# Data, storytelling and (info)graphics

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ENI SEIS II East

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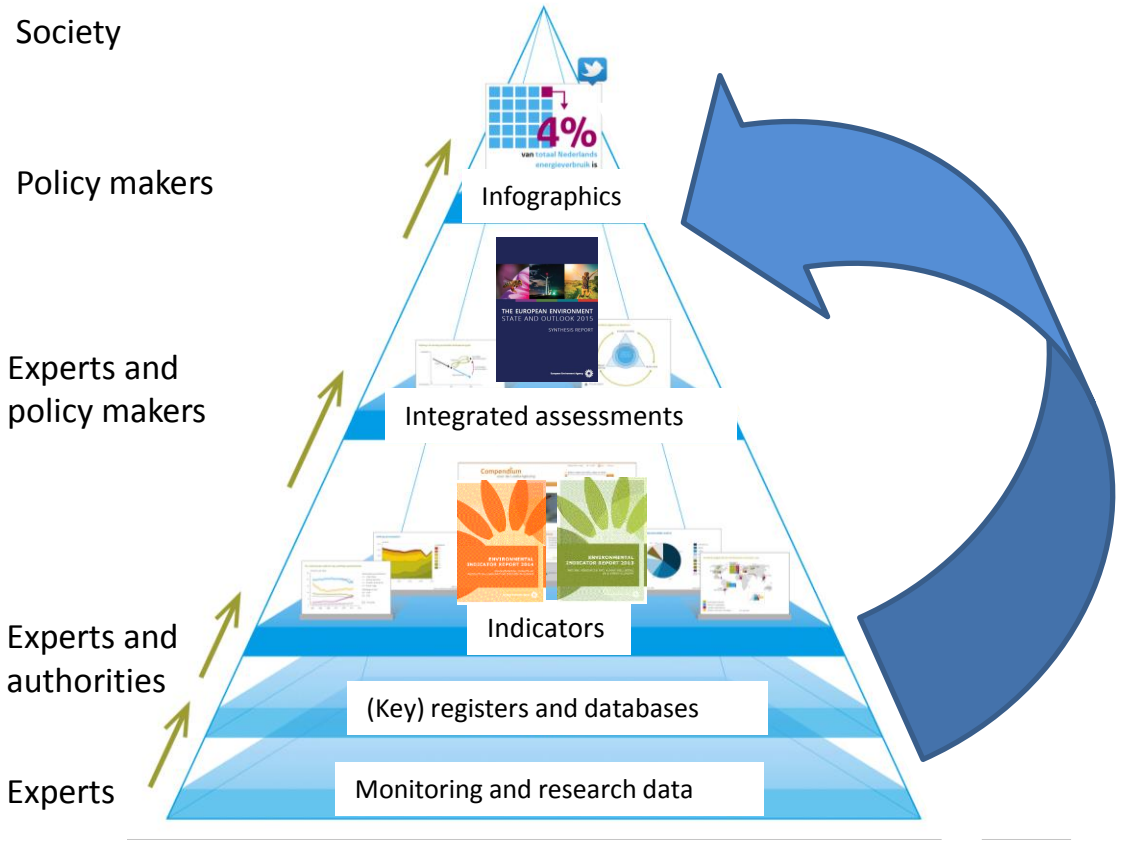
# SoE reporting

- State of the Environment (SoE) reports play an important role towards sustainable development as such reporting provides targeted, relevant and reliable information and knowledge for decision-makers and civil society on the environment

# Different target groups




**K**nowledge

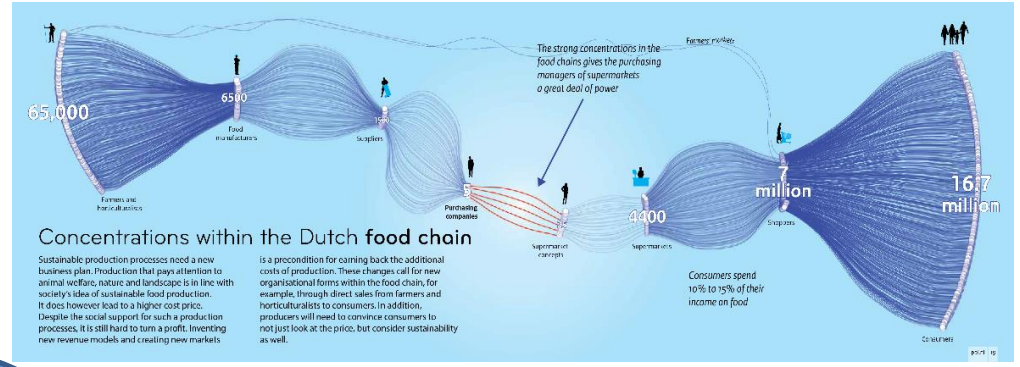
**A**ssessments

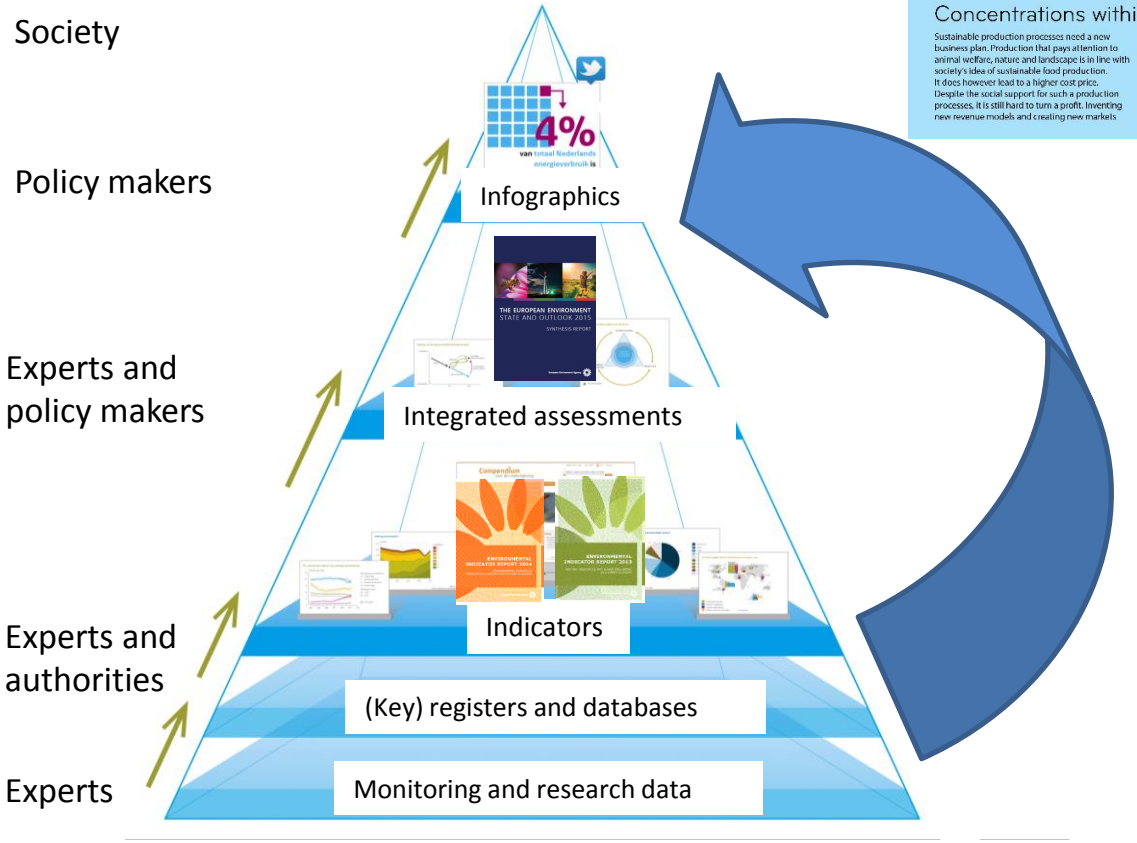
**I**nformation

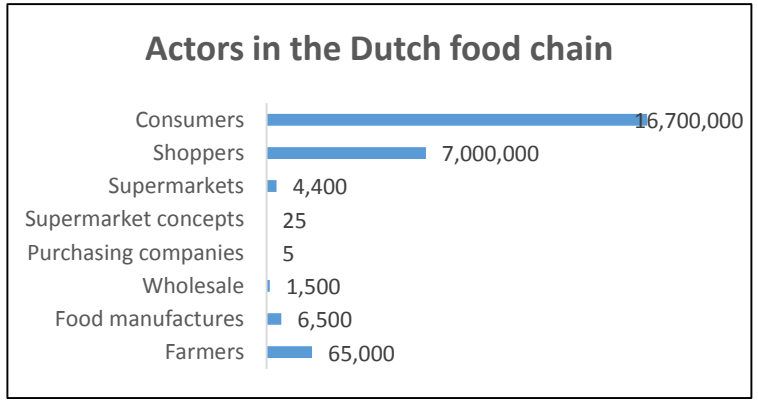
**D**ata

**M**onitoring

# But also.....different kinds of visualization




| Actors in the Dutch food chain | |
|---|---|
| Farmers | 65,000 |
| Food manufactures | 6,500 |
| Wholesale | 1,500 |
| Purchasing companies | 5 |
| Supermarket concepts | 25 |
| Supermarkets | 4,400 |
| Shoppers | 7,000,000 |
| Consumers | 16,700,000 |

# How to communicate your outcomes

# .....different communication products

**Every year, Italy develops a package of products. The 2018 edition has 8 products:**

1. **Environmental Data Yearbook** - full version, it presents the indicator sheets populated during 2018. It contains 306 indicators, of which 260 updated, organized by Production Sectors (Agriculture and Forestry, Fisheries and Aquaculture, Energy, Transport, Tourism, Industry), Environmental Conditions (Atmosphere, Biosphere, Hydrosphere, Geosphere, Waste, Nuclear Activities and Radioactivity, Non – Ionising Radiation, Noise, Natural Hazard, Anthropogenic Hazard) and Safeguards and Prevention (Environmental Assessment and Certification, Monitoring and Control, Promotion and Dissemination of Environmental Culture, Environmental Planning Instruments). It is available in electronic format (PDF).

2. **2018 Environmental Data** - it presents an accurate selection of Environmental Data Yearbook indicators aimed at the monitoring of the main objectives of the Seventh Environmental Action Programme (7th EAP). The document is organized around 5 sections or chapters according to the first three priority objectives and sub-objectives 4a and 7a listed in the 7th EAP. Each chapter describes an introduction and a selection of Environmental Data Yearbook indicators identified on the basis of the European Environmental Agency corresponding indicators to monitor adequately the achieving of the goal. Furthermore, in this report is present a new study with an aggregative approach based on composite indicators. Furthermore, in this report is developed a new study with an aggregative approach based on composite indicators. The proposed composite indicators are based on the methodology used by ISTAT (National Institute of Statistics) for the indicators of sustainable wellbeing.
   It is available in electronic format (PDF).

# .....different communication products

**Every year, Italy develops a package of products that are different over time. The 2018 edition has 8 products:**

4. **The Yearbook in figures -** statistical booklet, contains graphics the most representative time series of the environmental issues addressed in the Environmental Data Yearbook accompanied by comments, short information and particular relevant data.

3. **Summarising… the environment** – information *brochure*, it presents in a concise format some relevant environmental issues. It is available in paper and electronic version (PDF).

4. **Indicators Database** – tool for online consultation of the indicator sheets (data e metadata) and the creation of *reports*. The *Database* allows to publish, manage and organize the contents related to the different editions of the Yearbook and to create synthetic versions personalised namely according to the needs of individual users

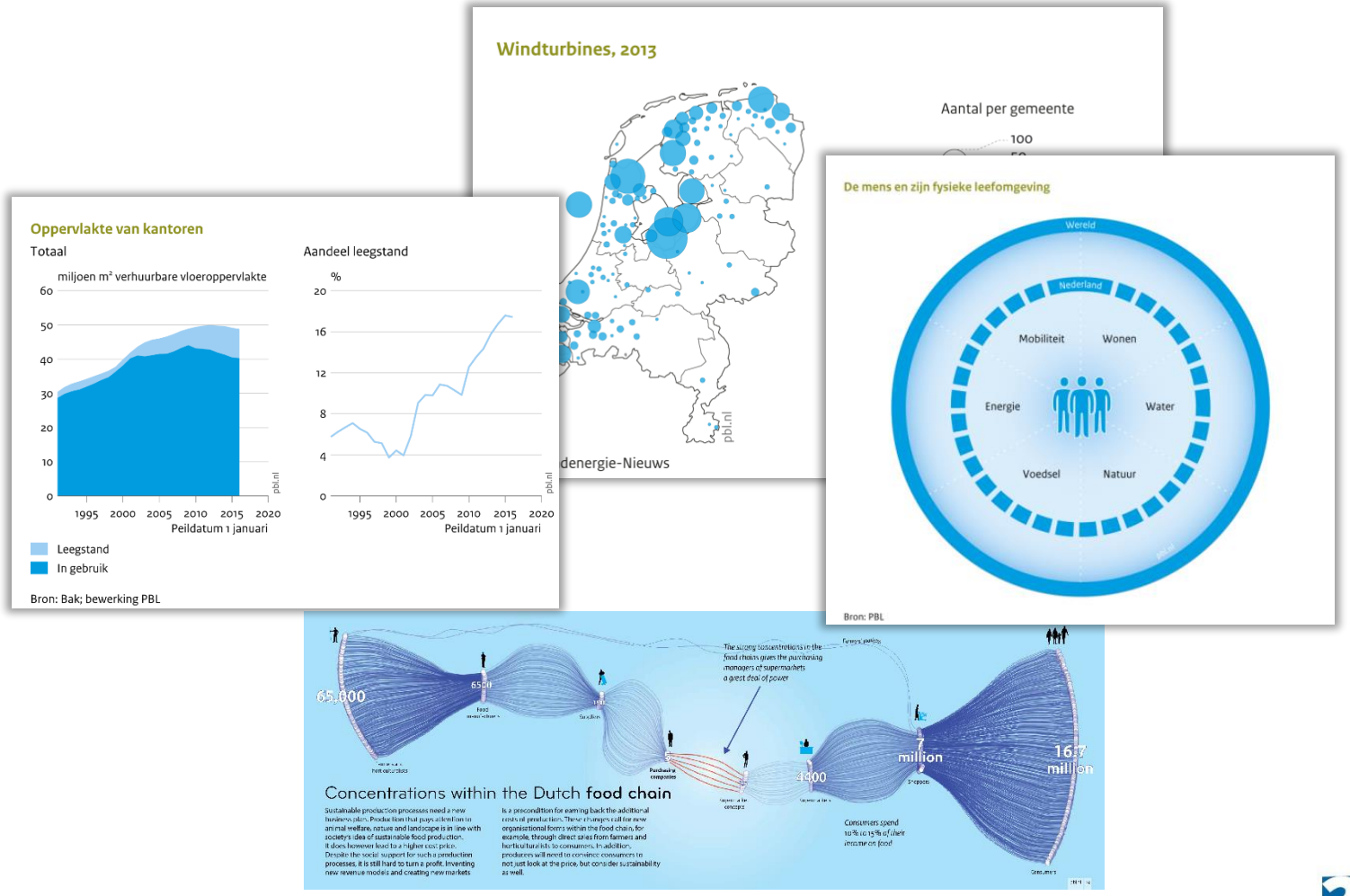
5. **Multimedia** – it presents the 2018 edition of the Environmental Data Yearbook and shows briefly some environmental issues which are considered a priority for the reference *target*. The 2018 edition of the Environmental Data Yearbook film is available at https://annuario.isprambiente.it

6. **Comic strip** – It is titled “Inspector SPRA investigation”, it periodically (yearly) deals with a single environmental issue with the aim of disseminating information and the Yearbook data to a young audience of no expert people. For the 2018 edition the selected issue is “Geological hazards” (The Earth is quaking!). It is available in PDF

7. **Infographics** - Infographics selection from " **Summarising… the environment**" and "**2018 Environmental Data** "

# Types of visualization

## Graphs, Maps, Schemematic and Infographics

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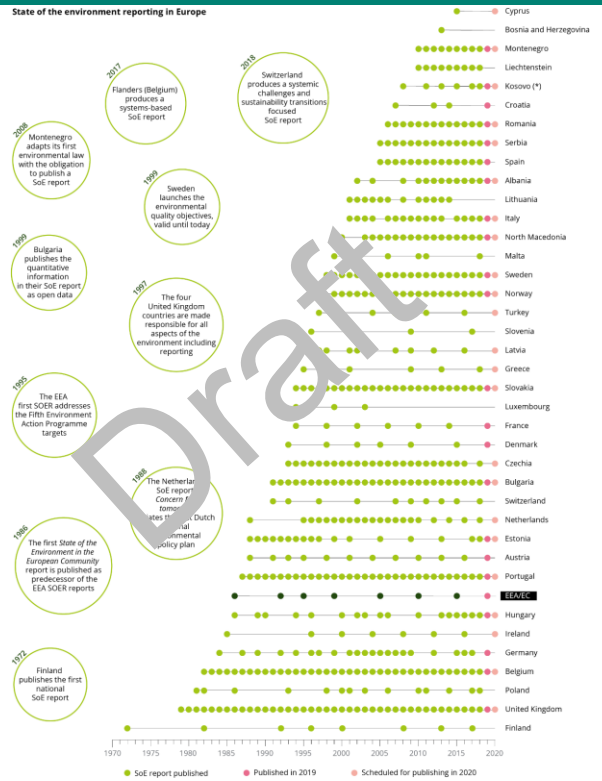
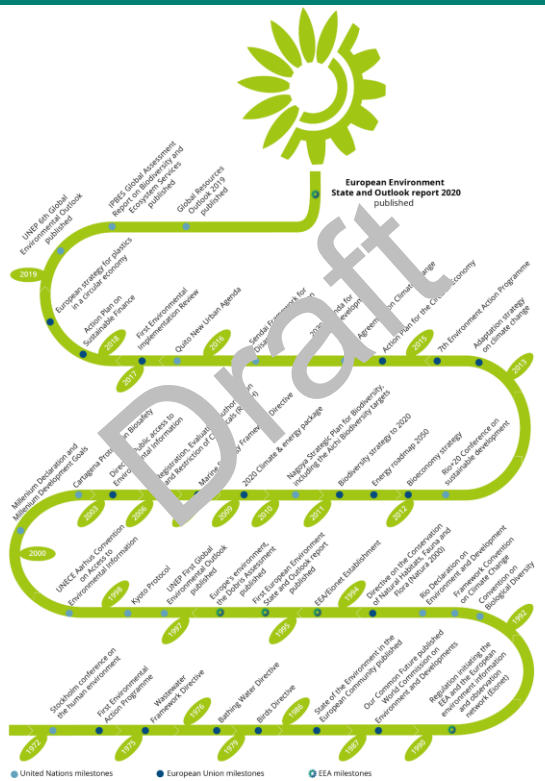
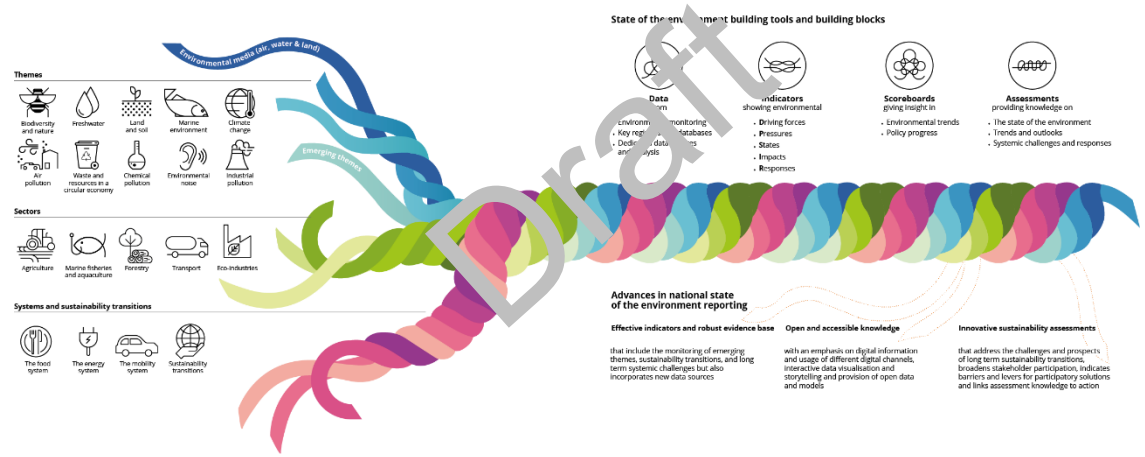
# State of the environment reporting in Europe




History of SoE-reporting




Drivers in SoE-reporting




Development in SoE-reporting

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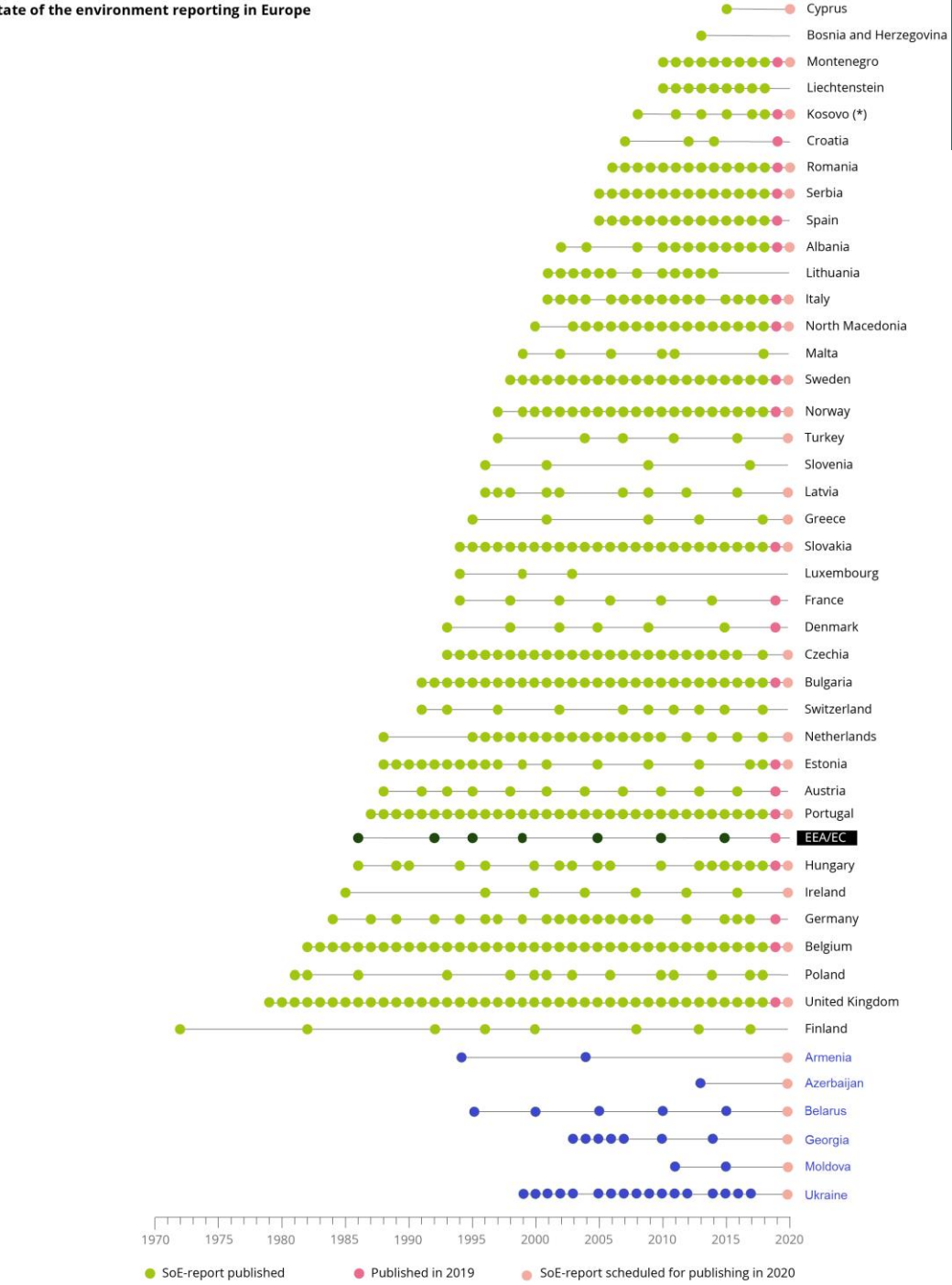
# History of SoE reporting




1972

The Stockholm *UN Conference on the Human Environment* triggers the first national SoE-report in Finland in the same year.

1995

Europe's environment *The Dobris Assessment* published by the EEA

1998

*The UNECE Arhus Convention on Access to Information* anchors SoE reporting in legislation

2019

The *SOER 2020* is published by the EEA

## Group exercise:

# "Making a good figure: the card game"

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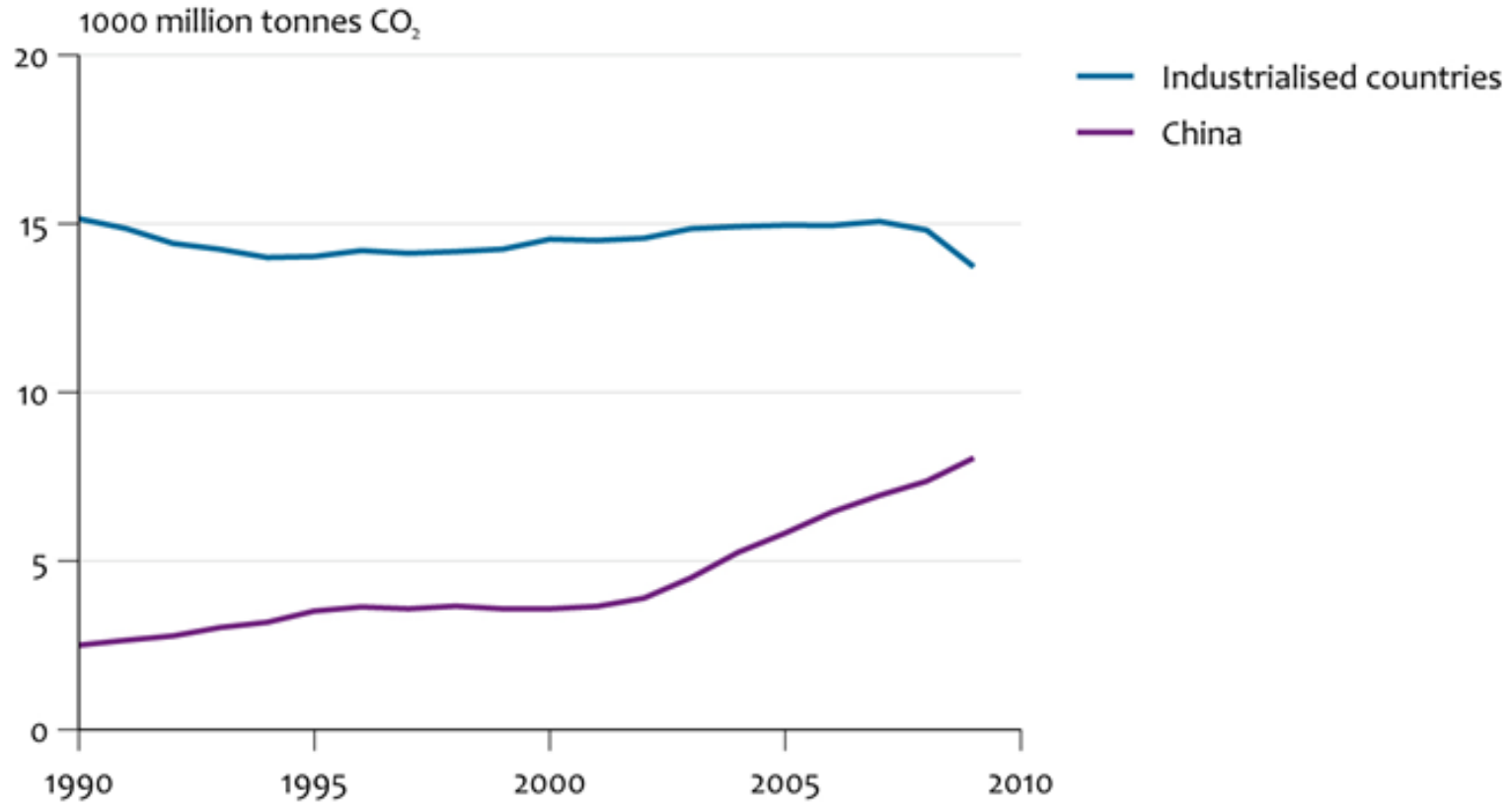
# When does a good figure go wrong?

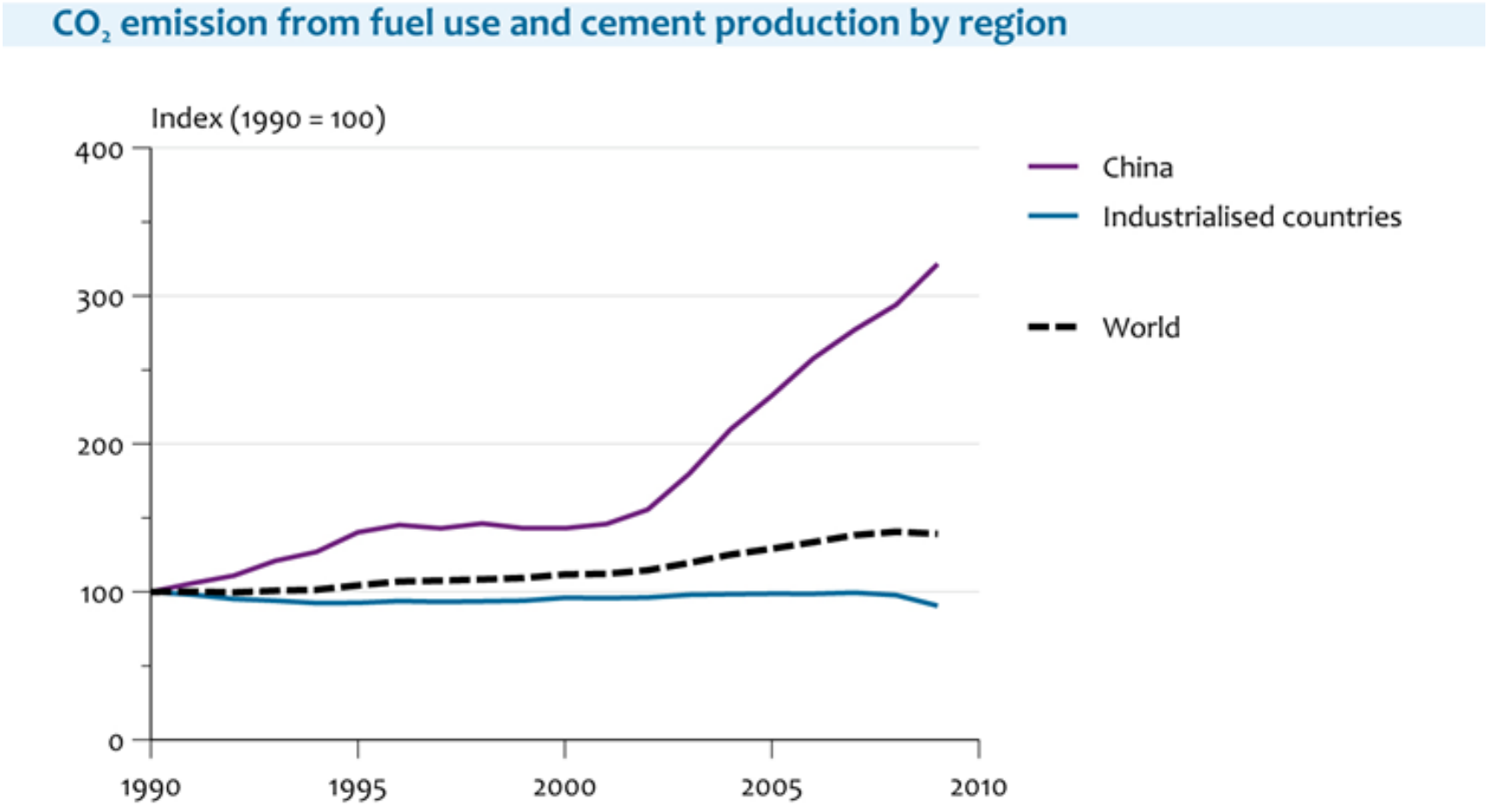
1) When the research is not ready
2) When the data/facts/conclusions do not align with the message
3) When the message is not clear / too complex
4) When the wrong type of visualization is chosen
5) When the graph/map or infographic tells a different message

# What is the message?

## $CO_2$ emissions from fuel use and cement production per region



# Same data different message

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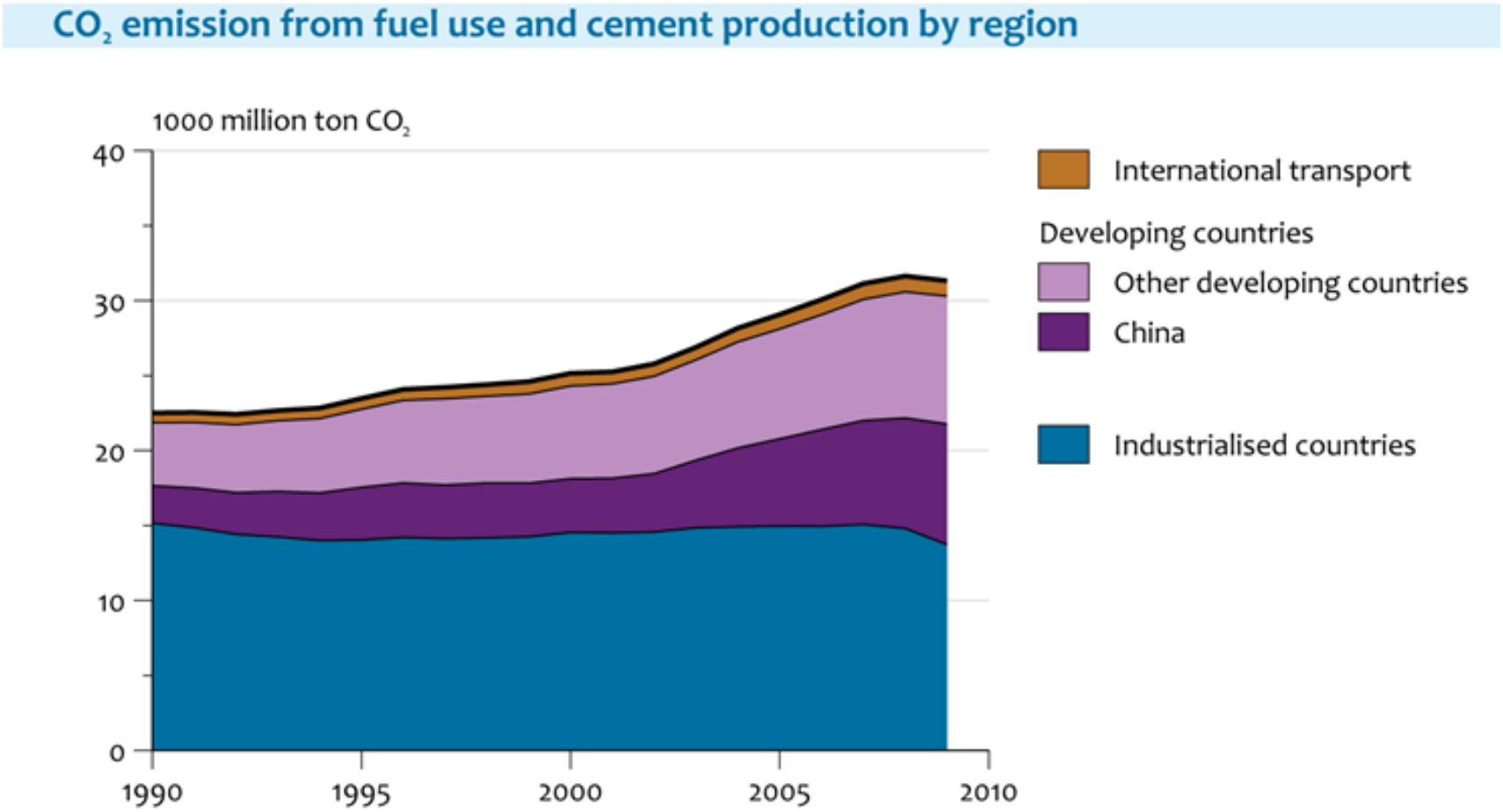

# “Making a good figure: the card game”

Aim: **understanding** the basics of **a good graph, map and infographic**

By: **playing memory** and **discussing** the sets of graphs, maps and infographics

(1) You are provided with 2 sets of cards with 24 (or 22) figures

(2) Select 1 set, place the 24 cards on the table upside down

(3) One persons turns around 2 cards until he/she has a pair
(like memory; look at the titles)

(4) **Discuss the differences**, which of the 2 figures you **prefer and why**

(5) Look at the handout for the reasoning or ask me

(6) If you have time proceed with the second set of cards

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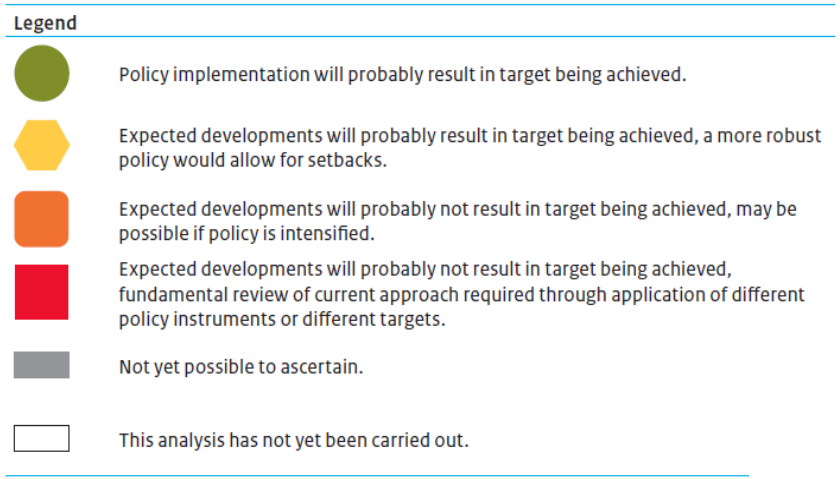
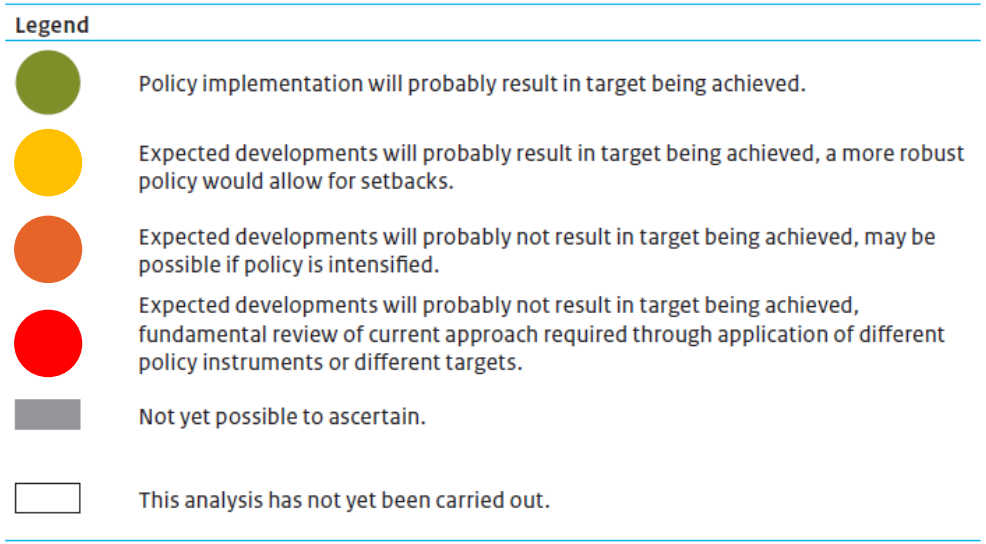
# An example: which table you prefer and why

## Assessment of human environment policy objectives




## Assessment of human environment policy objectives



# An example: which table you prefer and why

| Legend | |
|---|---|
| | Policy implementation will probably result in target being achieved. |
| | Expected developments will probably result in target being achieved, a more robust policy would allow for setbacks. |
| | Expected developments will probably not result in target being achieved, may be possible if policy is intensified. |
| | Expected developments will probably not result in target being achieved, fundamental review of current approach required through application of different policy instruments or different targets. |
| | Not yet possible to ascertain. |
| | This analysis has not yet been carried out. |

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# “Play the memory game”

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# Thank you

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