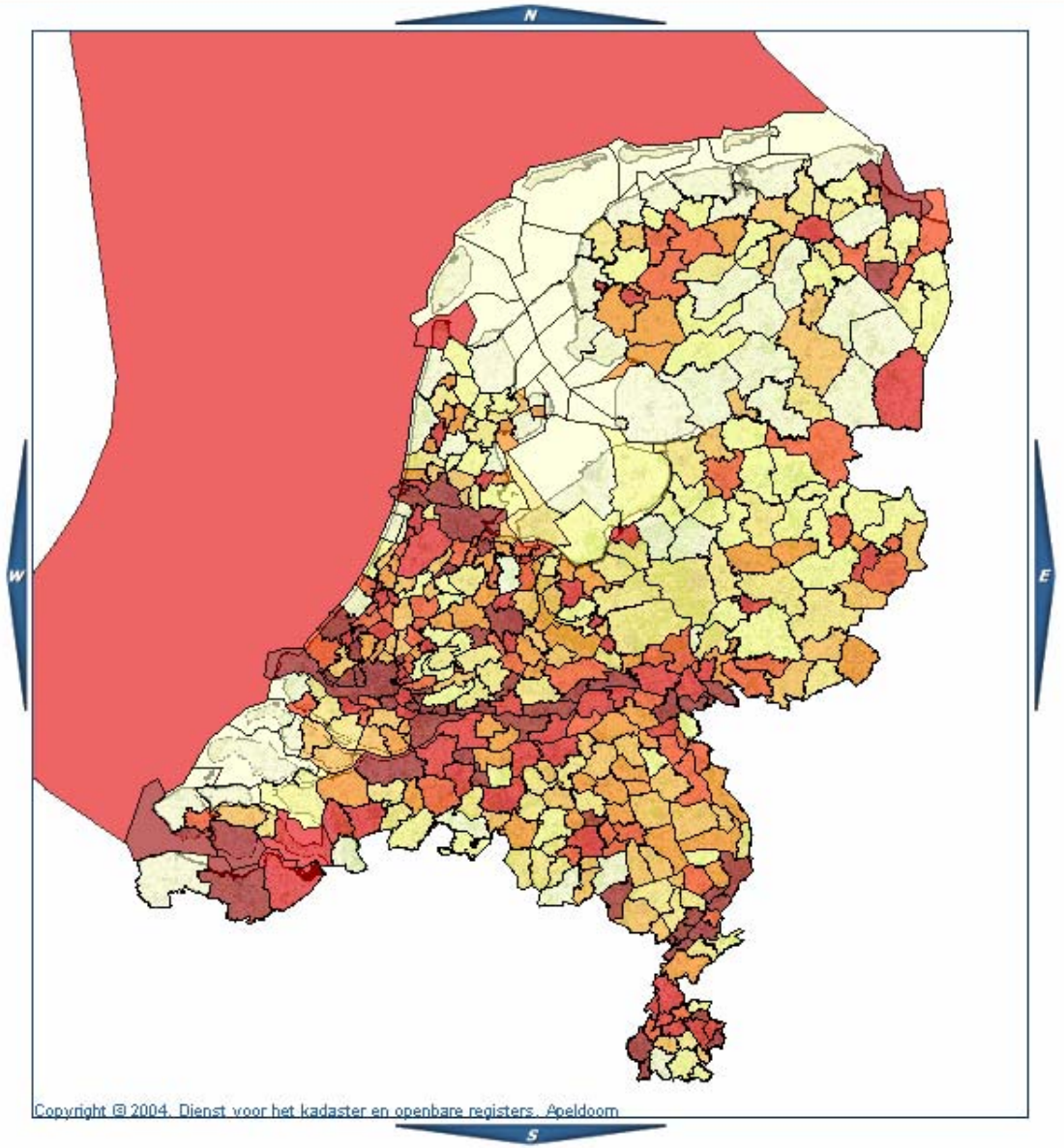

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Emissions per km2 ☐

Facilities: ☑

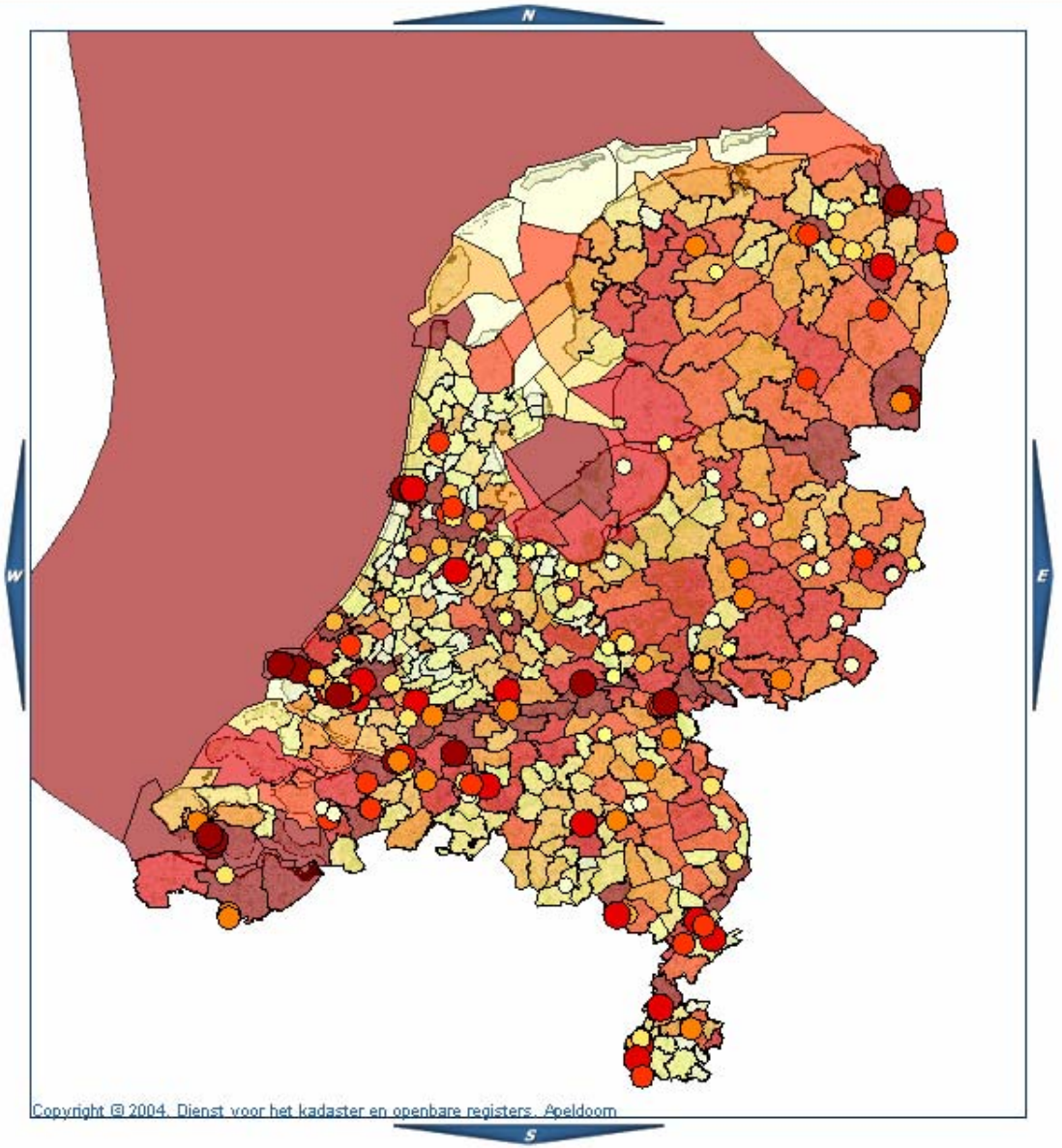
Refresh Map | Change selection

- ◉ Postalcode (4 positions)
- ○ Community
- ○ Companies

Search

Companies (kg)

- 0 - 0
- 0 - 12 (20)
- 12 - 117 (20)
- 117 - 316 (20)
- 316 - 1194 (20)
- 1194 - 5027 (20)
- 5027 - 30400 (20)
- 30400 - 289000 (20)
- 289000 - 17100000 (17)



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○ Postalcode (4 positions)

○ Community

◉ Companies

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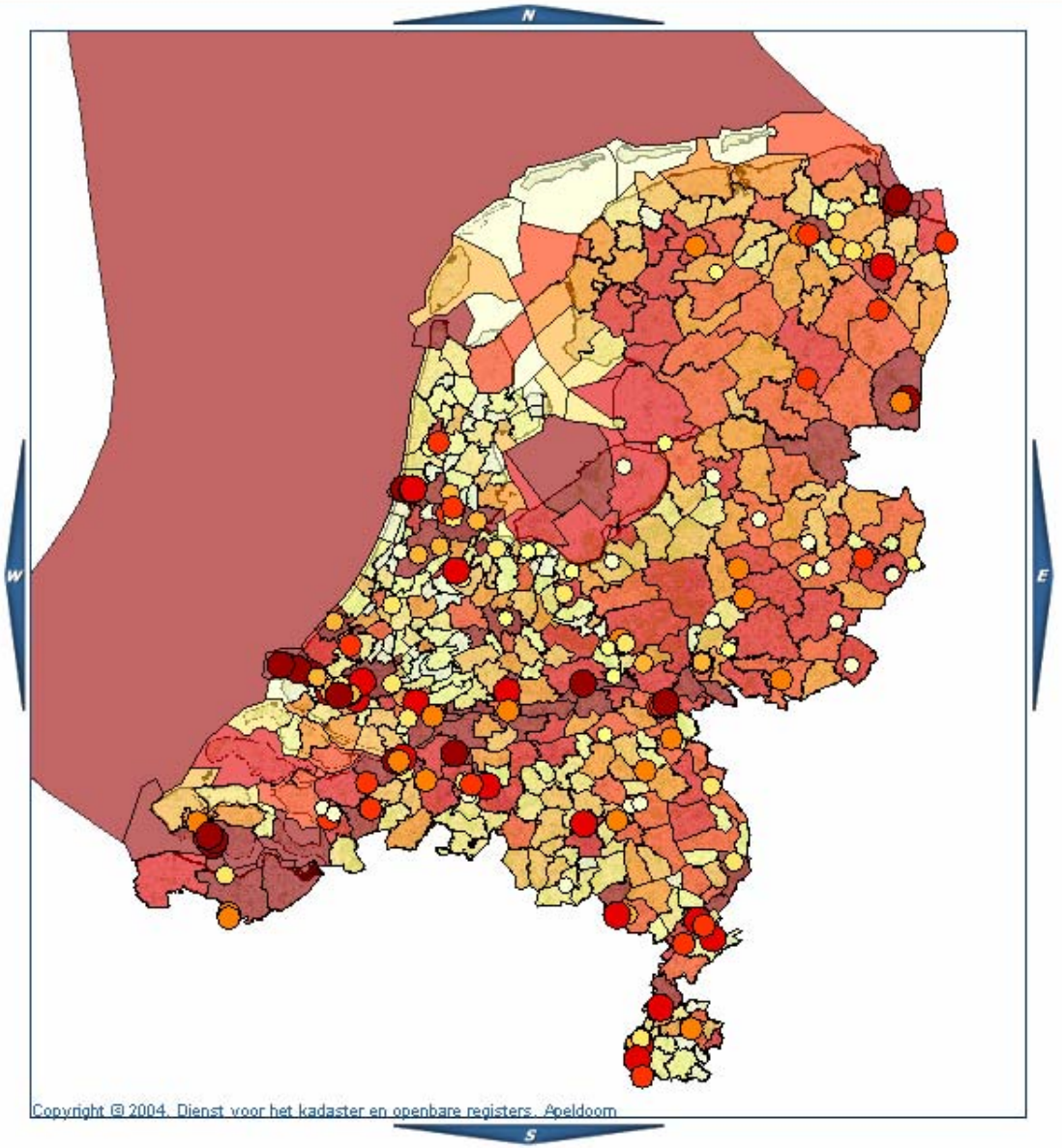

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Total

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Emissions per km2 ☐

Facilities: ☑

Refresh Map | Change selection

○ Postalcode (4 positions)

○ Community

◉ Companies

Ex | Search

---select one object---

Companies (kg)

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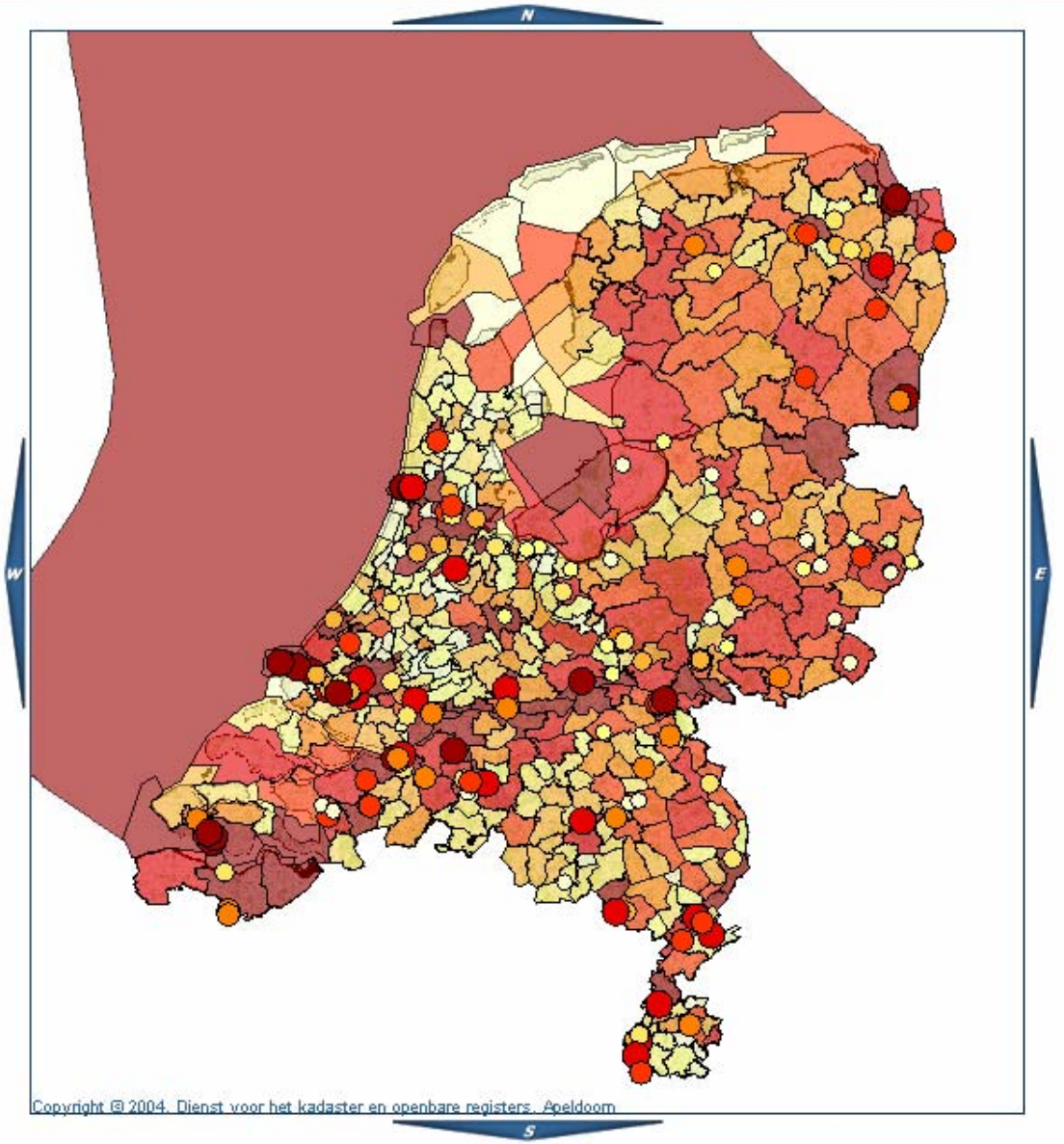

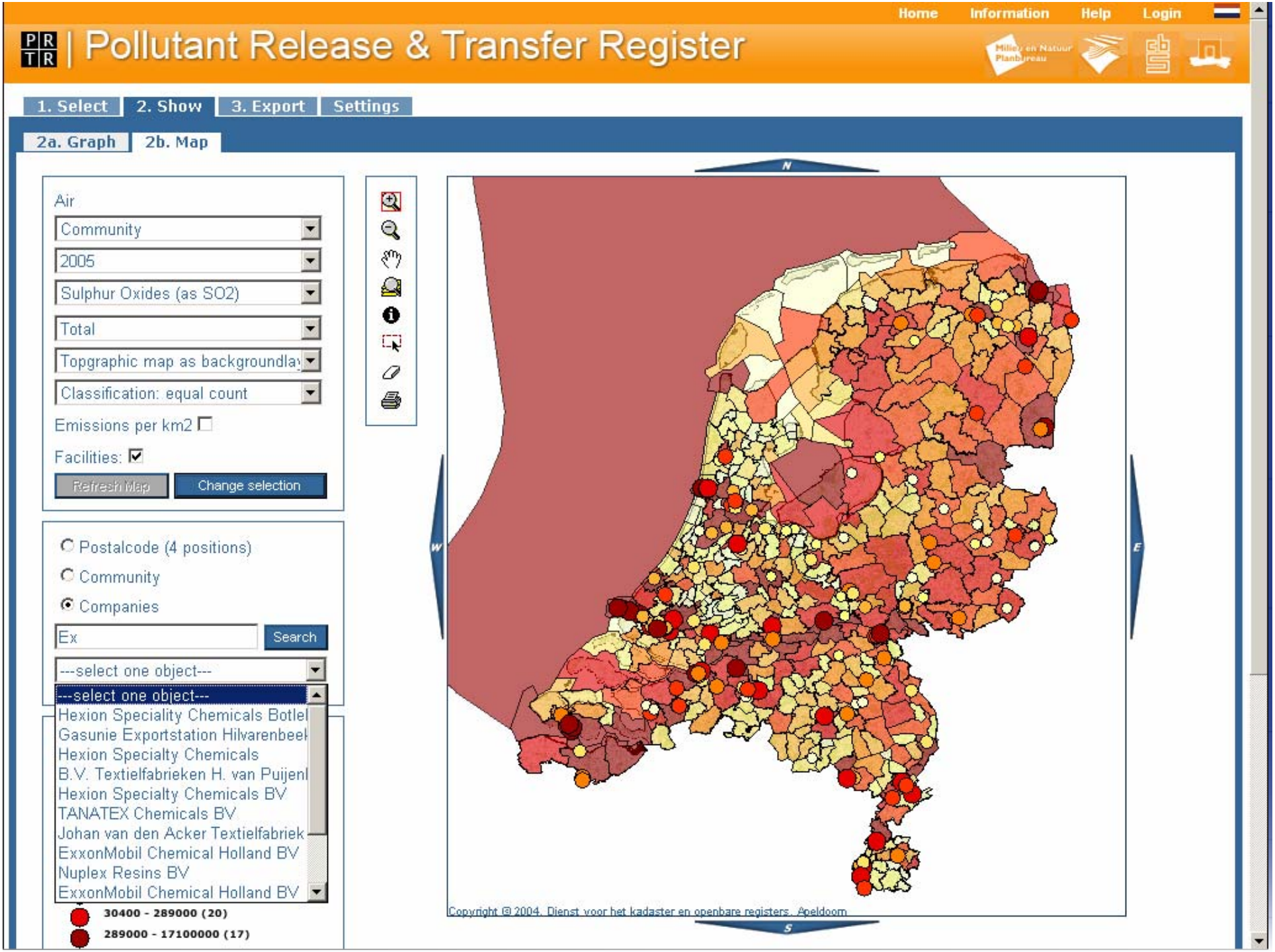
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Emissions per km2
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---select one object---
---select one object---
Hexion Speciality Chemicals Botlel
Gasunie Exportstation Hilvarenbeek
Hexion Specialty Chemicals
B.V. Textielfabrieken H. van Puijenl
Hexion Specialty Chemicals BV
TANATEX Chemicals BV
Johan van den Acker Textielfabriek
ExxonMobil Chemical Holland BV
Nuplex Resins BV
ExxonMobil Chemical Holland BV
30400 - 289000 (20)
289000 - 17100000 (17)
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W
E
S
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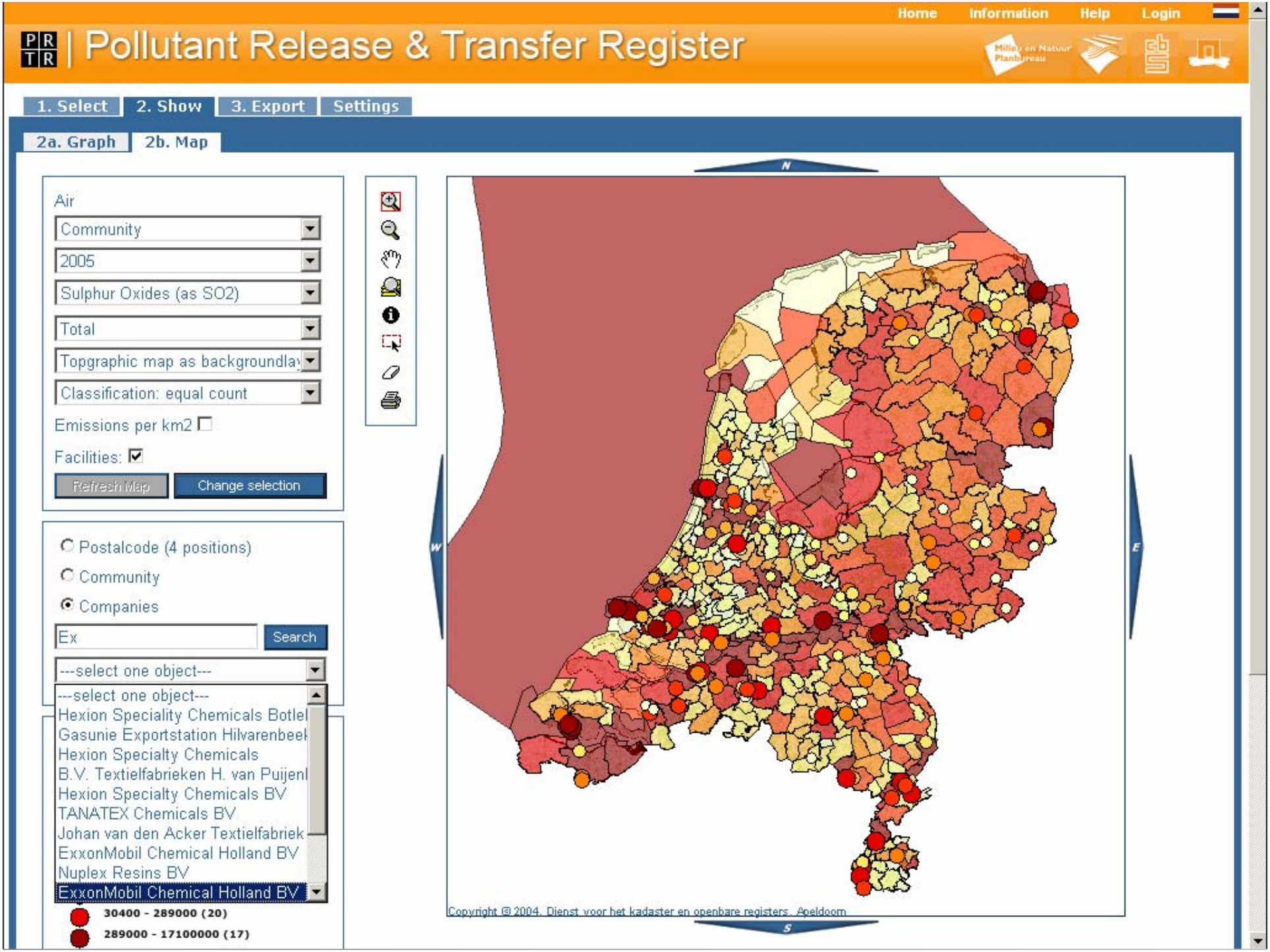
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Emissions per km2 ☐

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Refresh Map | Change selection

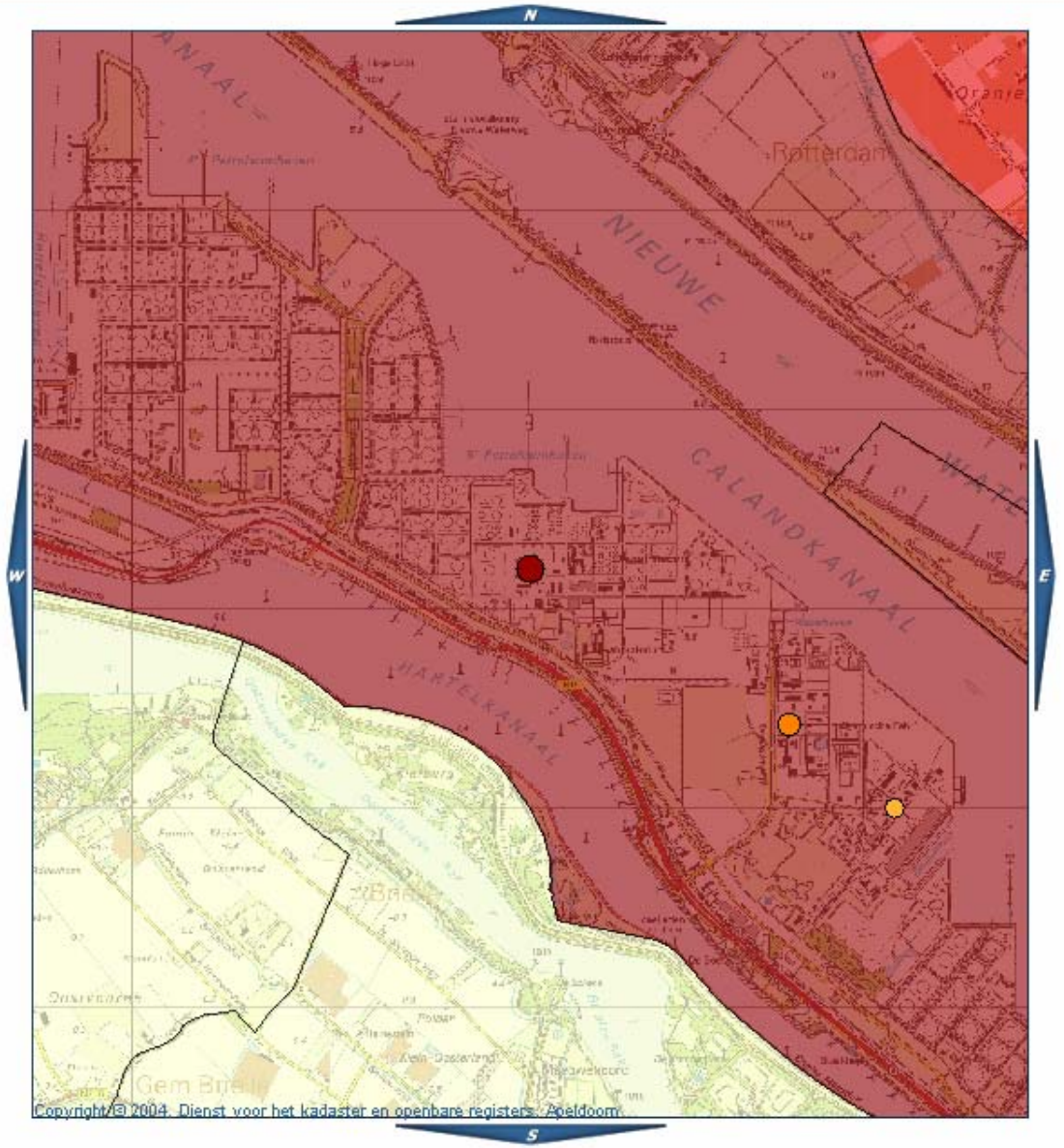
Postalcode (4 positions)

Community

Companies

Ex Search

ExxonMobil Chemical Holland BV



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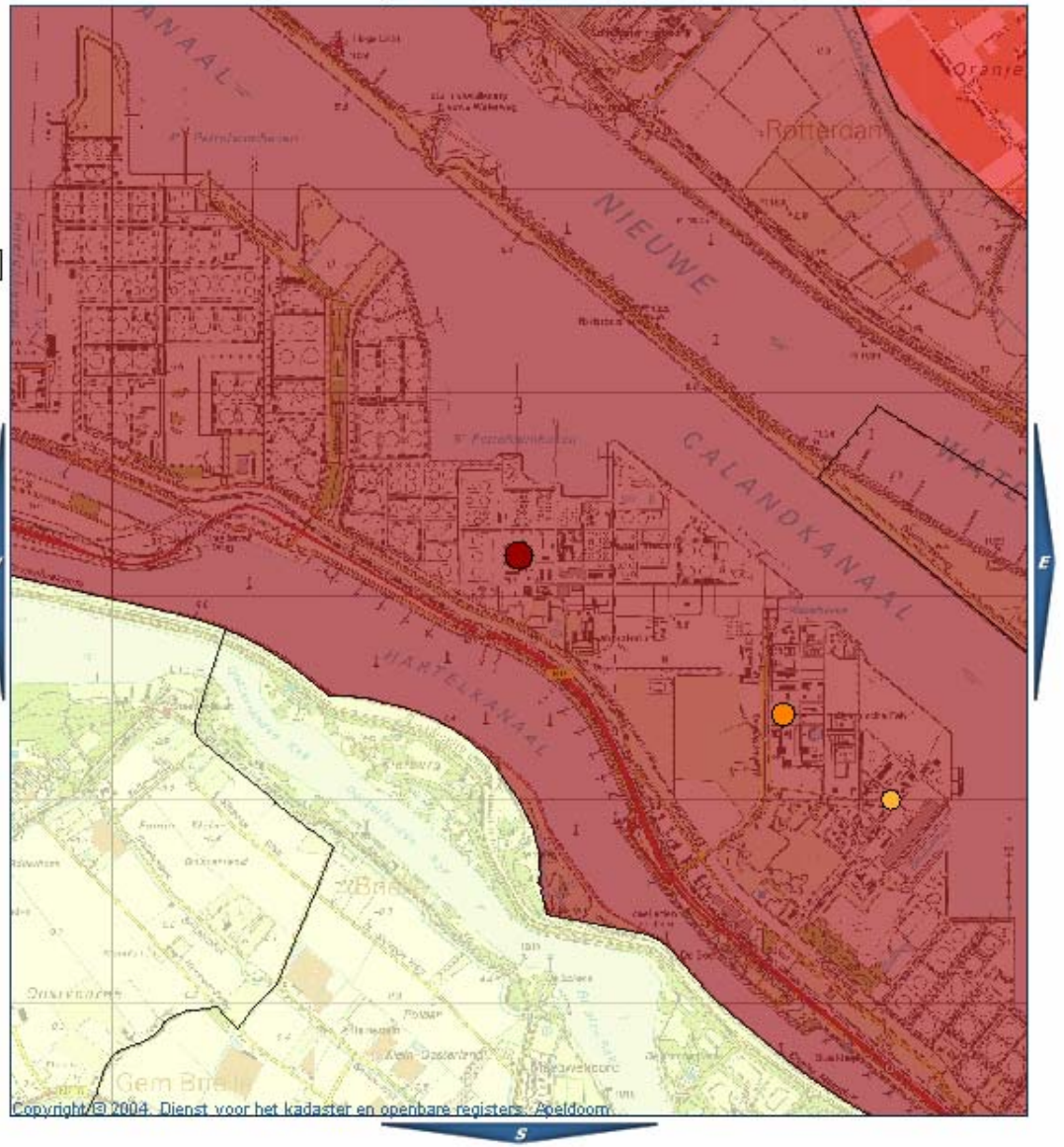
Emissions per km2 ☐

Facilities: ☑

Refresh Map | Change selection

Identify

N W E S



Postalcode (4 positions)

Community

Companies

Ex | Search

ExxonMobil Chemical Holland BV

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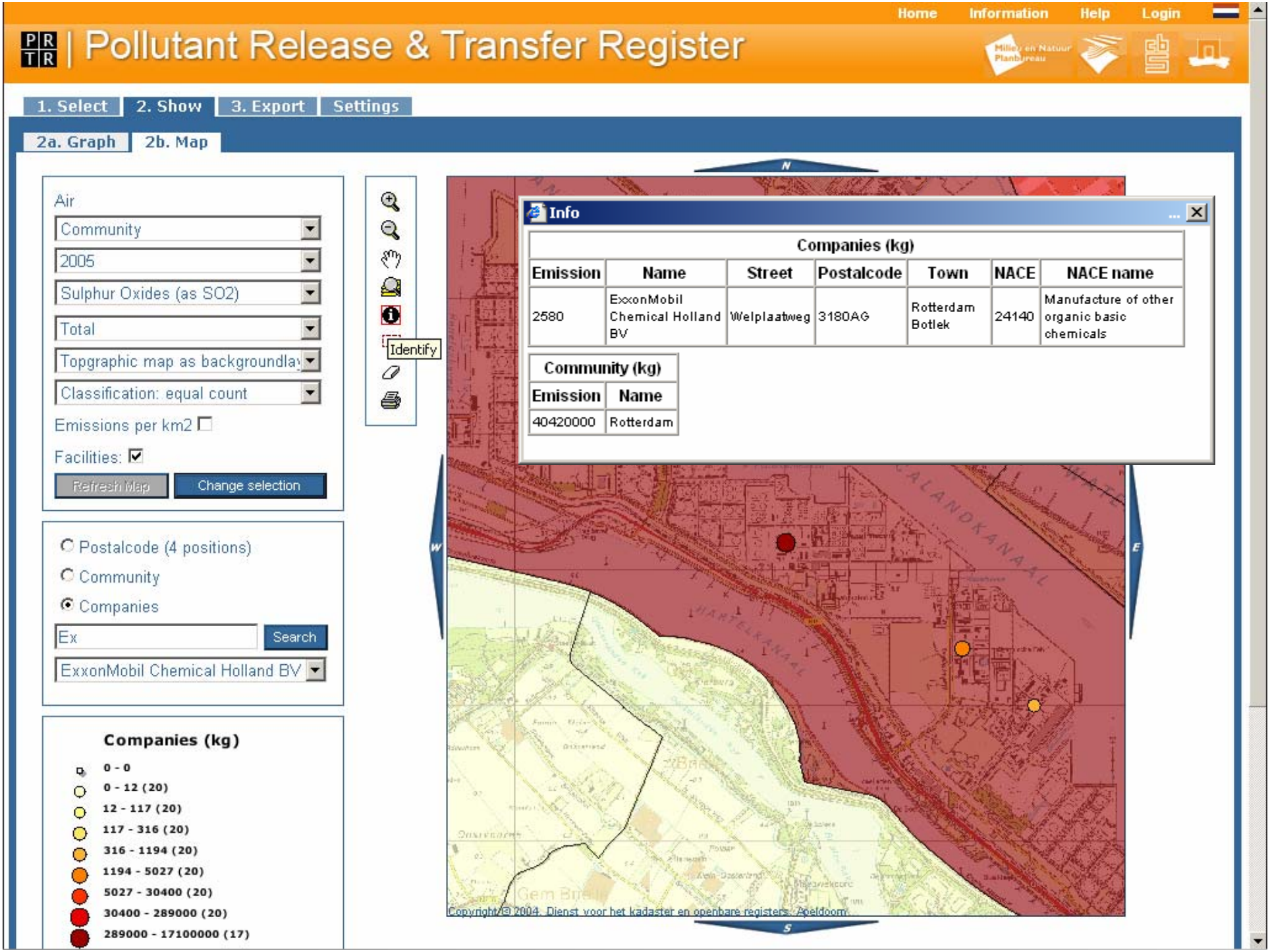
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Info
Companies (kg)
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Postalcode
Town
NACE
NACE name
2580
ExxonMobil Chemical Holland BV
Welplaatweg
3180AG
Rotterdam Botlek
24140
Manufacture of other organic basic chemicals
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40420000
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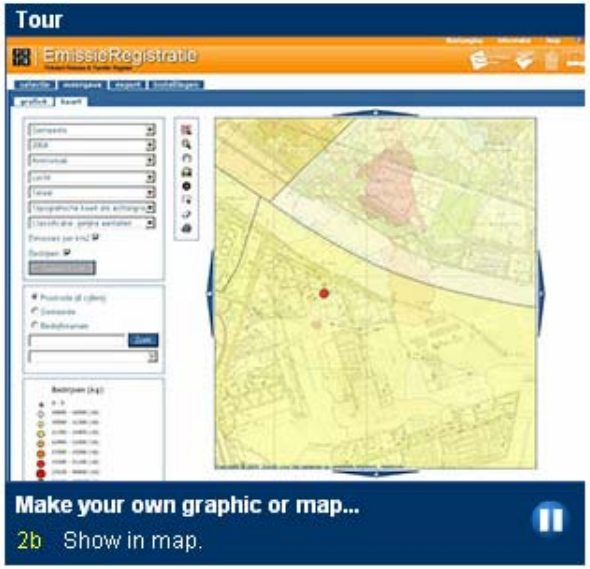
Related links

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

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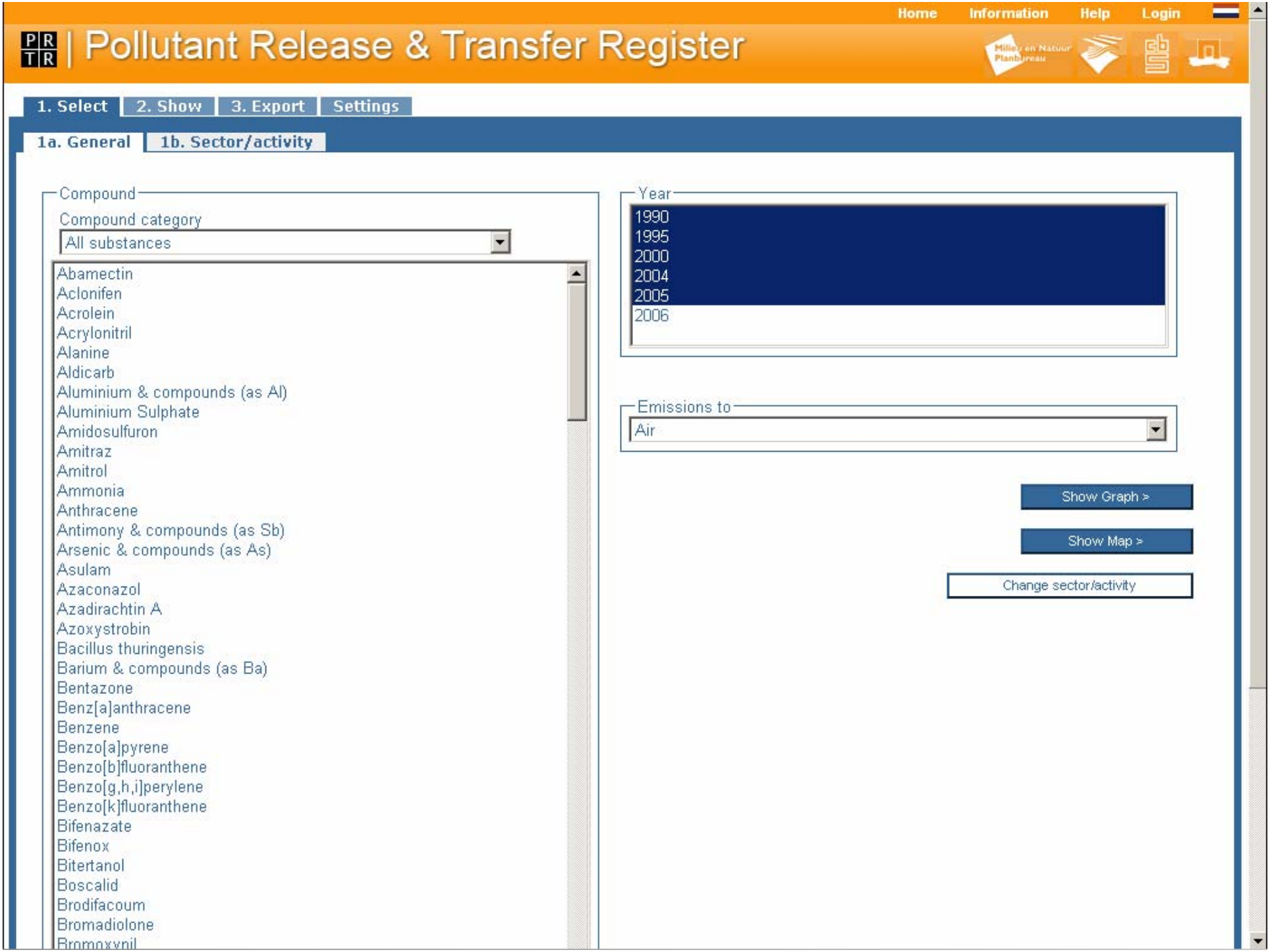
Please send us an update-mail if you want to be informed on website updates.

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 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 ....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Settings
1a. General
1b. Sector/activity
Compound
Compound category
All substances
Abamectin
Aclonifen
Acrolein
Acrylonitril
Alanine
Aldicarb
Aluminium & compounds (as Al)
Aluminium Sulphate
Amidosulfuron
Amitraz
Amitrol
Ammonia
Anthracene
Antimony & compounds (as Sb)
Arsenic & compounds (as As)
Asulam
Azaconazol
Azadirachtin A
Azoxystrobin
Bacillus thuringensis
Barium & compounds (as Ba)
Bentazone
Benz[a]anthracene
Benzene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Bifenazate
Bifenox
Bitertanol
Boscalid
Brodifacoum
Bromadiolone
Bromoxynil
Year
1990
1995
2000
2004
2005
2006
Emissions to
Air
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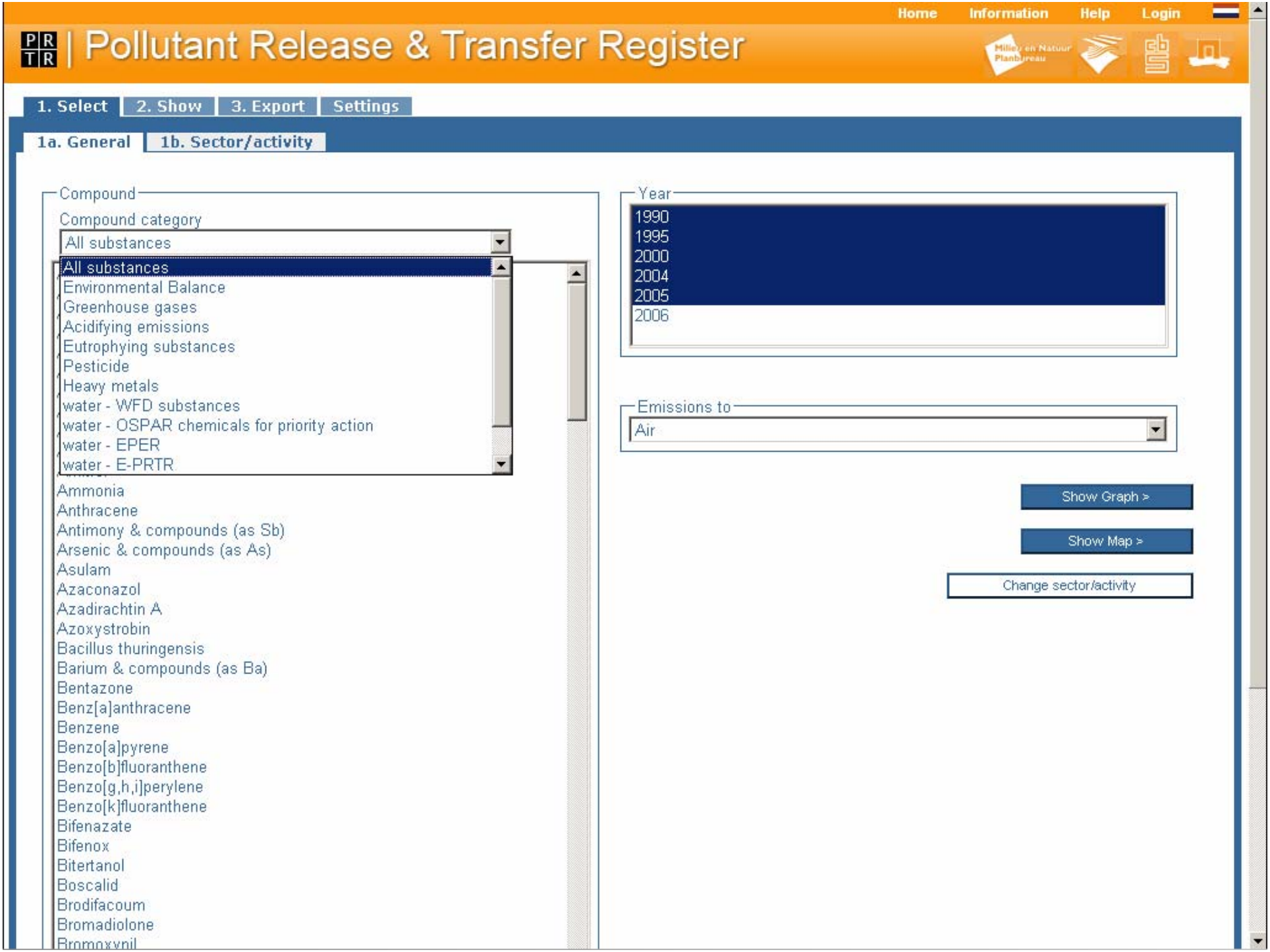
Show Map >
Change sector/activity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Compound category
All substances
All substances
Environmental Balance
Greenhouse gases
Acidifying emissions
Eutrophying substances
Pesticide
Heavy metals
water - WFD substances
water - OSPAR chemicals for priority action
water - EPER
water - E-PRTR
Ammonia
Anthracene
Antimony & compounds (as Sb)
Arsenic & compounds (as As)
Asulam
Azaconazol
Azadirachtin A
Azoxystrobin
Bacillus thuringensis
Barium & compounds (as Ba)
Bentazone
Benz[a]anthracene
Benzene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Bifenazate
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Bitertanol
Boscalid
Brodifacoum
Bromadiolone
Year
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1995
2000
2004
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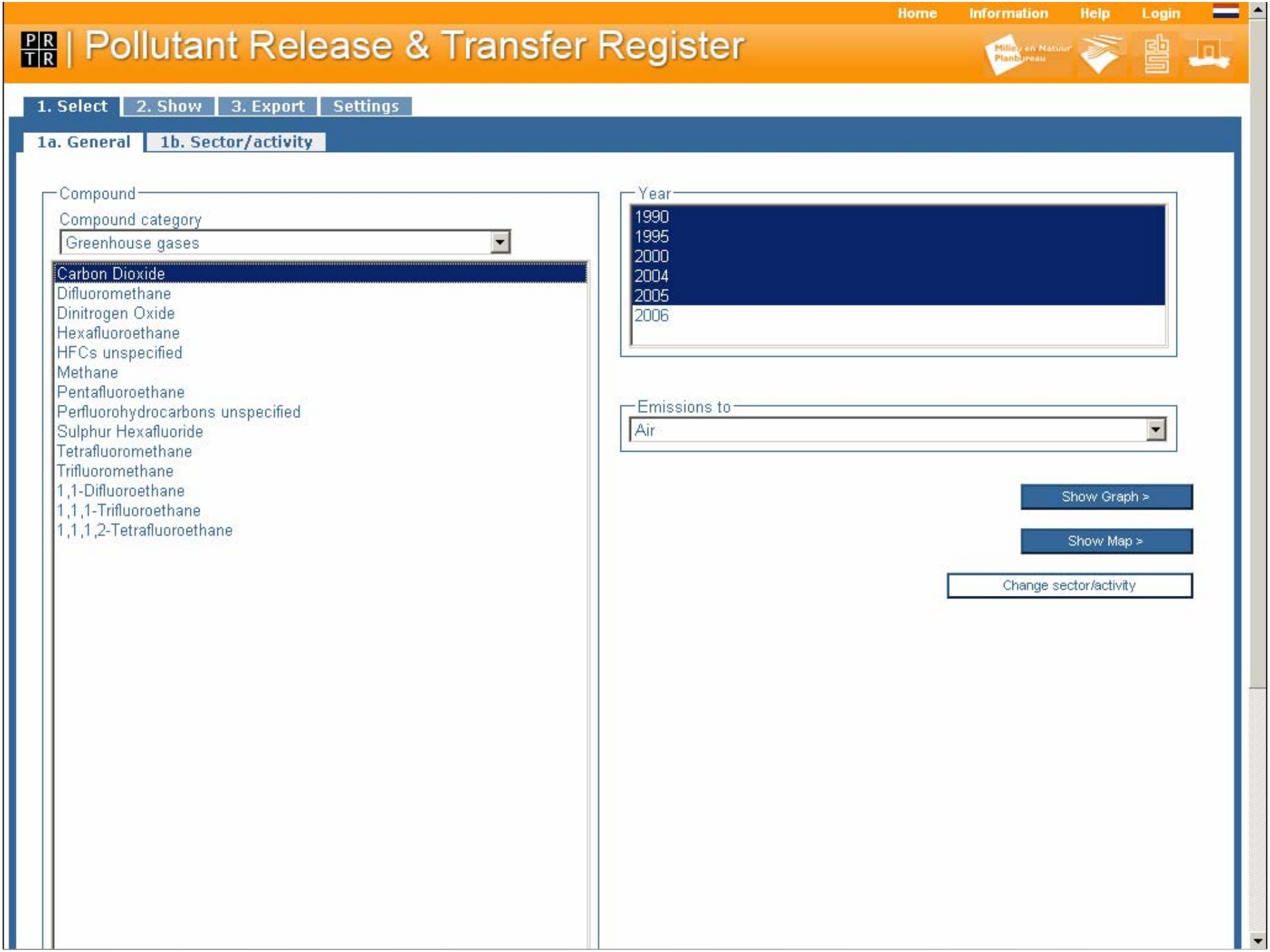
2006
Emissions to
Air
Show Graph >
Show Map >
Change sector/activity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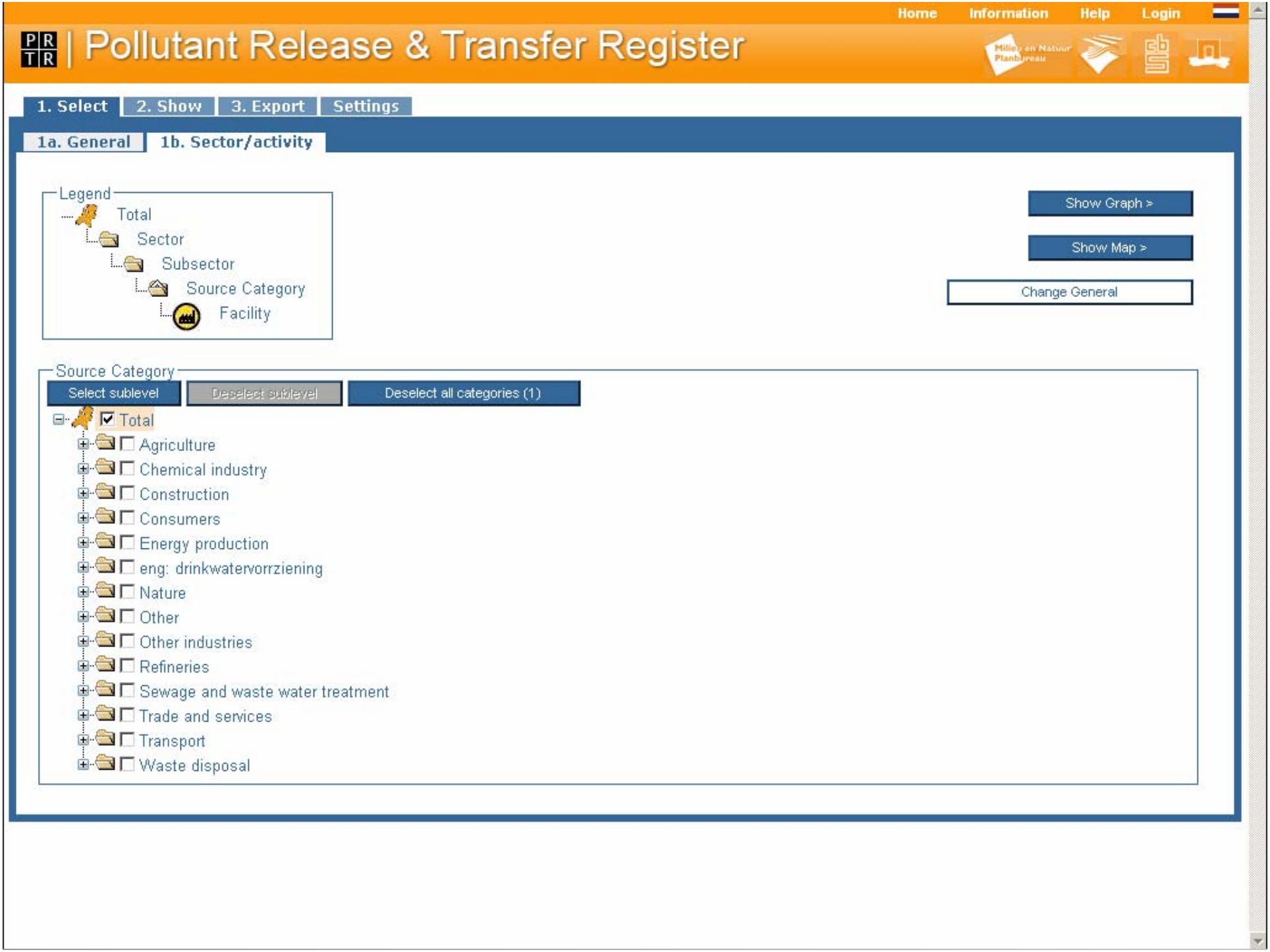
1b. Sector/activity
Compound
Compound category
Greenhouse gases
Carbon Dioxide
Difluoromethane
Dinitrogen Oxide
Hexafluoroethane
HFCs unspecified
Methane
Pentafluoroethane
Perfluorohydrocarbons unspecified
Sulphur Hexafluoride
Tetrafluoromethane
Trifluoromethane
1,1-Difluoroethane
1,1,1-Trifluoroethane
1,1,1,2-Tetrafluoroethane
Year
1990
1995
2000
2004
2005
2006
Emissions to
Air
Show Graph >
Show Map >
Change sector/activity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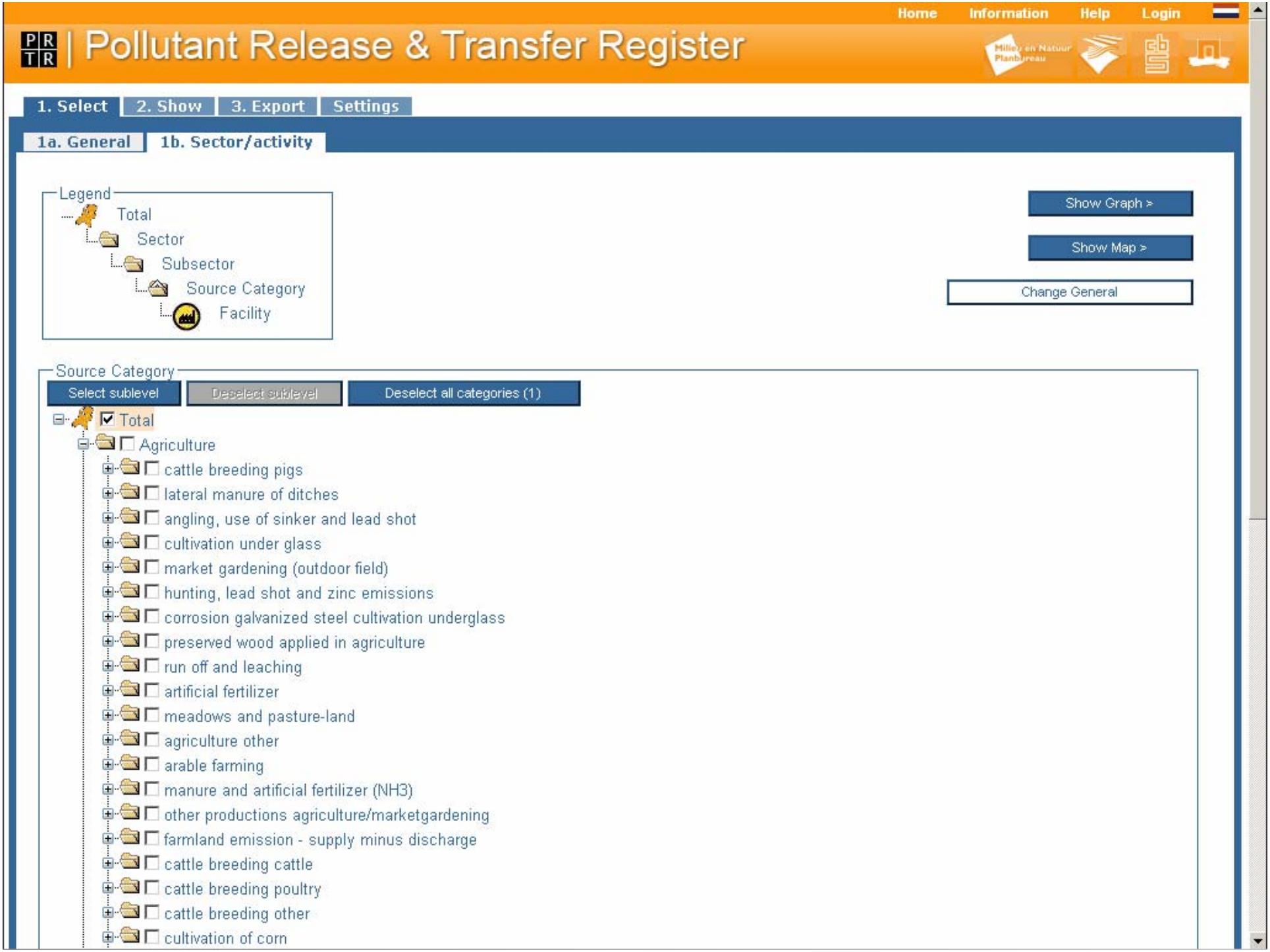
Source Category
Facility
Show Graph >
Show Map >
Change General
Source Category
Select sublevel
Deselect sublevel
Deselect all categories (1)
Total
Agriculture
Chemical industry
Construction
Consumers
Energy production
eng: drinkwatervorrziening
Nature
Other
Other industries
Refineries
Sewage and waste water treatment
Trade and services
Transport
Waste disposal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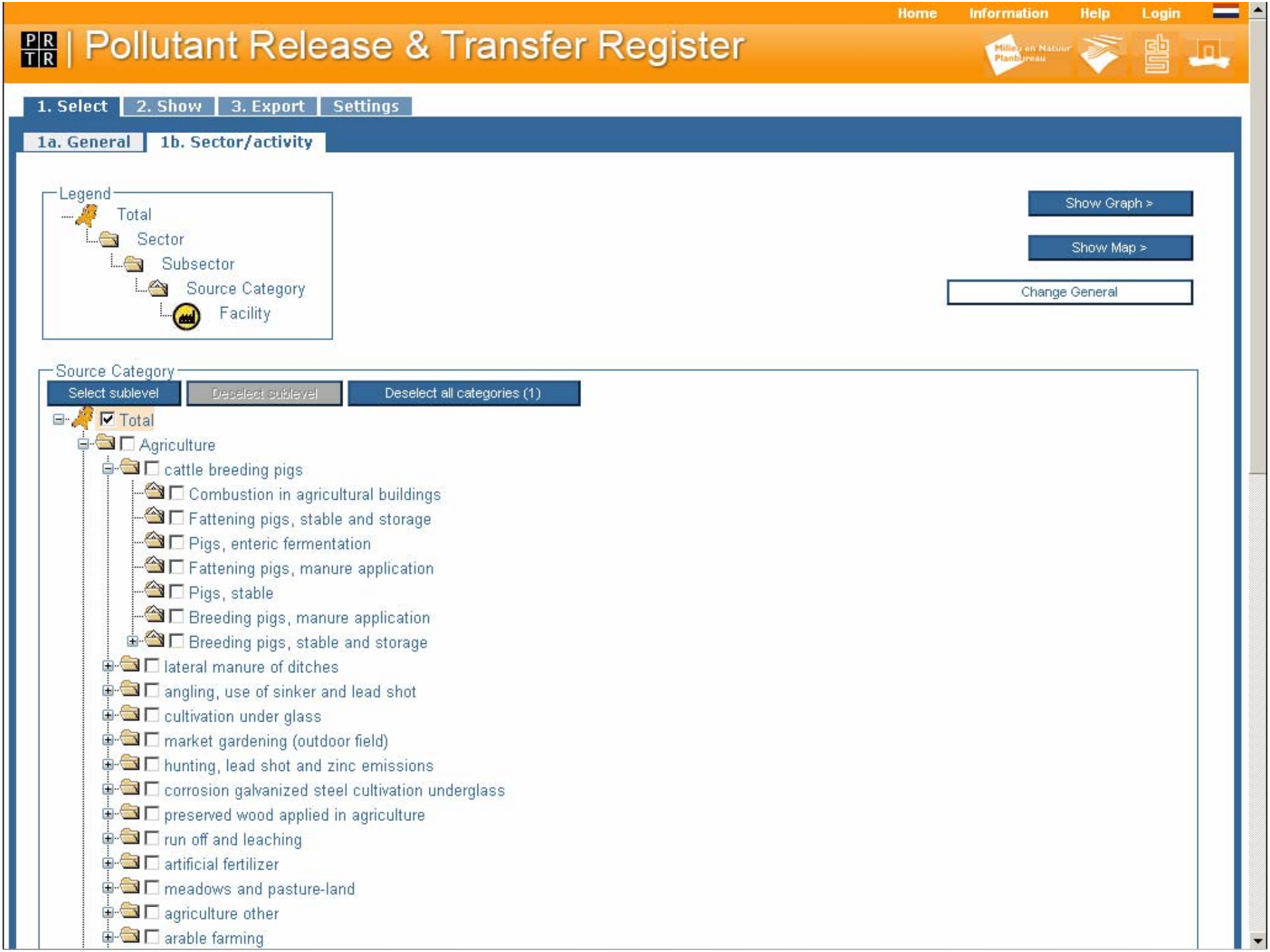
Source Category
Select sublevel
Deselect sublevel
Deselect all categories (1)
Total
Agriculture
cattle breeding pigs
lateral manure of ditches
angling, use of sinker and lead shot
cultivation under glass
market gardening (outdoor field)
hunting, lead shot and zinc emissions
corrosion galvanized steel cultivation underglass
preserved wood applied in agriculture
run off and leaching
artificial fertilizer
meadows and pasture-land
agriculture other
arable farming
manure and artificial fertilizer (NH3)
other productions agriculture/marketgardening
farmland emission - supply minus discharge
cattle breeding cattle
cattle breeding poultry
cattle breeding other
cultivation of corn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Change General
Source Category
Select sublevel
Deselect sublevel
Deselect all categories (1)
Total
Agriculture
cattle breeding pigs
Combustion in agricultural buildings
Fattening pigs, stable and storage
Pigs, enteric fermentation
Fattening pigs, manure application
Pigs, stable
Breeding pigs, manure application
Breeding pigs, stable and storage
lateral manure of ditches
angling, use of sinker and lead shot
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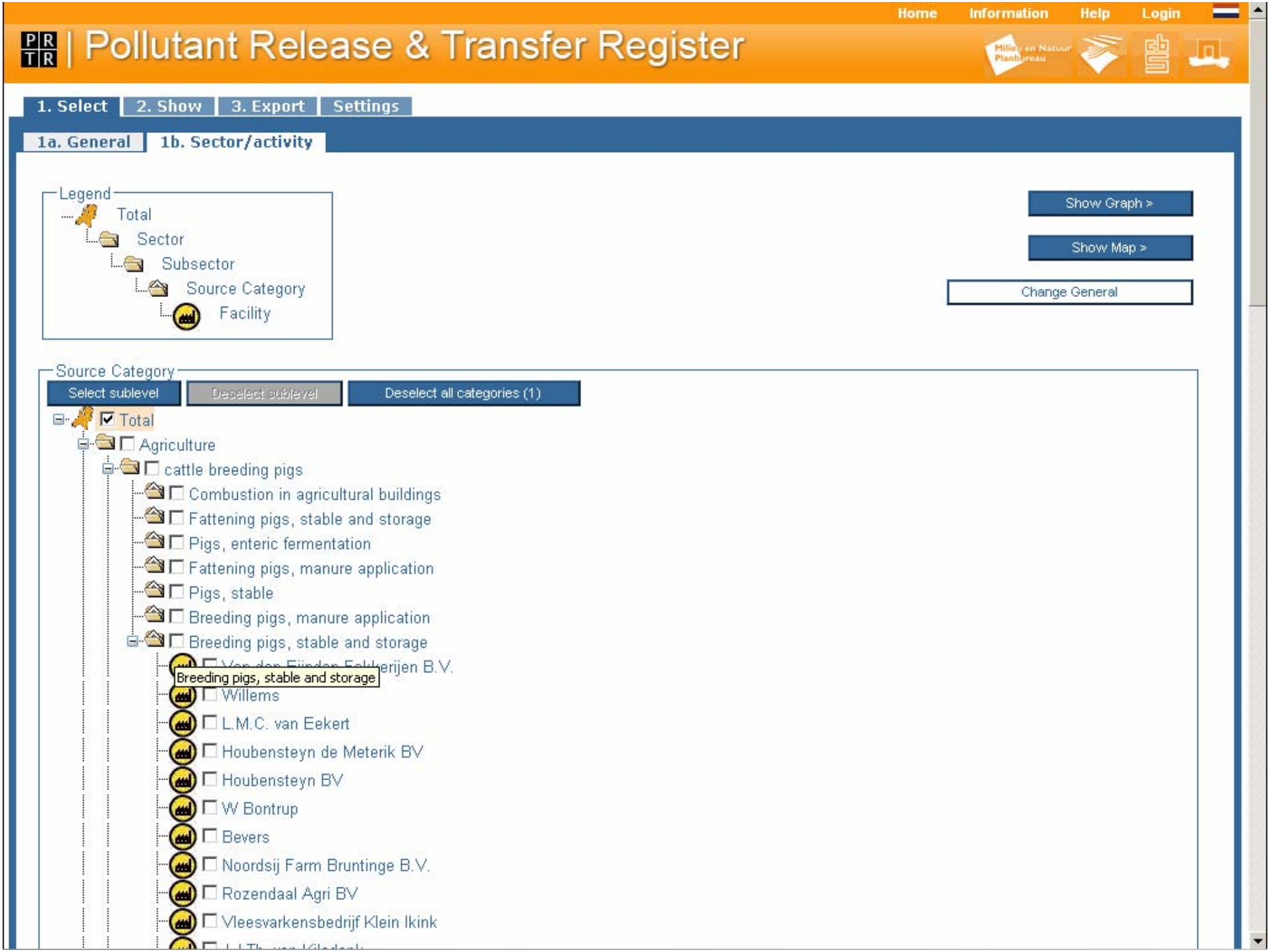
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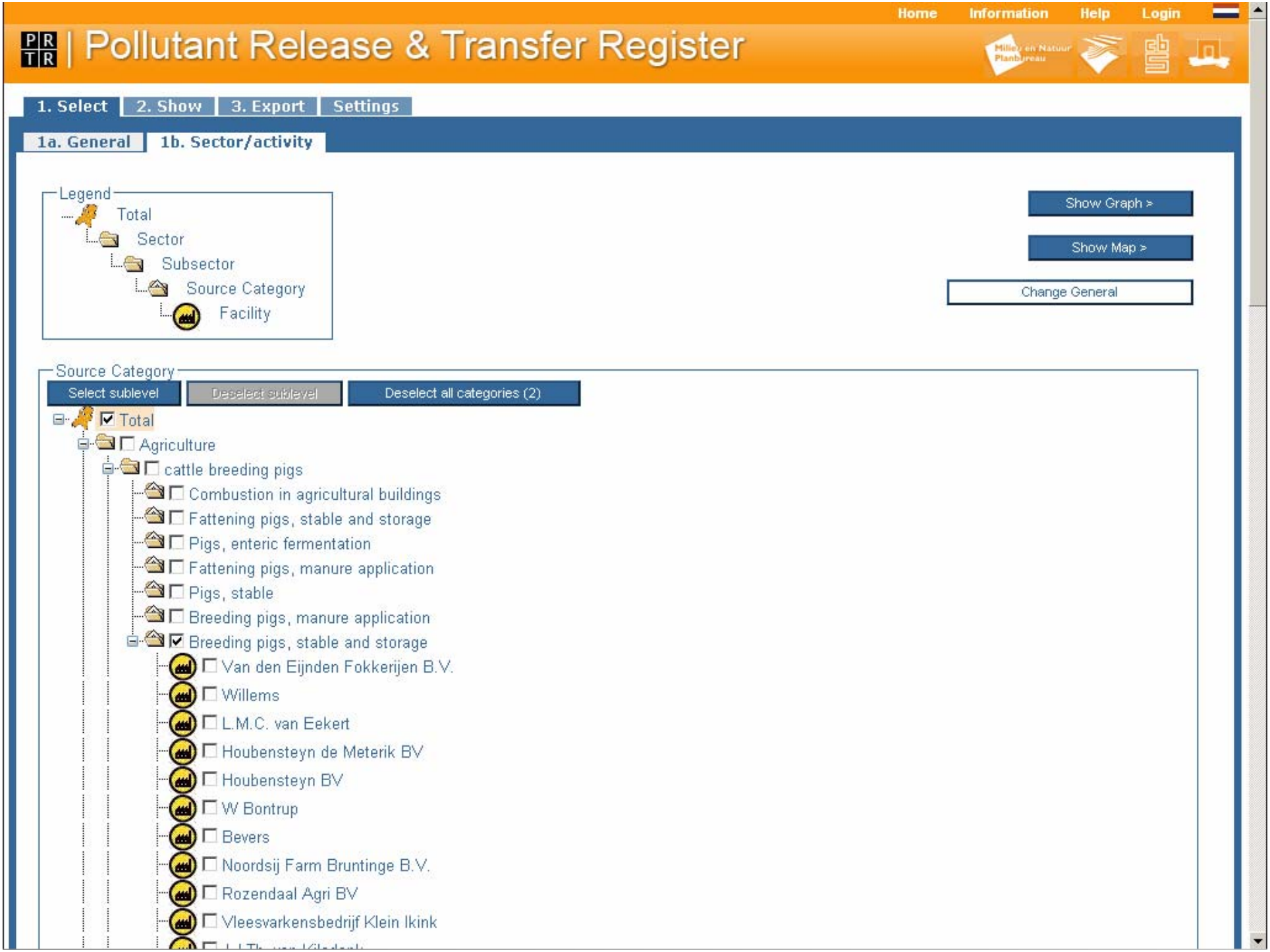
Willems
L.M.C. van Eekert
Houbensteyn de Meterik BV
Houbensteyn BV
W Bontrup
Bevers
Noordsij Farm Bruntinge B.V.
Rozendaal Agri BV
Vleesvarkensbedrijf Klein Ikink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1a. General
1b. Sector/activity
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Subsector
Source Category
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Deselect sublevel
Deselect all categories (2)
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Agriculture
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Combustion in agricultural buildings
Fattening pigs, stable and storage
Pigs, enteric fermentation
Fattening pigs, manure application
Pigs, stable
Breeding pigs, manure application
Breeding pigs, stable and storage
Van den Eijnden Fokkerijen B.V.
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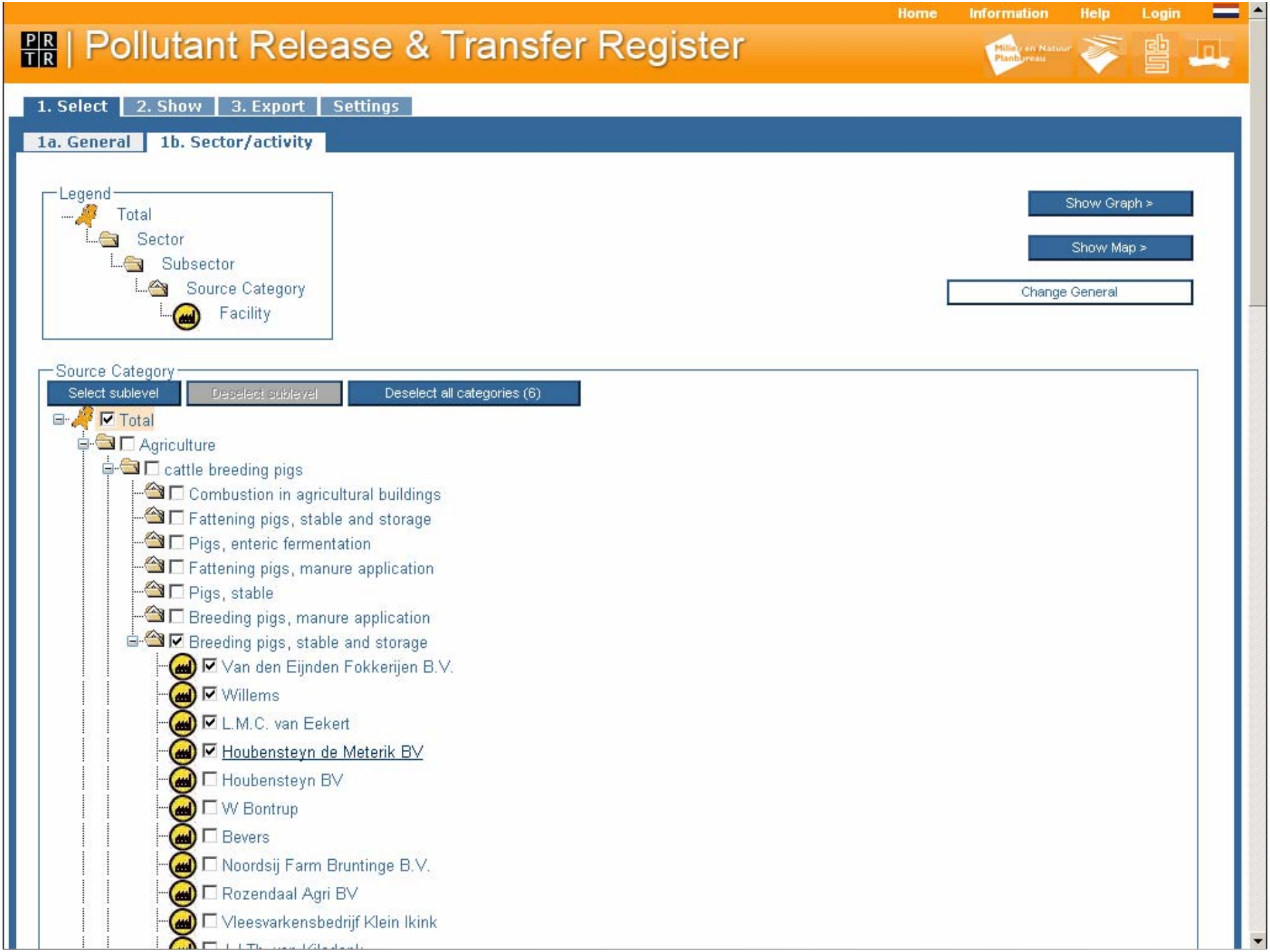
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Subsector
Source Category
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Show Graph >
Show Map >
Change General
Source Category
Select sublevel
Deselect sublevel
Deselect all categories (6)
Total
Agriculture
cattle breeding pigs
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Rozendaal Agri BV
Vleesvarkensbedrijf Klein Ikink

Absolute / Relative Year of reference 1990 Ok

Show only current selection / Add new selection

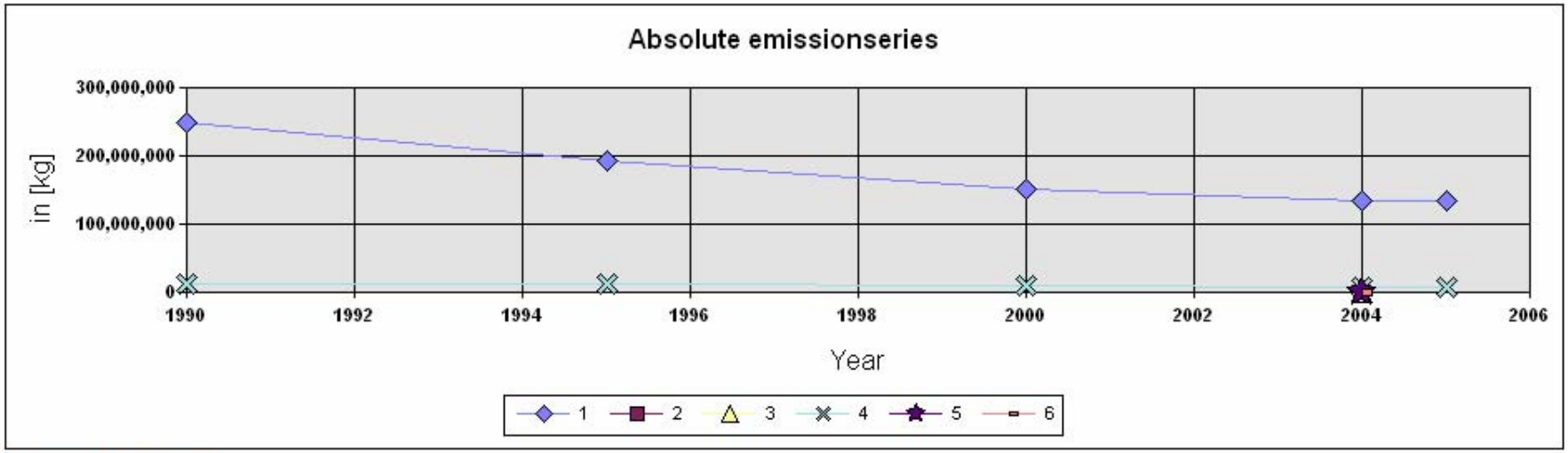
Selection

Pollutant: Ammonia

Year: 1990,1995,2000,2004,2005

Compartment: Air

Change selection



Remove | To Excel

#		Sector/Activity	Theme	Pollutant	Unit	Sectortype	Sector	1990	1995	2000	2004	2005	Activity	Facility	Compartment
1	☐	Total		Ammonia	kg			249800000	192600000	152200000	133900000	133000000			Air
4	☐	Breeding pigs, stable and storage		Ammonia	kg	Subsector	cattle breeding pigs	11980000	10990000	8817000	7020000	7258000	Breeding pigs, stable and storage		Air
2	☐	Willems		Ammonia	kg						11900		Breeding pigs, stable and	201109	Air

PRTR | Pollutant Release & Transfer Register

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

Make your graphic or map
Select pollutants, sources ...

Documentation
All documents
Search in documents
Glossary
Related links

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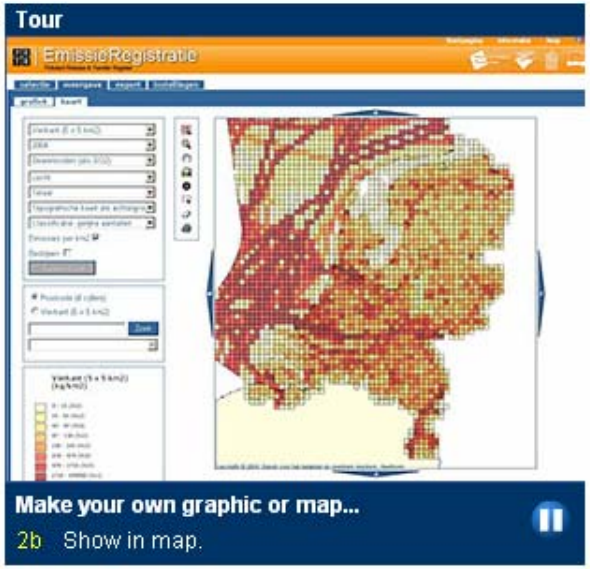

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More about the Netherlands PRTR ....

QA/QC by the public

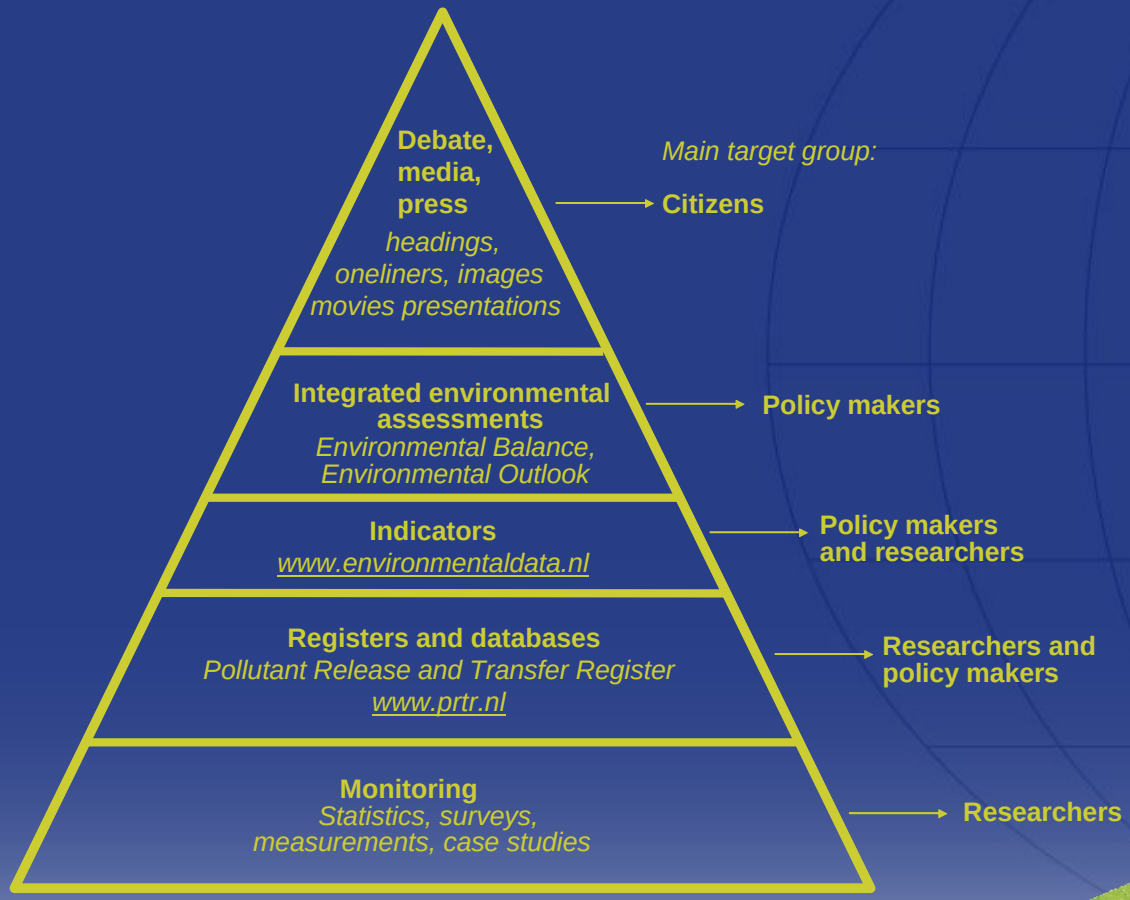
Webstatistics show:

- 1500 visitors per month
- 80% professional users
- 20% from abroad
- 150 requests for additional data
- 15 corrections last 12 months

To complex and to detailed for the general public

Netherlands Environmental Assessment Agency

Information pyramid for Environmental information in the Netherlands (adaptation from *World resource institute 1995)*



Netherlands Environmental Assessment Agency

Planned improvements

Short term (2008)

- ‘deep links’ from prtr.nl (level 4) to higher level websites
  - With policy goals, concentrations etc. of current source or pollutant
  - With factsheets for each pollutant
- Better handling of selections without data
- Extra top10 with the most relevant sources/facilities
- Reductions amount of emission sources from 1200 → 700
- Tool tips

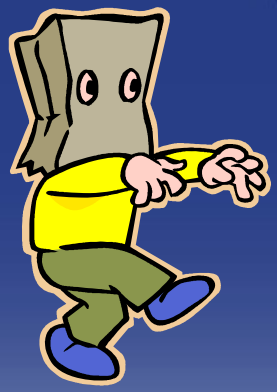
Long term (2009)

- Alternative user interface tested now

Netherlands Environmental Assessment Agency

Questions?

Wim van der Maas
Netherlands Environmental Assessment Agency
Wim.van.der.Maas@mnp.nl



Netherlands Environmental Assessment Agency