EEA’s Core Set of Indicators (CSI)

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European Environment Agency
Why a core set of indicators?

1. Provide a manageable and stable basis for indicator reporting on the web and in EEA’s indicator-based reports
2. Prioritise improvements in the quality and geographical coverage of data flows, especially data from countries to the European level
3. Streamline contributions to other European and global indicator initiatives, e.g. Eurostat structural indicators and sustainable development indicators.
The history of the CSI

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st phase</td>
<td>400 indicators relevant to policy objectives and distributed across DPSIR</td>
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<tr>
<td>July 2002:</td>
<td></td>
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<tr>
<td>2nd phase</td>
<td>350 indicators relevant to policy objectives and distributed across DPSIR</td>
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<tr>
<td>May 2003:</td>
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<tr>
<td>3rd phase</td>
<td>37 indicators relevant to policy targets and data availability</td>
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<td>February 2004:</td>
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</tbody>
</table>

Wide consultation with EIONET community  
Less engagement by policy community
The 11 criteria: getting from 350 to 37

1. Be *policy relevant* - support existing EU policies, issues of increasing policy relevance (on the basis of available EU policy documentation, DG environment work programme..)

2. Monitor *progress toward the quantified targets* (if there are no targets, then use thresholds)

3. Be based on *ready available and routinely collected data* for EEA countries within specified timescales
The 11 criteria: getting from 350 to 37

4. Be consistent in *space coverage* and cover all or most of EEA countries

5. Time coverage—sufficient/insufficient time trends

6. Primarily be national in scale and representative for countries (countries benchmarking)

7. Be understandable and simple

8. Be conceptually and methodologically well founded and representative (to be used by at least one community or international organization) and on the basis of consultation with countries
The 11 criteria: getting from 350 to 37

9. Be of **priority** in EEA management plan
10. Be **timely** (be produced in a reasonable and “useful” time)
11. Be **well documented** and of known quality
Number of indicators per topic

- Air pollution (5)
- Ozone depletion (1)
- Climate change (4)
- Biodiversity (5)
- Terrestrial (2)
- Water (7)
- Waste (2)

Total: 37
CSI objective: should be stable but not static

- Demands for more indicators on topics like noise, chemicals, health impacts
- Demands for better indicators for example on biodiversity and water
- Many initiatives that drive improvements:
  - new data: eg WFD implementation, SEBI2010
  - policy revisions, links to thematic strategies: indicators should maintain relevance
CSI - a web-based indicator presentation

http://themes.eea.europa.eu/IMS
CSI - a web-based indicator system

Each indicator has a 2 part ‘factsheet’
1. Indicator ‘specification’
2. Indicator ‘assessment’

Data transparency is key
- what data is used & the source
- for each chart/map there is access to data used
- access to the raw dataset held in EEA’s Dataservice (for EEA-maintained datasets)
CSI - Assessment elements (designed for regular updating)

1. Key policy question: e.g. ‘What progress is being made in reducing xxx...’
2. Key messages
3. Charts showing e.g. overall trend, progress for each country
4. Assessment text: addresses policy questions, explains why changes have occurred, discusses progress to target
5. Methodology, data sources and references: a link to the specification
CSI - indicator specification elements (stable in content)

1. **Rationale**: justification for indicator selection

2. **Indicator definition and units**

3. **Policy context and targets**: identifies relevant legislation, international conventions relevant to indicator - goals, targets

4. **Policy questions**: what questions does the indicator address?

5. **Methodology**: data sources, how data is manipulated
CSI - indicator specification elements (stable in content)

6. Data specifications: description of data, link to datasets

7. Uncertainties: qualitative information on methodology uncertainty, datasets uncertainty

8. Further work: short and long-term plans to improve the indicator

9. General metadata: contact point, DPSIR classification etc
CSI 010 Specification - Greenhouse gas emission trends

Table of contents
- Rationale
- Indicator definition
- Policy context and targets
- Policy questions and graphics
- Methodology
- Data specifications
- Uncertainties
- Further work
- General metadata

Assessment versions
- Published (reviewed and quality assured):
  - Assessment published Mar 2009 [Latest version]
  - Assessment published Feb 2008
  - Assessment published Feb 2007
  - Assessment published Nov 2005
- Draft (not yet published - not quality assured):
  - No drafts available.
37 Core set indicators translates into ...

- Specific policy question: Are concentrations of nutrients in our surface waters decreasing?

- Key policy question: Are concentrations of nutrients in our freshwaters decreasing?

- Specific policy question: Are nitrate concentrations in our groundwater decreasing?

- Specific policy question: Are concentrations of nutrients in our surface waters decreasing?

Nutrients in transitional, coastal and marine waters (CSI 021) - May 2005 Assessment

- Key policy question: Are nutrient concentrations in our surface waters decreasing?
Example: CSI-011 GHG projections

Index 100 = base-year emissions

EU-15


- Base-year level
- Greenhouse gas emissions
- Kyoto target (2008–2012)

Additional policies and measures
- Use of Kyoto mechanisms
- Use of carbon sinks

Projections with existing measures

Projections with existing and additional measures, use of carbon sinks and Kyoto mechanisms

Kyoto Protocol commitment period 2008–2012

- 3.6 %
- 11.3 %
- 3.3 %
- 3.0 %
Example: CSI-011 GHG projections

Specific policy question: What progress is projected by sector towards reducing greenhouse gas emissions by 2010?

Fig. 4: Share of EU-15 sectors and key sources in 1990 and 2006 (Ver. 1.00)

Note: Emissions from international aviation and international maritime navigation, not covered by the Kyoto Protocol, are not included here.


Fig. 5: Changes in EU-15 greenhouse gas emissions by sector (Ver. 1.00)

Note: Some Member States did not report projections for all sectors or scenarios. Therefore, the information on the total EU-15 projections is based on gap-filling and should be interpreted with care.

Data source: IEA

UNECE/UNSD Joint meeting on Environmental Indicators, 31 Aug-2 Sept 2009, Geneva
Importance of stable dataflows
Indicators & products

Reporting obligations

Data dictionary

Data exchange modules

Network directory

Content monitoring

EEA data services

Data repository

Web forms - QA/QC - Aggregation

REPORTNET
The Central Data Repository is part of the ReportNet architecture. The Central Data Repository is like a bookshelf, with data reports on the environment as submitted to international clients.

Each country either has a collection (iliki) for its deliveries or a referral (mukti) to a different preferred repository. The data reports within each country collection are arranged under the relevant reporting obligations or agreements.

**EEA Member countries**
- Austria
- Cyprus
- Estonia
- Germany
- Iceland
- Latvia
- Luxembourg
- Norway
- Romania
- Spain
- Turkey
- Belgium
- Czech Republic
- Finland
- France
- Italy
- Liechtenstein
- Malta
- Poland
- Slovakia
- Sweden
- United Kingdom
- Bulgaria
- Denmark
- Germany
- Greece
- Hungary
- Ireland
- Lithuania
- Netherlands
- Portugal
- Slovenia
- Switzerland

**Other countries**
- Andorra
- Belarus
- European Community
- Kazakhstan
- Kyrgyzstan
- Montenegro
- Morocco
- Moldova
- Tajikistan
- Armenia
- Bosnia and Herzegovina
- Georgia
- Kyrgyzstan
- Montenegro
- Morocco
- Serbia
- Ukraine

Recently uploaded:
- NO: Biological data (WISE-SCED) - Data delivery
- NO: Efl 2009 (2008 data)
- NO: data submission 2003
- NO: DEMP data - 2009 delivery - Contaminants in biota and sediments
- FR Monthly Czdr Exceedances 2009_7_July
- FR: FF 2009-2740 094 Agglomerations
- IS: 2009-08 (June 2009) Monthly Czdr Exceedances in Iceland
### Regular annual cycle

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<th>Status</th>
<th>Description</th>
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<tbody>
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<td>3/3</td>
<td>Delivered on time. Meets additional requirement</td>
</tr>
<tr>
<td>3</td>
<td>Something delivered</td>
</tr>
<tr>
<td>3</td>
<td>Nothing delivered</td>
</tr>
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</table>

#### Priority data flows 2006-2007

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<th>Country</th>
<th>0%</th>
<th>50%</th>
<th>100%</th>
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<tbody>
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<td>Latvia</td>
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<td>Slovakia</td>
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<tr>
<td>Lithuania</td>
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Some reflections

The 11 ‘criteria’...

Coordination:
• development and maintenance of indicators needs high level support to ensure work is properly resourced and prioritised
• a central coordinator can be valuable in driving the process, planning, ensuring consistency and comparability of information and analysis across indicators

Assessments:
• If assessment or analysis is included keep it short and succinct to help communication

Transparency
• access both to data and methods
Thank you for your attention

www.eea.europa.eu/themes/air

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