

# **Compendium on Sustainable Development Indicator Initiatives:**

**How to define, find, share, develop and follow best practice  
on the use of systematic indicator initiatives.**

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[www.IISD.org](http://www.IISD.org)

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**Busan, South Korea**



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# Overview

- Brief about the IFEH and the IISD
- Context: Global and local importance of systematic indicator systems – What defines best practice
- Compendium of Sustainable Development Indicator Initiatives
- Examples of comprehensive indicator systems across nations, scales and sectors
- Final messages



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# Brief about IFEH

## International Federation of Environmental Health

- Founded in 1986
  - 38 National Member Organisations representing approx. 60.000 professionals in the field of Environmental Health and Environmental Protection.
  - 24 Academic Associated Member Organisations (Universities)
  - 6 Associated Member organisations
  - IFEH Regional Groups (Africa, Americas, Europe, Middle-East, Pacific Rim)
  - Aims and activities
- The motto of the Federation is:**  
**“Caring for the environment in the interest of world health.”**

The Federation works to disseminate knowledge and exchanging of information and experience concerning environmental health and to promote co-operation between countries where environmental health issues are transboundary.

IFEH World Congresses (bi-ennial)  
Technical as well as organisational meetings.  
Projects, International Magazine on EH, Website, Twinning arrangement, etc.



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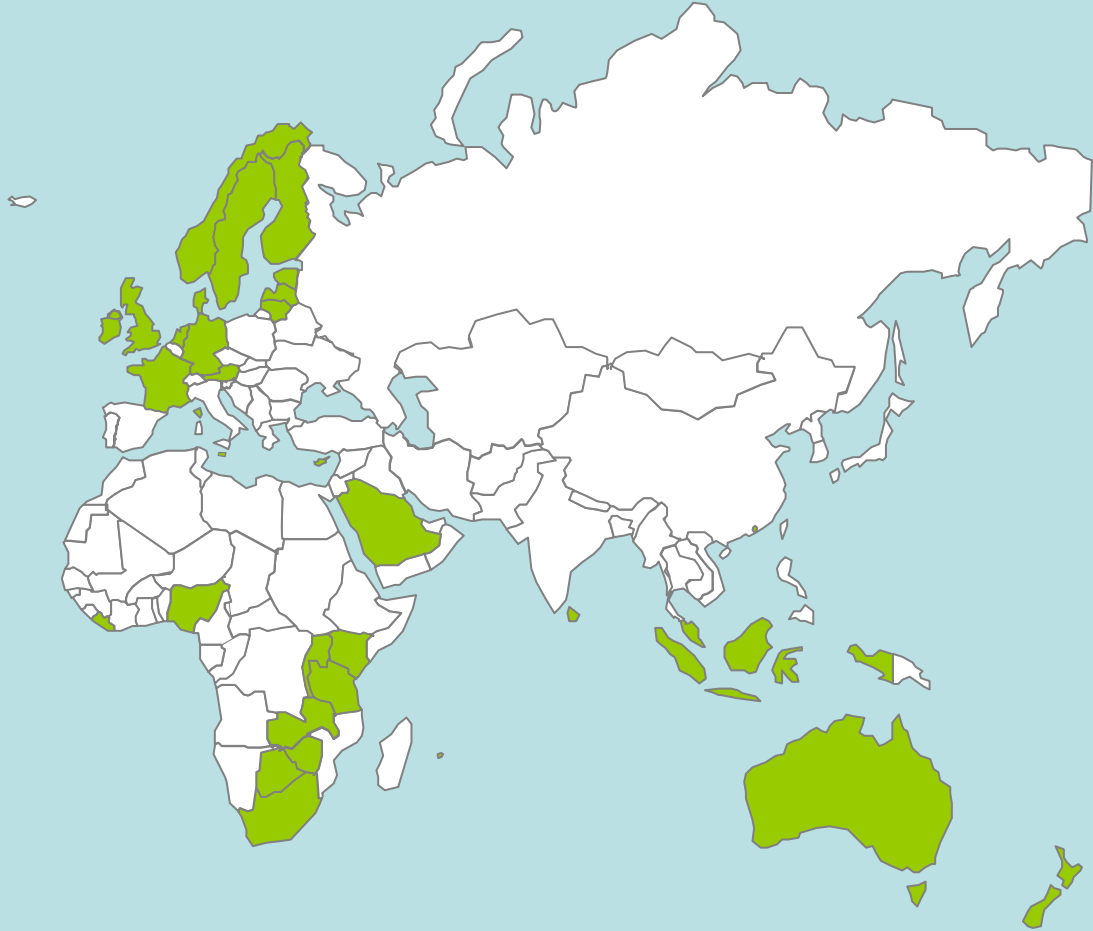


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# IFEH MEMBER ORGANISATIONS

Australia  
Austria  
Botswana  
Canada  
Cyprus  
Denmark  
England, Wales and Northern  
Ireland  
Finland  
France  
Germany  
Hong Kong  
Indonesia  
Ireland  
Jamaica  
Kenya  
Latvia  
Liberia  
Lithuania  
Malawi  
Malaysia  
Malta  
Mauritius  
Netherlands  
New Zealand  
Nigeria  
Norway  
Rwandese Republic  
Saudi Arabia  
Scotland  
Singapore  
South Africa  
Sri Lanka  
Sweden  
Tanzania  
Uganda  
United States of America  
Zambia  
Zimbabwe



# Brief about IISD

## International Institute for Sustainable Development

- Established in 1990
- **IISD's vision is better living for all—sustainably; its mission is to champion innovation, enabling societies to live sustainably.**
- Canadian-based not-for-profit organization with a diverse team of more than 150 people located in more than 30 countries.
- IISD contributes to sustainable development by advancing policy recommendations on **international trade and investment, climate change and energy, measurement and assessment, global connectivity and sustainable natural resources management**. IISD reports on **international negotiations** and share knowledge gained through collaborative projects with global partners, resulting in more rigorous research, capacity building in developing countries and better dialogue between North and South.
- IISD receives core operating support from the Government of Canada, and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.



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# Context

- **Call for the development of SD indicator systems by Brundtland and Ch. 40 of Agenda 21**
- **The Global Project on "Measuring the Progress of Societies"- hosted by the OECD  
The OECD Istanbul Declaration**
- **Success: A large and growing number of measurement initiatives, across scales, sectors, themes etc.**
- **CHALLENGES:**
  - Development and harmonization**
    - Fundamental principles
    - Fundamental methodological questions
    - A variety of conceptual frameworks
    - Development of international accepted and agreed core indicators on well-being of societies
    - Indicator analysis and interpretation
  - Implementation**
    - Need for dissemination of information and knowledge on the use of measurement system
    - Use of indicators in strategic policy processes – local level – national level
    - Capacity building
    - Data access and availability
    - Need for co-learning, coordination, leadership



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# Global and local importance of systematic indicator systems

## What defines best practice

Fundamental Principles

Structure of indicator framework

Relevance in terms of:

- Headline issues
- Target groups for the information
- Geographic scope
- How to influence the indicator values

Public involvement

Public access to information and supporting data

Quality control

Reliable frequency of updating information



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# Global and local importance of systematic indicator systems

## What defines best practice

### Fundamental Principles:

#### **Sustainability Assessment and Measurement Principles (STAMP)**

*BELLAGIO PRINCIPLES REVISITED – TO BE LAUNCHED ON OCTOBER 28 IN BUSAN*

#### **Areas covered:**

- (1) guiding vision
- (2) essential considerations
- (3) adequate scope
- (4) framework and indicators
- (5) transparency
- (6) effective communication
- (7) broad participation
- (8) continuity and capacity



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# Global and local importance of systematic indicator systems

## What defines the “ideal” indicator

- From the reading of the indicator values over time you should be able to definitively and objectively conclude whether the changes describe a positive or negative development.
- The indicator shall be based upon objective data measurements, where the specific data leaves no room for interpretation besides the monitoring inaccuracy.
- The indicator must be easy to comprehend and there has to be a recognized causal link between the used data that the indicator is based upon and the development one wishes to describe.
- The indicator is closely linked to planned targets and critical thresholds / boundaries



# Global and local importance of systematic indicator systems

How to design adequate measurement systems

**By adopting and following common principles such as the BellagioSTAMP (Sustainability Assessment and Measurement Principles)** *BELLAGIO PRINCIPLES REVISITED*

**By defining the purpose and scope of the initiative**

**By involvement of responsible decisions makers**

**By involvement of the public – and stakeholders**

**By keeping the process open**

**By sharing and learning from best practice through mechanisms such as the Compendium on Sustainability Indicator Initiatives**



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# Global and local importance of systematic indicator systems

## Why are systematic measurement systems important

**It is not the use of indicator systems in it self,  
but indicators are tools to serve higher level purposes, such as::**

- Good governance
- Transparency
- Accountability
- Making the right planning and right decisions based on solid facts and evidence
- being able to monitor the effectiveness of actions.
- Involving the public as well as the business community
- Without the use of an open, systematic and long-term approach and without the use of a systematic measurement system it will become very difficult to navigate towards a sustainable development.

**If you don't know where your are located  
and where you are coming from  
you won't be able to define where you are heading and you won't be able to decide  
whether you are moving in the right or wrong direction!**

**Only by the use of a comprehensive indicator system you will be able to navigate.**



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# Compendium of Sustainable Development Indicator Initiatives

- Global directory of SD indicator initiatives
- By practitioners for practitioners
- Collaborative
- Free access
- Long-term
- Embraces diversity of methods and terminology, as long as whole-system approach is followed



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# Compendium goals

- Improve communication, promote the sharing of experiences, methods and approaches;
- Facilitate harmonization of indicator development approaches and indicator sets;
- Help avoid duplication, facilitate the integration of monitoring, data analysis and reporting activities;
- Provide access to a pool of experts working on indicator development;
- Help identify areas of future research where required; and
- Provide access to products of indicator initiatives.



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The Compendium - Sustainability Indicator Initiative - Microsoft Internet Explorer

File Rediger Vis Foretrykne Funktioner Hjælp

Adresse  http://www.ifeh.org/indicators/compendium/index.html  Gå



## International Federation of Environmental Health

[Home](#) [News](#) [Publications](#) [IFEH Forum](#) [Events](#) [Sitemap](#) [Links](#) [Contact IFEH](#)

[About IFEH](#) [Member Organisations](#) [IFEH Regional groups](#) [Meetings](#) [IFEH World Congress](#) [Activities & Projects](#)

### ACTIVITIES AND PROJECTS

- Scientific Reports
- IFEH Policy Statements
- Twinning arrangements
- World Congress 2010 Vancouver Canada
- Codex Alimentarius Commission
- The European Environment and Health Process
- EHIDE - Environmental Health in Disasters & Emergencies
- IFEH Sustainability Indicator Initiative ( SII )**
- THE COMPENDIUM  
A Global Directory to Indicator Initiatives**

[Home](#) > [Activities & Projects](#) > [IFEH Sustainability Indicator Initiative \( SII \)](#) > [Compendium](#)

## IFEH Sustainability Indicator Initiative ( SII ) - The Compendium

### THE COMPENDIUM.

#### A global directory of sustainability indicator initiatives

The International Federation of Environmental Health (IFEH) has entered into collaboration with the International Institute for Sustainable Development (IISD) with the aim of collecting, disseminating and promoting the use of indicators to monitor and assess progress towards a sustainable development.

The International Institute for Sustainable Development (IISD) has housed the Compendium of Sustainable Development Indicator Initiatives since 1995 and the International Federation of Environmental Health has been running a project on sustainability indicator initiatives since 2000. As a result of our co-operation with the IISD it has been decided to use the Compendium as the common database on indicator initiatives.

We would like to invite your organisation / institution to join the Compendium. Your organisation's / institution's indicator initiatives would be a valuable addition as other organisations and institutions such as yours and involved in similar activities would benefit from learning about your work.

You can add information on your indicator initiative(s) with a broad focus on sustainability and environmental health and protection or just browse initiatives already included in the Compendium by selecting the items on the upper right menu.

» Compendium Navigation

When selecting the items below you will be redirected to the Compendium website hosted by the IISD.

» **Compendium Home**

About the Compendium

Search the Compendium

Edit Initiative

Add Initiative



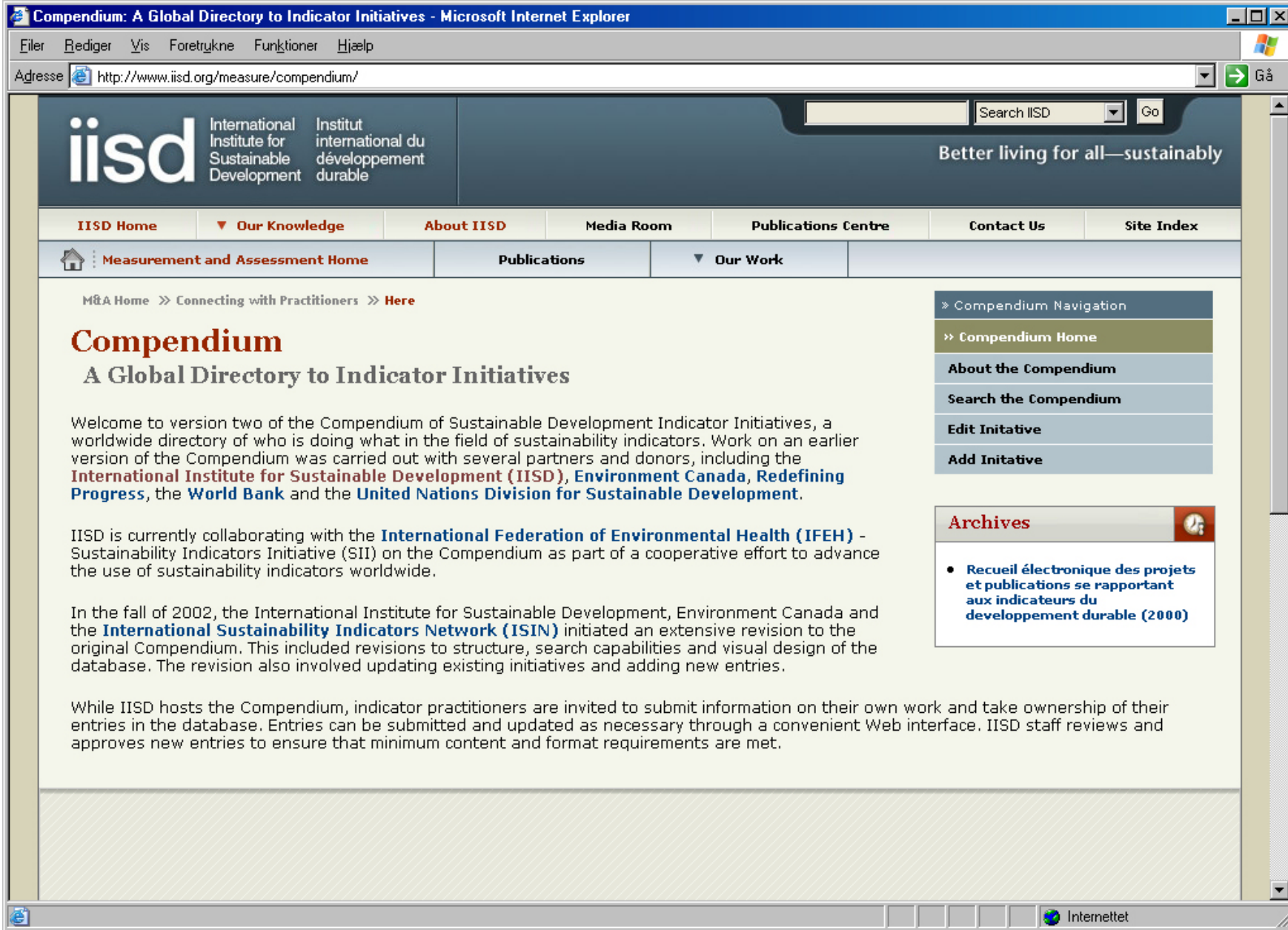
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Search the Compendium - Microsoft Internet Explorer

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Adresse <http://www.iisd.org/measure/compendium/searchinitiatives.aspx> Gå

**iisd** International Institute for Sustainable Development Institut international du développement durable

Search IISD Go

Better living for all—sustainably

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[Measurement and Assessment Home](#) [Publications](#) [Our Work](#)

M&A Home >> Connecting with Practitioners >> Compendium >> **Here**

## Search the Compendium

Search:

Location:

Scope:

Initiative Type:

Initiative Goal:

Issue Areas:

Initiative Framework:

Organization Type:

Sort By:

Sort Order:

Your search resulted in **842** initiatives.

- Sustainable Society Index**  
Sustainable Society Foundation, the Netherlands  
submitted Oct 17, 2009
- Accounting for Complexity in Strategic Impact Assessment**  
Bojan Radej, Independent Researcher, Slovenia Slovenian Evaluation Society  
submitted Aug 19, 2008

» Compendium Navigation

[Compendium Home](#)

[About the Compendium](#)

» [Search the Compendium](#)

[Edit Initiative](#)

[Add Initiative](#)

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Compendium entry - Microsoft Internet Explorer

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Adresse  http://www.iisd.org/measure/compendium/addinitiative.aspx  Gå




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M&A Home >> Connecting with Practitioners >> Compendium >> [Here](#)












## Add Initiative

Use this page to add a new initiative. Initiative attributes with a \* are required.

Descriptions of the entry fields can be found [here](#).

[» Compendium Navigation](#)  
[Compendium Home](#)  
[About the Compendium](#)  
[Search the Compendium](#)  
[Edit Initiative](#)  
[» Add Initiative](#)

* Title of Initiative:	<input type="text"/>
Lead Organization(s) for this Initiative:	<input type="text"/>
* Your Name:	<input type="text"/>
* Your Email:	<input type="text"/>
* Your Organization:	<input type="text"/>
Date Initiative	<input type="text" value="Select a year..."/>

           Internet



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# Examples of Indicator Systems

1. Canadian Environmental Sustainability Indicators
2. The New Orleans Index, United States
3. Sustainable Society Index, the Netherlands
4. Climate Change Plan, Denmark



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# Canadian Environmental Sustainability Indicators

The screenshot shows the homepage of the Canadian Environmental Sustainability Indicators (CESI) 2008. The browser window title is "Canadian Environmental Sustainability Indicators 2008 - CESI Home Page - Microsoft Internet Explorer". The address bar shows "http://www.ec.gc.ca/indicateurs-indicators/". The page features the Environment Canada logo and a large red maple leaf. A navigation bar includes links for Français, Home, Contact Us, Help, Search, and canada.gc.ca. A sidebar on the left lists various topics: Environment Canada, Sustainable Development, CESI, 2008 Highlights, Air Quality, Water Quality, Greenhouse Gas Emissions, About the 2008 CESI report, FAQ, and Glossary. The main content area is titled "Canadian Environmental Sustainability Indicators 2008" and contains a paragraph about the importance of environmental quality for Canadians' health and economic security. It also includes a list of links for Air Quality, Water Quality, and Greenhouse Gas Emissions.

Canadian Environmental Sustainability Indicators 2008 - CESI Home Page - Microsoft Internet Explorer

File Rediger Vis Foretrukne Funktioner Hjælp

Tilbage Søg Foretrukne

Adresse <http://www.ec.gc.ca/indicateurs-indicators/> Gå Hyperlinks

Environment Canada Environnement Canada

Canada

Environment Canada  
www.ec.gc.ca

Français Home Contact Us Help Search canada.gc.ca

[Home](#)

Environment Canada

**Sustainable Development**

**CESI**

2008 Highlights

Air Quality

Water Quality

Greenhouse Gas Emissions

About the 2008 CESI report

FAQ

Glossary

## Canadian Environmental Sustainability Indicators 2008

Canadians' health, well-being and economic security are highly dependent on the quality of the environment. Reports of smog alerts, lakes with blue-green algae, or shrinking ice caps bring attention to changing conditions in the environment. Issues such as asthma, cardiovascular disease and waterborne illnesses underline linkages between the environment and human health. Environmental changes such as low water levels, pest infestations and intense storms also have economic impacts in such sectors as agriculture, forestry and tourism.

Indicators provide a simple way to convey complex information on the environment, much like the gross domestic product, the consumer price index and the unemployment rate do for the economy. Through the Canadian Environmental Sustainability Indicators (CESI) initiative, the federal government reports on environmental indicators that track three issues of key concern to Canadians:

- [Air Quality](#)
- [Water Quality](#)
- [Greenhouse Gas Emissions](#)



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# The New Orleans Index, USA



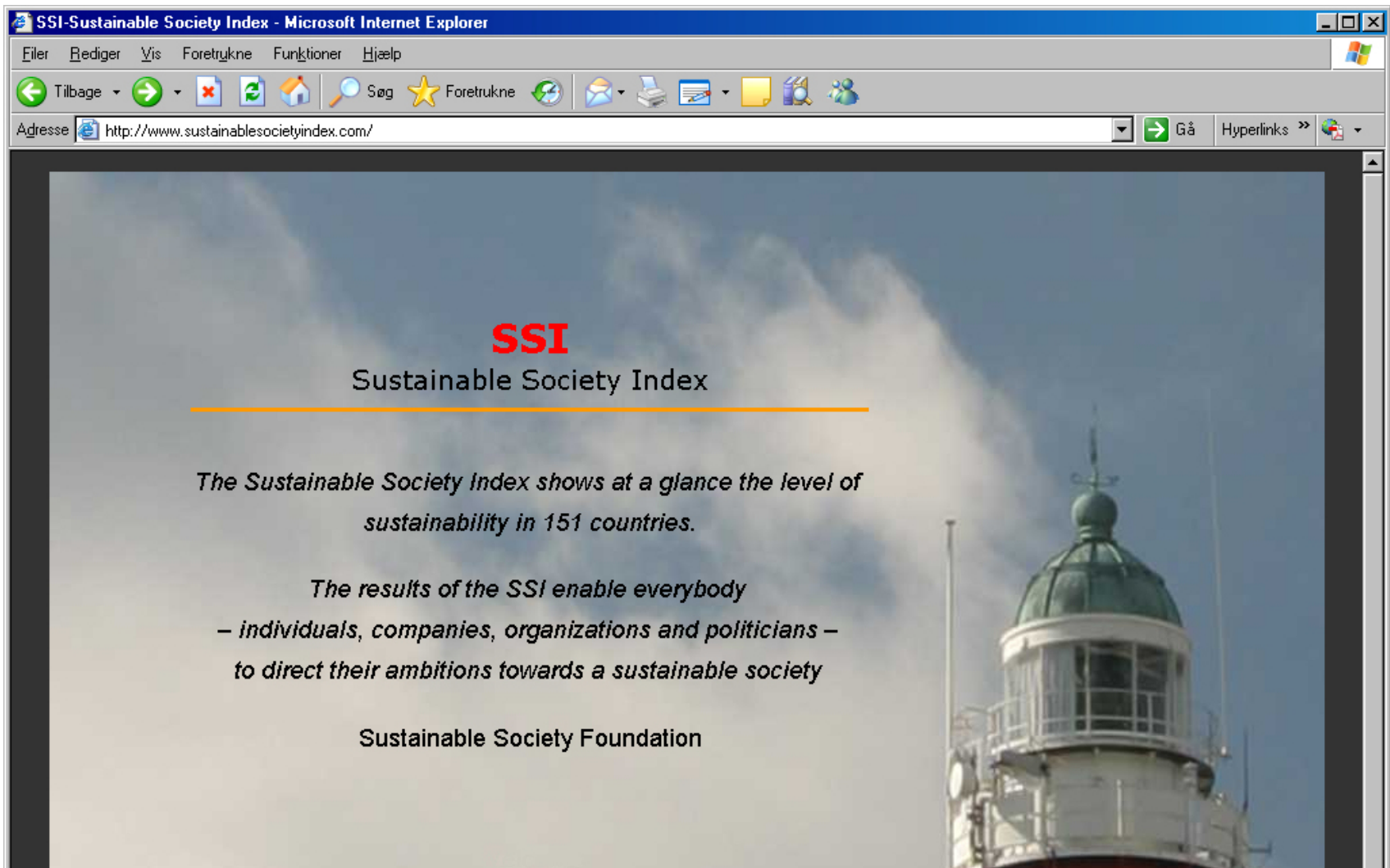
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# Sustainability Society Index, The Netherlands



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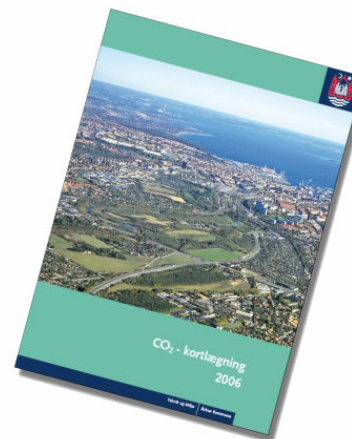
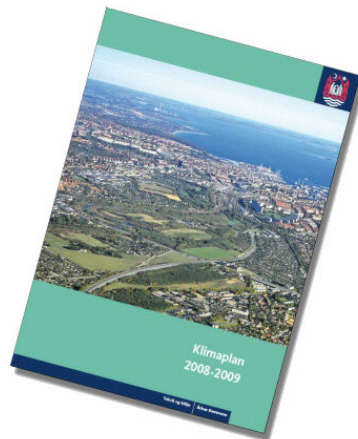


# Climate Change Plan, Aarhus Municipality Denmark

General Planning Strategy  
Local Agenda 21 Plan  
Spatial City Planning



Environment Action Plan  
Other sector plans



CO<sub>2</sub> emission mapping

Climate Change Plan



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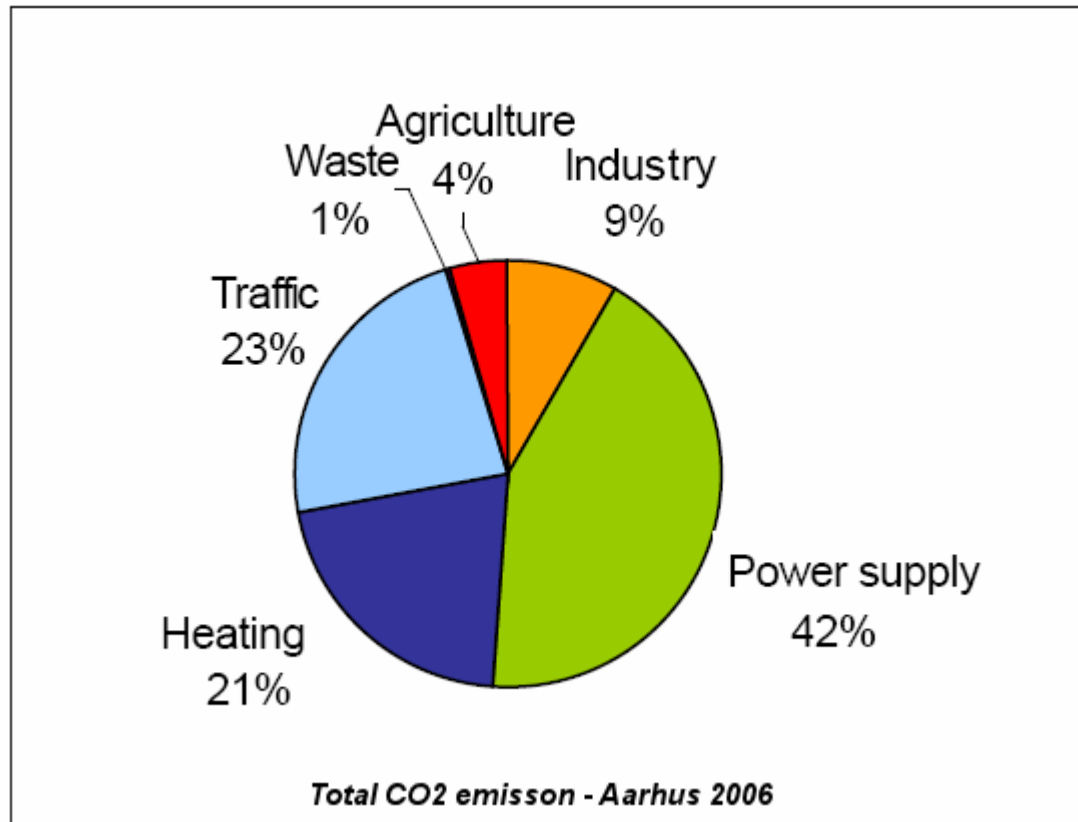


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# Climate Change Plan, Aarhus Municipality Denmark

## Mapping of CO<sub>2</sub> emission – Aarhus Municipality 2006



	ton CO <sub>2</sub> /year
Industry	171.127
Power supply	838.491
Heating	406.976
Traffic	458.489
Waste	10.000
Agriculture	85.000
Total	1.970.083

CO<sub>2</sub> emission - Aarhus Municipality 2006

CO<sub>2</sub> emission - Aarhus Municipality 2006  
- per capita: 6,6 ton

REF: [www.aarhuskommune.dk/files/aak/aak/content/filer/magistratens\\_2.\\_afdeling/natur\\_og\\_miljoe/miljoehandlingsplan/Kortlxgning.pdf](http://www.aarhuskommune.dk/files/aak/aak/content/filer/magistratens_2._afdeling/natur_og_miljoe/miljoehandlingsplan/Kortlxgning.pdf)



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# Final messages

- A strong need for a coordinated dissemination of information, knowledge and capacity building on the use of monitoring, measurement and reporting systems. Potential use of the Compendium of Sustainable Development Indicator Initiatives
- Support for general principles, such as the BellagioSTAMP (Sustainability Assessment and Measurement Principles) that provide broad methodological guidance
- Continuing efforts to harmonize indicator initiatives, with emphasis on sustainability and well-being indicators – with emphasis on enhancing the GDP / national economic accounts with similar robust and globally recognized indices regarding environment and social factors.
- Recognizing that the basic monitoring, measurement and reporting systems are still not implemented on a satisfactory level in many developing countries – which to some extent also goes for the developed countries. (e.g. CO<sub>2</sub>-emission, water, health, social and economic factors)



# Final messages

- Need to undertake, support and learn from local indicator efforts, while strengthening their compatibility with higher scaled indicator systems.
- To seek binding commitments on a high international level for all nations to implement measurement systems and to issue publicly available reports on all key aspects of sustainable development.
- All local/regional governments could be required by national law to establish measurement and reporting systems regarding the local community – given that they are provided with proper guidelines and finances.
- Ideally we would end up with a system where local/regional measurement systems are nested smoothly into national systems which finally are nested into international and global measurement systems.

**Thank you for your attention.**

**<http://www.iisd.org/measure/compendium>**

**<http://www.ifeh.org/indicators/compendium>**



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