

# The National Atmospheric Emissions Inventory (NAEI)

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# What is the NAEI

- UK Air emissions estimates
- All UK sources\*
- Consistent time trend 1970 - 2001
- Air Quality and Greenhouse Gas Pollutants
- Statistics and measurement based



\* excludes natural sources

# What does the NAEI do

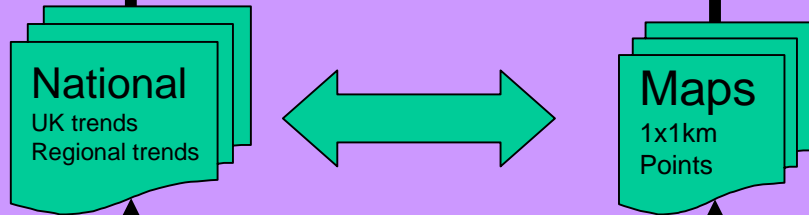
- Meet the UK's Air emission reporting commitments
- To Support Government in policy making related to sources of air pollution
  - UK emission trends
  - Input to atmospheric models
  - Supporting Local Government
- Informing the public

# How the NAEI Works

## 6) Products

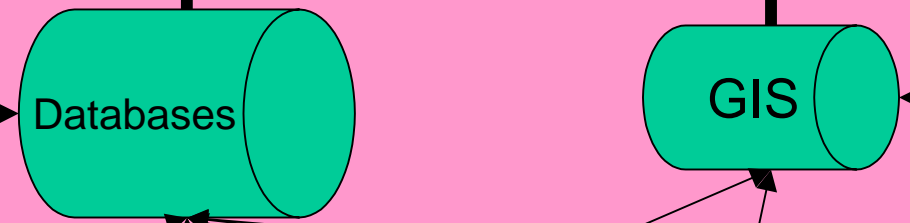


## 5) Emission Data

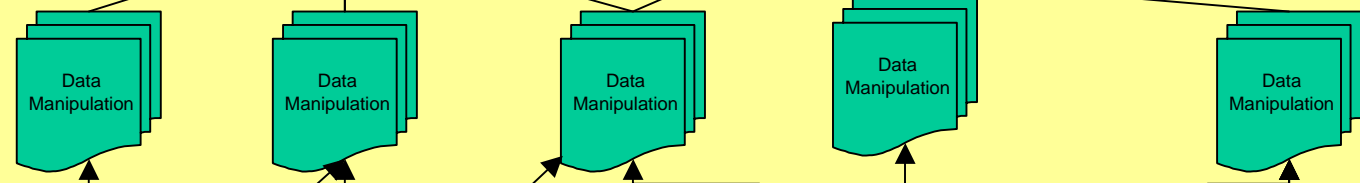


## 4) Checking

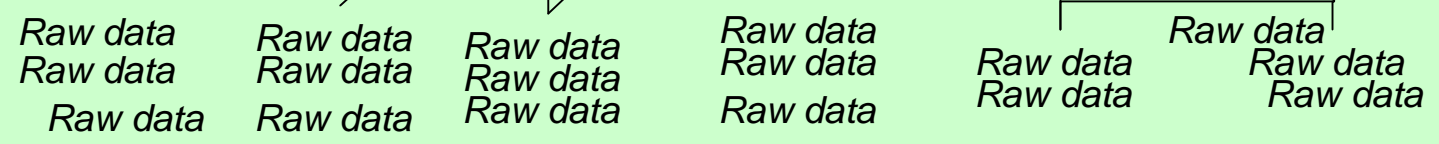
## 3) Emission Calculation



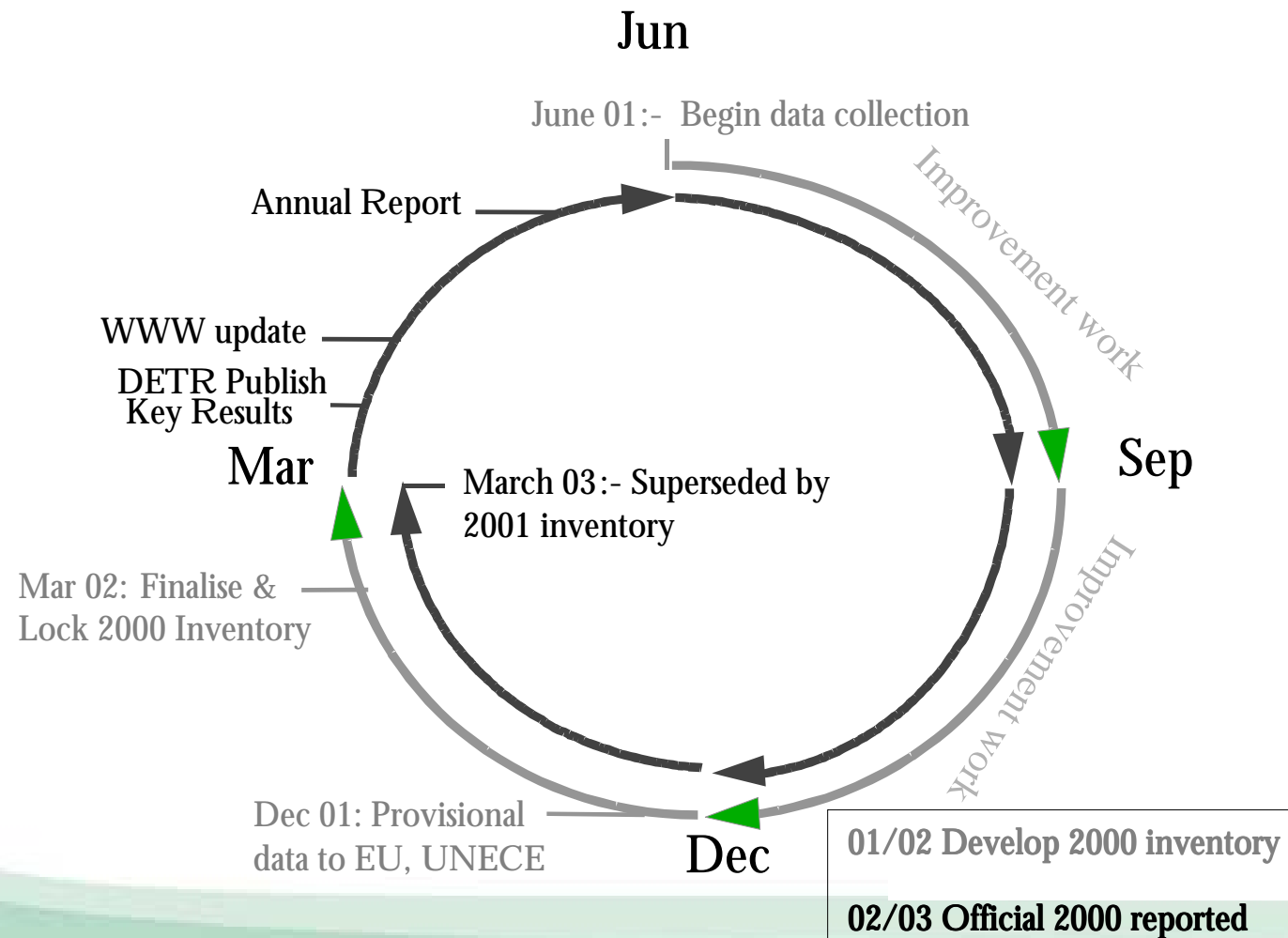
## 2) Formatting & Method Development



## 1) Data Collection



# Inventory Lifecycle



# NAEI website

Www.naei.org.uk

## Public

AP & GHG problems  
Main sources  
Which pollutants do what  
Emissions by Postcode



## Scientific

**Data Warehouse**

Map data (Activity)  
UK Activity Stats  
UK emission trends (detailed)  
Bulk download  
Inventory Methodology



AQ pollutants  
SO<sub>2</sub>, CO, PM<sub>10</sub>

## Geographic Coverage:

UK totals  
1x1km & points  
By Local Authority

# Data Warehouse

Use - Welcome to the NAEI's Data Warehouse. Below are the links to the emission related emission factors, activity data and emission statistics. Browse through the directory structure and available datasets. Alternatively search for your dataset using the search bar.

DATA WAREHOUSE

Search

Emission Factor Database

Emission Statistics

### Data Warehouse

- + [1: Tools for Emission Inventories \(1\)](#)
- + [Mapped activity data \(5\)](#)
- + [Mapped emissions data \(10\)](#)
- + [UK Activity Data \(Fuel use, vehicle km etc\) used for the NAEI \(2\)](#)
- + [UK Emission Estimates \(2\)](#)
- + [UK Emission Factors \(Emission rates per unit of activity\) \(2\)](#)

NAEI Home

Data Warehouse

FAQ's

Reports

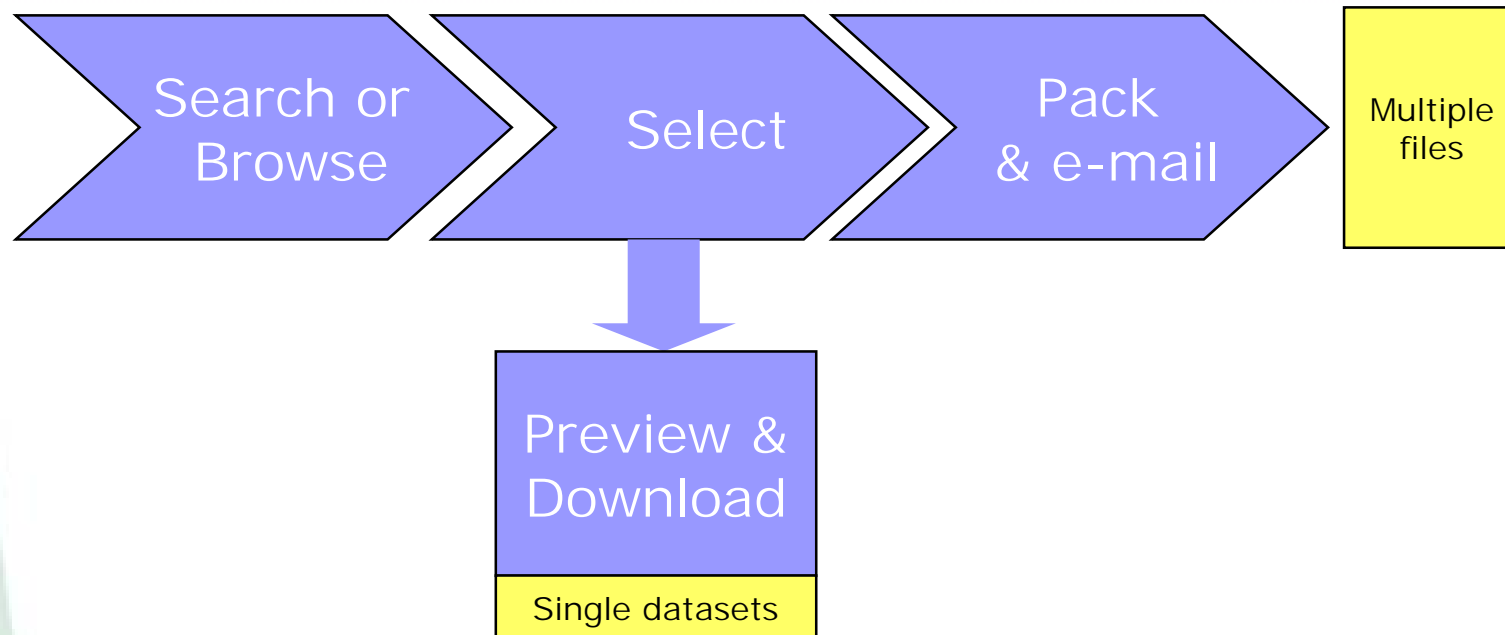
Inventory Methodology

Related Sites

UK Air Quality Archive



# The Service:



The website: [www.naei.org.uk/data\\_warehouse.php](http://www.naei.org.uk/data_warehouse.php)



# Data Warehouse: Sample Datafile

```
http://www.naei.org.uk/datawarehouse/8_39_83_17678_419_NOx.txt - Microsoft Internet Explorer provided by Integris
File Edit View Favorites Tools Help
Address http://www.naei.org.uk/datawarehouse/8_39_83_17678_419_NOx.txt Go Links

# Belfast

# 1x1km emissions of NOx in 2000 (tonnes).

# Compiled from the UK's National Atmospheric Emissions Inventory sponsored by DEFRA.
# For more information see www.naei.org.uk/data_warehouse.php

# Area source emission are grouped by UNECE sectors. Column headings starting a01.
# Total area source emissions in column at.
# Point source emissions are totals for all sectors, in column pt.
# Total emissions in column t.

# UNECE Sectors:
# 01. Energy Production and Transformation
# 02. Commercial, Institutional and Residential Combustion
# 03. Industrial Combustion
# 04. Industrial Processes
# 05. Production and Distribution of Fossil Fuels
# 06. Solvent Use
# 07. Road Transport
# 08. Other Transport
# 09. Waste Treatment and Disposal
# 10. Agriculture
# 11. Nature

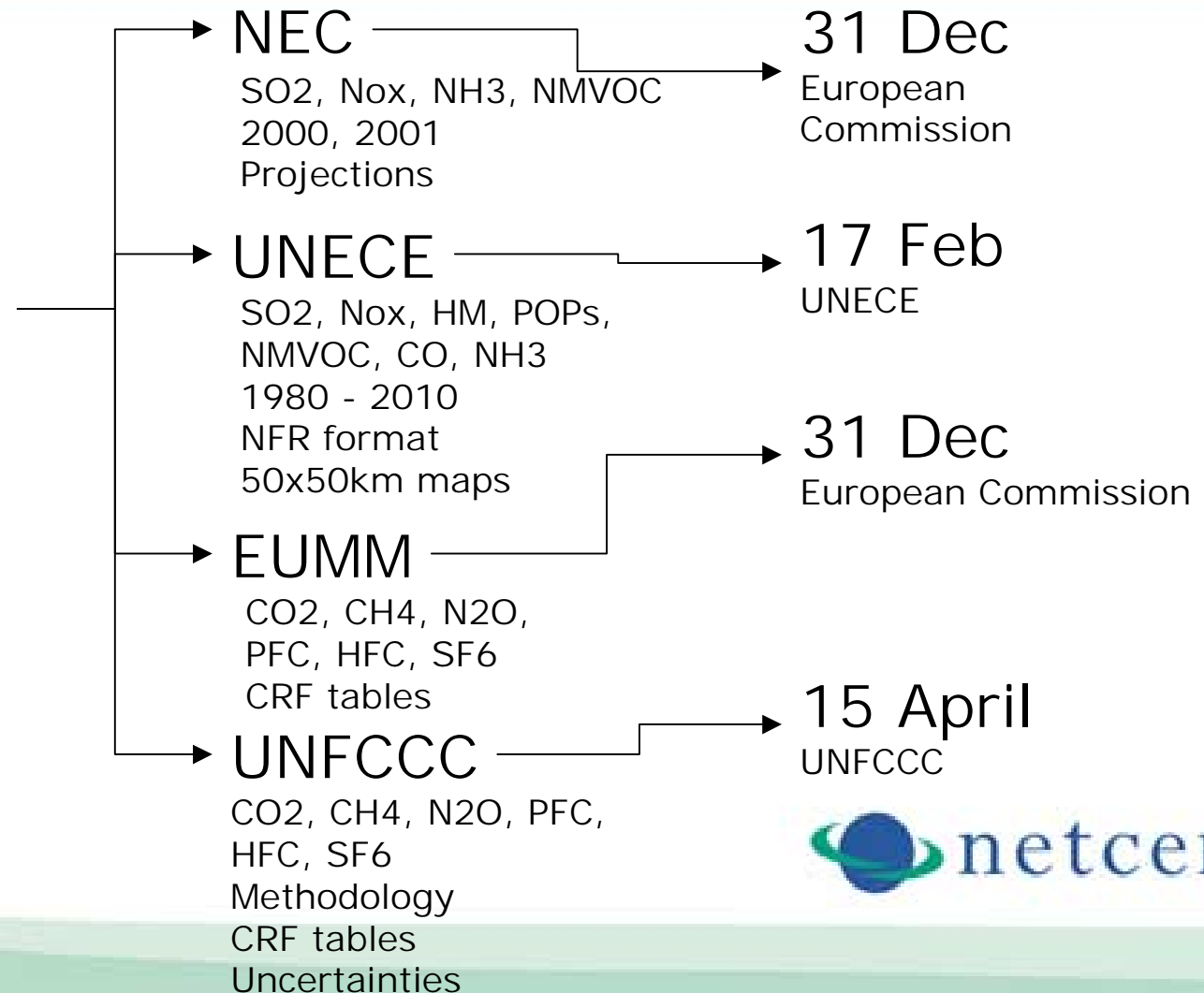
# Grid co-ordinates refer to the centre of the 1km squares

X      Y      a01    a02    a03    a04    a05    a07    a08    a09    at     pt
139500 527500 0.00000 0.155  0      0      0      15.5  0.00273 0.00000 15.7  0
139500 528500 0.00000 0.179  0      0      0      1.04  0.00281 0.00000 1.23  0
139500 529500 0.00000 0.225  0      0      0      2.32  0.00290 0.00000 2.55  0
139500 530500 0.00000 0.167  0      0      0      0.407 0.00290 0.00000 0.577  0
139500 531500 0.00000 0.107  0      0      0      0.232 0.00250 0.00000 0.341  0
140500 527500 0.00000 7.16  1.66   0      0      9.4   0.0957 0.00000 18.3  0
140500 528500 0.00000 0.186  0.503  0      0      1.10  0.00300 0.00000 1.11  0
```

netcen

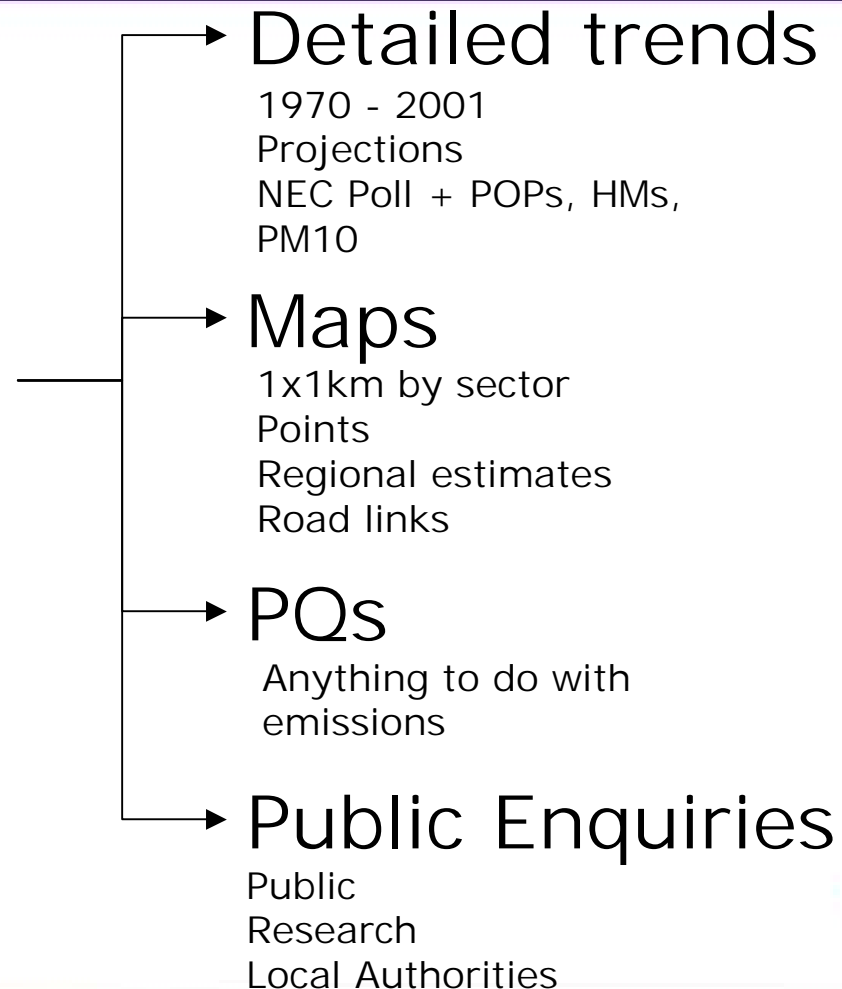
# National Reporting

## National Reporting

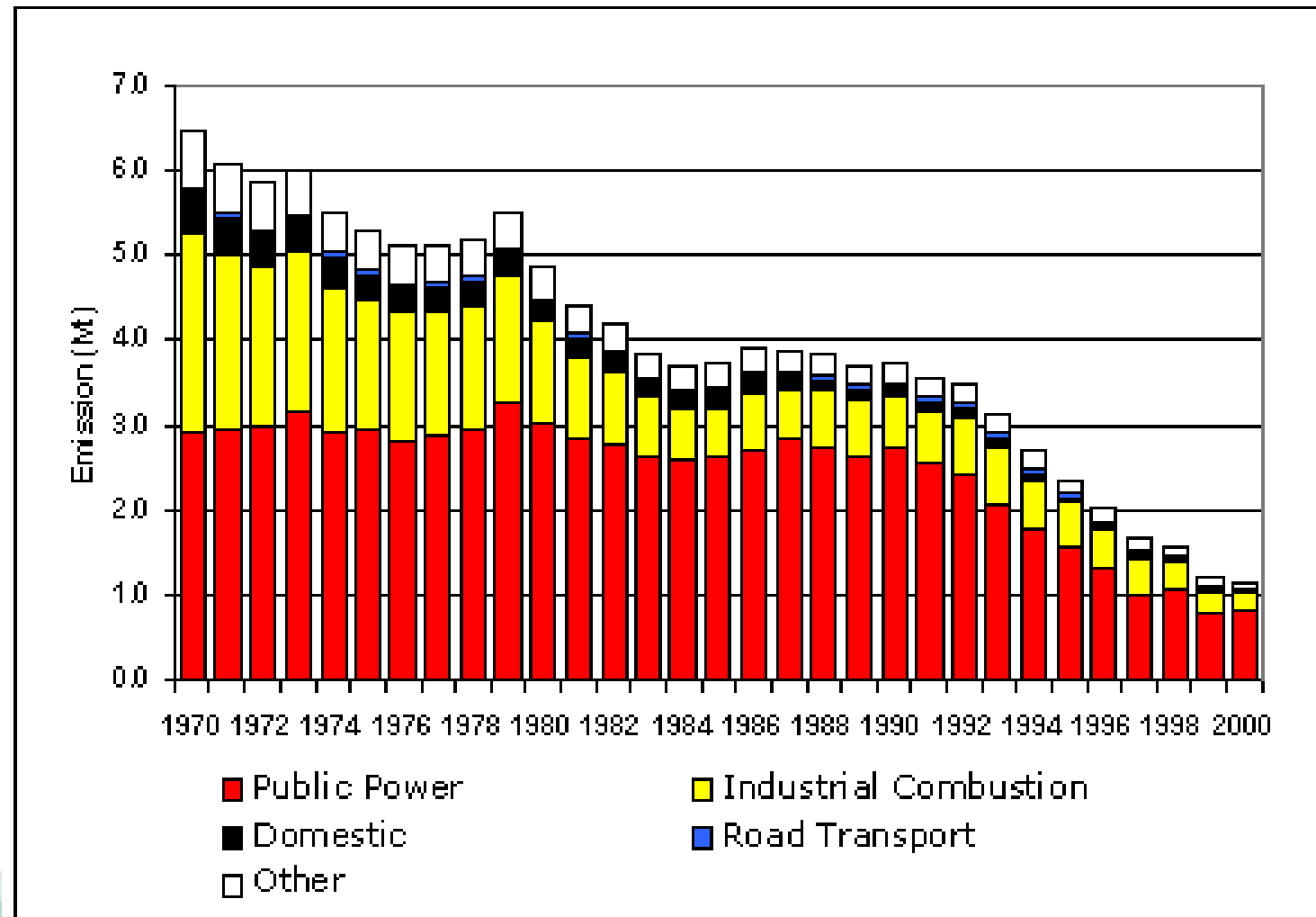


# Inventory Support

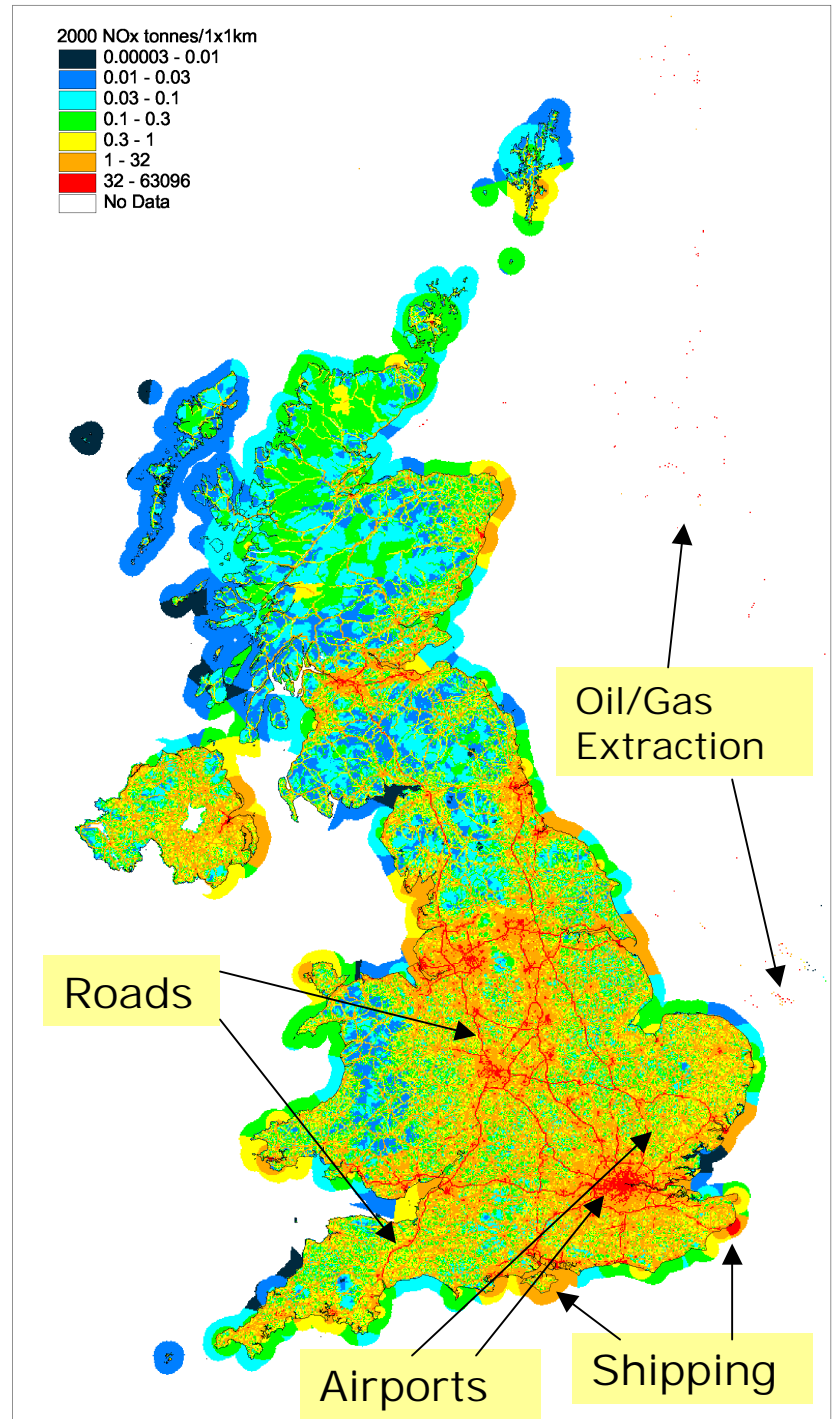
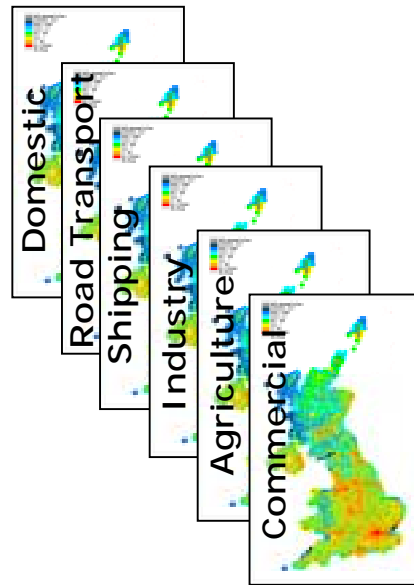
Raw data  
& Ad Hoc



# Trends: SO<sub>2</sub>



# Emission Maps



# Inventory Quality

## TACCCT

- Transparency
- Accuracy
- Completeness
- Consistency
- Comparability
- Timeliness

# The NAEI

- National Reporting (meeting Commitments) National Tool for Assessing Air Emissions
  - Trends
  - Maps
  - Models
  - R&A
- Used for National Level Assessments