Review of the UNECE list of environmental indicators

DIMITRIOS MEIMARIS
Expected outcome: List of reviewed indicators and detailed suggestions for update and revisions of the list of environmental indicators - list of new indicators to be considered.

START DATE 20 MAY 2021
UNECE list of environmental indicators

- An Environmental Indicator is a numerical value that helps us to describe the condition of the environment in a specific area.

- Environmental indicators make it possible to compare environmental conditions between different areas and to measure the effectiveness of environmental policy measures.

- The UNECE Guidelines for applying environmental indicators in Eastern Europe, Caucasus and Central Asia was first presented in 2006.

- The global SDG indicators of the UN Statistics Division have had an important role in the evolution of the UNECE list of environmental indicators.

- The current revision of the list takes into account the Countries Reports on the Current state and development of the Shared Environmental Information System (SEIS) that were published earlier this year.
Guidelines for the Application of Environmental Indicators

ALIGNED WITH THE FRAMEWORK FOR THE DEVELOPMENT OF ENVIRONMENT STATISTICS
• The environmental challenges are global
• Co-operation between countries is required
• International Environmental Indicators sets are used to describe the condition of the environment
• Substantial effort is needed for the collection and processing of environmental data
EEA environmental indicators

- Climate change adaptation (40)
- Water and marine environment (32)
- Biodiversity - Ecosystems (22)
- Climate change mitigation (11)
- Agriculture (9)
- Air pollution (9)
- Environment and health (9)
- Transport (9)
- Soil (8)
- Energy (7)
- Industry (7)
- Land use (7)
- Resource efficiency and waste (6)
- Sustainability transitions (3)
**Indicator definition**

This indicator shows the fraction of the EU-28 urban population that is potentially exposed to ambient air concentrations of six key pollutants (PM$_{2.5}$, PM$_{10}$, O$_3$, NO$_2$, SO$_2$, and BaP) that are in excess of the EU limit or target values (EU, 2004, 2008) set for the protection of human health, and to concentrations of these pollutants in excess of the WHO Guidelines (WHO, 2000, 2006).

The indicator is based on measurements of air pollutants as reported under the Air Quality Directives (EU, 2004, 2008) and the Decisions on the exchange of information (EU, 1997, 2011).

**Units**

Concentration:

- micrograms (mg) of pollutant per cubic metre for PM$_{2.5}$, PM$_{10}$, O$_3$, NO$_2$, and SO$_2$.
- Nanograms (ng) of pollutant per cubic metre for BaP.

Urban population (POP): number of inhabitants in the 'core city' and, from 2016 on, 'greater city' of the Urban Audit cities represented by the urban stations taken into account in the calculations.

Percentage of the urban population.

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**EEA: Detailed information on 85 indicators**
EEA State of the Environment Reports were also considered
OECD Environmental indicators

- Air and climate
- Biodiversity
- Environmental policy
- Forest resources
- Materials
- Waste
- Water
**Definition of Municipal waste**

Municipal waste is defined as waste collected and treated by or for municipalities. It covers waste from households, including bulky waste, similar waste from commerce and trade, office buildings, institutions and small businesses, as well as yard and garden waste, street sweepings, the contents of litter containers, and market cleansing waste if managed as household waste. The definition excludes waste from municipal sewage networks and treatment, as well as waste from construction and demolition activities. This indicator is measured in thousand tonnes and in kilograms per capita.
Eurostat SDG Indicators

Goal 1 - No poverty (sdg_01)
Goal 2 - Zero hunger (sdg_02)
Goal 3 - Good health and well-being (sdg_03)
Goal 4 - Quality education (sdg_04)
Goal 5 - Gender equality (sdg_05)
Goal 6 - Clean water and sanitation (sdg_06)
Goal 7 - Affordable and clean energy (sdg_07)
Goal 8 - Decent work and economic growth (sdg_08)
Goal 9 - Industry, innovation and infrastructure (sdg_09)
Goal 10 - Reduced inequalities (sdg_10)
Goal 11 - Sustainable cities and communities (sdg_11)
Goal 12 - Responsible consumption and production (sdg_12)
Goal 13 - Climate action (sdg_13)
Goal 14 - Life below water (sdg_14)
Goal 15 - Life on land (sdg_15)
Goal 16 - Peace, justice and strong institutions (sdg_16)
Goal 17 - Partnerships for the goals (sdg_17)

SDG 14 ‘LIFE BELOW WATER’

SDG 14 aims to conserve oceans by ensuring their sustainable use. This includes protecting and recovering marine and coastal ecosystems, conserving at least 10% of coastal and marine areas, as well as preventing and reducing marine pollution and the impacts of ocean acidification.

- Read more

Compare your country’s progress:

Surface of marine sites designated under Natura 2000

Select countries

- EU: 441,001 km²

2013: 100,000 km²
2014: 150,000 km²
2015: 200,000 km²
2016: 250,000 km²
2017: 300,000 km²
2018: 350,000 km²
2019: 400,000 km²
2020: 450,000 km²
2021: 500,000 km²
Detailed metadata for Eurostat SDG environmental indicators
A template was introduced, with information for indicators from the different sets and the resulting suggestions.
161 UNECE Indicators were considered. For each one of them all related information from the indicator sets of EEA, OECD and Eurostat was used to fill in the template.
Analysis of the information in the template was done in close co-operation with the UNECE Secretariat and Dr Tobias Garstecki, UNECE biodiversity consultant.

**Outcome**

**Suggestions**

- Keep indicator ➤ 112
- Discard indicator ➤ 27
- Modify indicator ➤ 22
- Add indicator ➤ 24
Thank you for your attention!