


Key performance indicators for sustainable reporting according to NACE



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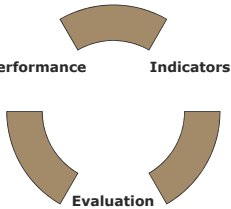
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Introduction

Definitions
The *Environmental Performance (EP)* of an organisation is defined as *results of an organisation's management of its environmental aspects*.

Environmental performance evaluation (EPE) is process to facilitate management decisions regarding an organisation's environmental performance by selecting indicators, collecting and analysing data, assessing information against environmental performance criteria, reporting and communicating, and periodic review and improvement process.



Performance Indicators
Evaluation

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What are Key Performance Indicators (KPIs)?

Quantifiable metrics that reflect the performance of a business in achieving its wider goals and objectives.

- ☑ They should **align** all levels of an organisation (business units, departments and individuals) with **clearly defined targets** and **benchmarks** to create accountability and to track progress.
- ☑ They should **focus** on **'key' measures** – i.e. those most important to an understanding of the business and thus avert the tendency for lengthy reporting on a wide range of measures, of which many may be less relevant.

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How to recognise a good KPIs

- Definition & calculation method
- Purpose
- Source of data
- Quantification of future targets
- Reconcile adjusted environmental information from financial statements
- Disclose preceding financial year data
- Compare previous calculations and significant changes

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Selecting KPIs with respect to ISO 14031:1999

The standard ISO 14031:1999 describes two general categories of indicators for EPE: *Environmental Performance Indicators* (EPIs); and *Environmental Condition Indicators* (ECIs).

There are two types of EPIs:

- Management performance indicators* (MPIs) provide information about management efforts to influence the environmental performance of the organisation's operations.
- Operational performance indicators* (OPIs) provide information about the environmental performance of the organisation's operations.

Indicators ECIs provide information about the condition of the environment. This information may help an organisation to better understand the environmental impact or potential impact of its environmental aspects, and thus assists in the planning and implementation of EPE.

The decisions and actions of an organisation's management are closely related to the performance of its operations.

The process EPE defined in ISO 14031 is too general including methods how to define KPIs and choose appropriate EPIs and ECIs and set organisation performance criteria.

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Selecting key indicators with respect to Recommendation 2003/532/EC

Annex I of Commission Recommendation 2003/532/EC, on guidance for the implementation of Regulation (EC) No 761/2001 of the European Parliament and of the Council allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) concerning the selection and use of environmental performance indicator, is the guidance on the selection and use of environmental performance indicators for the purpose of producing the EMAS environmental statement of organisation.

However this guidance is also too general. Its major categories OPIs, MPIs, and ECIs as well as most its subcategories correspond directly to relevant indicator categories used in ISO 14031.

New subcategories: *the organisation's operation, transport, employee involvement, administration and planning, purchasing and investments and health and safety* are specific for EMAS and can be included into KPIs.

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Selecting key indicators with respect to Recommendation 2003/532/EC

Basic principles of development of KPIs following from Recommendation 2003/532/EC are :

- *comparability*: KPIs should enable a comparison and show changes in the environmental performance,
- *balance between problematic (bad) and prospective (good) areas*,
- *continuity*: KPIs should be based on the same criteria and should be taken over comparable time sections or units,
- *timeliness*: KPIs should be updated frequently enough to allow action to be taken,
- *clarity*: KPIs should be clear and understandable.

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Criteria in the selection of appropriate KPIs with respect to Recommendation 2003/532/EC

- ***KPIs should give an accurate appraisal of the organisation's performance.***

It is important that the organisation can have a correct assessment of its environmental performance. *The KPIs should represent environmental performance as accurately as possible, providing a balanced illustration of environmental aspects and impacts*^[1].

In addition to absolute values of environmental impacts, measurement units may also address the environmental impact per unit of product or service, per turnover, gross sales or gross value added (eco-efficiency indicators) or the environmental impact per employee.

- ***KPIs should be understandable and unambiguous.***

For reasons of both credibility and management control it is important that KPIs should be clear and understandable to the user and correspond to the users' information requirements. KPIs should be coherent and concentrate on essential data. For reporting purposes data is often aggregated or normalised.

^[1] i.e. in ISO 14031: *any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services.*

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Criteria in the selection of appropriate KPIs with respect to Recommendation 2003/532/EC

- ***KPIs should allow for year on year comparison***
This aspect ensures that it is easy to follow the development of organisation's performance. The importance of the correct selection of KPIs at the beginning of the reporting process can be demonstrated in the requirement for year on year comparison.
- ***KPIs should allow for comparison with sector, national or regional benchmarks***
One of the essential requirements for comparison of KPIs is that they are generated the same way. The organisation should take care to apply the 'common standard' when creating their KPIs. Organisations should ensure that they are aware of these benchmarks and that if reporting against these aspects then the KPIs they choose should allow for direct comparison with these benchmarks.
- ***KPIs should allow for comparison with regulatory requirements***
For both internal management and external credibility, organisations should be able to demonstrate how they are performing in relation to legislative requirements. Where legislative requirements exist for the environmental aspect to be reported, organisations should include these requirements in the same table or graphical representation as the performance.

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Further approaches for selecting KPIs

United Nations approach

A Manual for Preparers and Users of Eco-efficiency Indicators (2004).

This UN Manual sets out a range of eco-efficiency indicators, defined as the ratio between an environmental and a financial variable, i.e. indicators are ratios composed of an environmental item divided by a financial item.

Accounting principles in the UN Manual are based on the document "*IASB Framework for the Preparation and Presentation of Financial Statements*", particularly the characteristics: *understandability, relevance, reliability and comparability*.

For each of the eco-efficiency indicators, the accounting policy adopted is disclosed.

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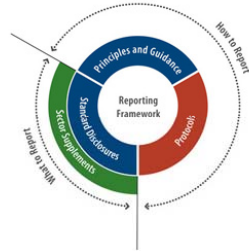
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Further approaches for selecting KPIs

Global Reporting Initiative

GRI G3 Guidelines (<http://www.globalreporting.org/ReportingFramework/>) are the third and the last generation of GRI Guidelines. They were published in 2006 and they are results of several years' development and improving Guidelines from 2002.

G3 Reporting Framework



Further approaches for selecting KPIs

Global Reporting Initiative

There are: *Economic Indicators*, *Social Indicators* and *Environmental Indicators*.

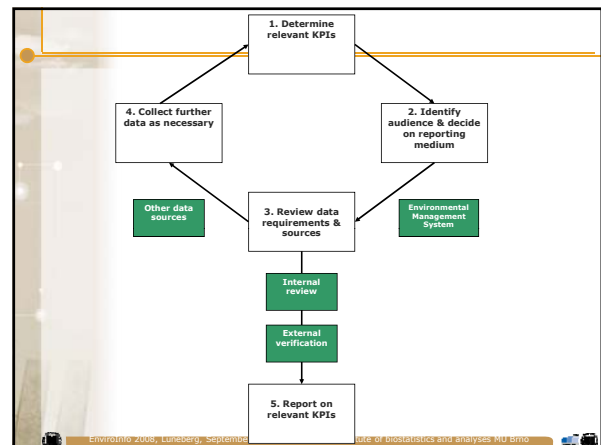
- o The Economic Indicators illustrate: *Flow of capital among different stakeholders; and Main economic impacts of the organization throughout society.*
 - o The Social Indicators illustrate: *Employment; Labor/Management Relations; Occupational Health and Safety; Training and Education; and Diversity and Equal Opportunity.*
 - o The Environmental Indicators concern: *an organization's impacts on living and non-living natural systems, including ecosystems, land, air, and water.*
- They cover following areas: *Materials; Energy; Water; Biodiversity; Emissions, Effluents, and Waste; Products and Services; Compliance and Transport.*

Further approaches for selecting KPIs

The UK Reporting Guidelines approach (2006)

Identify three general reporting principles:

- ☑ *transparency* (including the definition of boundaries and explanation of processes to manage risk),
- ☑ *accountability* (including stakeholder engagement and third party assurance) and
- ☑ *credibility* (including the use of an EMS and policy for supply chain management)



Environmental KPIs for corporate reporting

There is substantial variation between the different proposals as regards the range of environmental KPIs advocated and the environmental impacts covered. We recommend two approaches:

➤ *Defra*

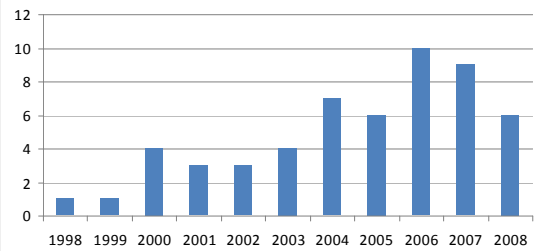
(<http://www.defra.gov.uk>) is currently reviewing its Environmental Reporting Guidelines and updating them to better reflect the current and future challenges of reporting. As an important part of this process Defra is producing a document on Environmental KPIs.

➤ *GRI G3 Guidelines*

(<http://www.globalreporting.org/ReportingFramework/>) are the last generation of GRI Guidelines.

Number of companies with corporate report in the Czech Republic

Reports per Year



Environmental KPIs for corporate reporting

There is substantial variation between the different proposals as regards the range of environmental KPIs advocated and the environmental impacts covered.

Emissions to air and contribution to global warming

The GRI G3 Guidelines have four indicators that concern emissions to air and contribution to global warming:

- EN 17 Greenhouse gas emissions**
- EN 19 Other significant air emissions by weight**
- EN 23 Other relevant greenhouse gas emissions**

The UK Guidelines include five indicators that concern emissions to air and contribution to global warming:

- KPI 1 Greenhouse gases**
- KPI 2 Acid rain and smog precursors**
- KPI 3 Dust and particles**
- KPI 5 Volatile organic compounds**
- KPI 6 Metal emissions to air**

Environmental KPIs for corporate reporting

• **Water use and discharge**

The GRI G3 Guidelines include indicators:

- EN 9 Total water withdrawal by source**
- EN 10 Water sources and related habitats significantly affected by withdrawal of water**
- EN 11 Percentage and total volume of water recycled and reused**
- EN 21 Total water discharge and quality**
- EN 25 Water sources and related habitats significantly affected by discharges of water and runoff**

The UK Guidelines deal separately with water abstractions and emissions to water:

- KPI 14 Water abstraction**
- KPI 7 Nutrients and organic pollutants**
- KPI 8 Metal emissions to water**

Environmental KPIs for corporate reporting

Waste and emissions to land

The GRI G3 Guidelines include indicators:

- EN 20 Total amount of waste by type and destination**
- EN 22 Total number and volume of significant spills**
- EN 24 Weight of transported, imported, or exported waste deemed hazardous**

The UK Guidelines include:

- KPI 9 Pesticides and fertilisers**
- KPI 10 Metal emissions to land**
- KPI 11 Acids and organic pollutant emissions to land**
- KPI 12 Waste (Recycling, recovery and landfill)**
- KPI 13 Radioactive waste**

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Environmental KPIs for corporate reporting

Materials, use of resources and recycling

The GRI G3 Guidelines include:

- EN 1 Weight of materials used**
- EN 2 Percentage of materials used that are recycled**
- EN 27 Percentage of products sold that is reclaimed at the end of the product's useful life by product category**

The UK Guidelines cover the use of resources:

- KPI 15 Natural gas**
- KPI 16 Oil**
- KPI 17 Metals**
- KPI 18 Coal**
- KPI 19 Minerals**
- KPI 20 Aggregates**
- KPI 21 Forestry**
- KPI 22 Agricultural produce**

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Environmental KPIs for corporate reporting

Energy use

The GRI G3 Guidelines include:

- EN 3 Direct energy consumption broken down by primary energy source**
- EN 4 Indirect energy consumption broken down by primary energy source**
- EN 5 Percentage of total energy consumption met by renewable sources**
- EN 6 Total energy saved due to conservation and efficiency improvements**
- EN 7 Initiatives to provide energy-efficient products and services**
- EN 8 Initiatives to reduce indirect energy consumption**

Biodiversity

The GRI G3 Guidelines include:

- EN 12 Location and size of land owned, leased or managed in, or adjacent to, protected areas**
- EN 13 Description of significant impacts of activities on protected areas**
- EN 14 Areas of habitats protected or restored**
- EN 15 Programmes for managing impacts on biodiversity**
- EN 16 Number of IUCN Red List species with habitats in areas affected by operations, broken down by level of extinction risk**

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Environmental KPIs for corporate reporting

Environmental protection expenditure

The GRI G3 Guidelines incorporate single indicator **EN 30** requiring total environmental protection expenditure by type, within the categories:

- Waste disposal, emission treatment and remediation costs**

- Prevention and environmental management costs.**

Expenditure on fines for non-compliance with environmental regulations is addressed under **EN 28**.

Impacts of products, services and transport

The GRI G3 Guidelines include:

- EN 26 Initiatives to manage the environmental impacts of products and services and extent of impact reduction.**

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ICT support of corporate reporting with KPIs

We have continued in development web information system ISEPE for corporate reporting, which is able to choose KPIs and easy communicate with both internal and external interested parties (employees, EMS team, company managers, public and external interested parties and other report readers), (Hřebíček, Kokrment, Ráček 2004), (Fiala, Hřebíček, Ministr, 2005), (Kokrment, Hřebíček, 2006).

We have used in communication and reporting processes devoted to KPIs as an output and input format mainly in XML (when it is possible) since 2002, but it was used also its native format with necessary conversions, because large volume of input data to EPE is stored in existing organisation information systems.

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ICT support of corporate reporting with KPIs

Processing general EMS records/data into KPIs and EPE documents/reports is customized for various interested parties in various forms (XHTML, PDF, text, etc.). Each document/report contains data from three main categories:

- *basic part*, which includes all the records/data for processing and choosing appropriate KPIs, which are subject of communication/reporting (but not all these data are contained in the final customized document/report);
- *information about interested parties - target group and foreword for specific target group.*

These data are transformed to the structure demanded by specific target group. Next step is application of the design for target group. Finally the data are sent to serialization process, which produces final document/report in XHTML, PDF format.

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Thank you for attention

Questions?

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