



MICA

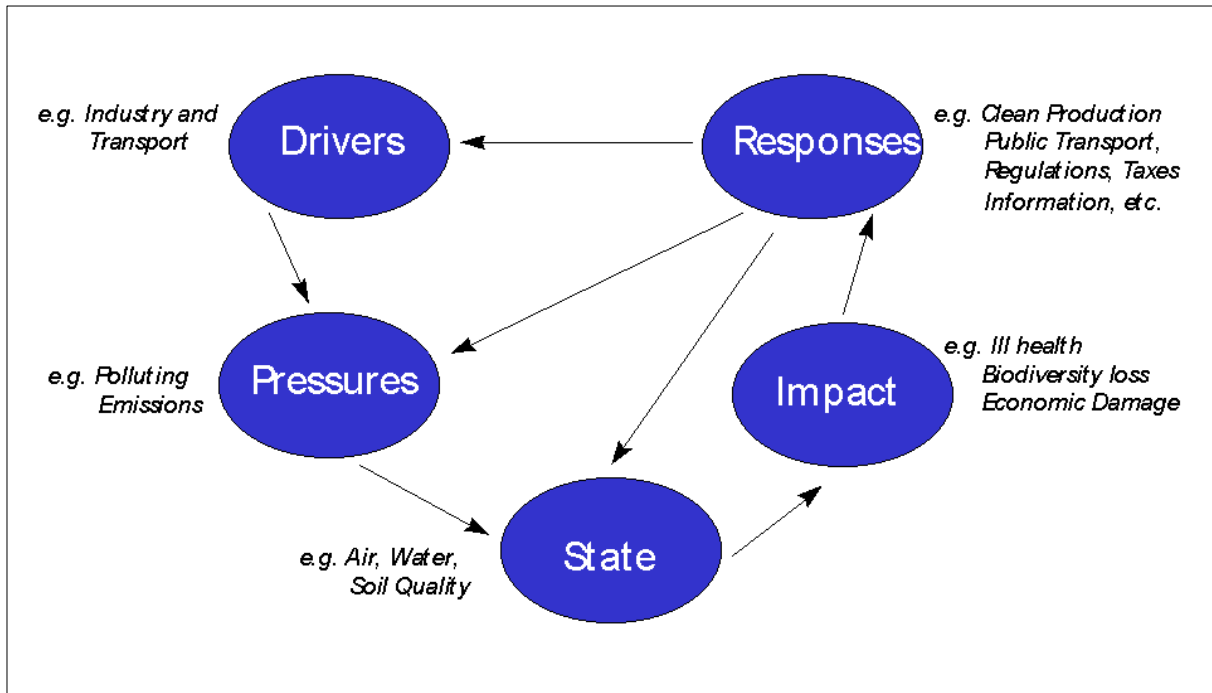
Minerals Intelligence Capacity Analysis

FACT SHEET

DPSIR Framework

Scope (conceptual model & main characteristics)

The analysis of Drivers, Pressures, Status (of the environment), Indicators to measure the efficacy of (policy) Responses (to environmental etc. impacts) is a form of systems analysis. It can provide the logical framework for scenario analyses and quantitative models. Drivers are underlying economic developments or consumer behaviours. Thus, for instance, increasing wealth leads to the desire of individual mobility, which in turn leads to greenhouse gas emissions that constitute a Pressure on the environment. The Status would be e.g. the current atmospheric CO₂-levels. In this case a policy Response could be to increase fuel taxes in order to dampen consumption. The associated Indicator would be the amount of fuel consumed in the market for individual transport. The benefit of the DPSIR-framework is that it goes beyond a mere description of mechanistic relationships by trying to identify root causes, namely the Drivers. This provides guidance as to where Responses should be targeted at.



DPSIR-framework for environmental impacts
(Source: <http://www.eea.europa.eu/publications/92-9167-059-6-sum/page002.html>)

Range of relevant applications or topics

Can be, in principle, applied to any kind of system.

Data needs, databases

Data needs depend on the problem in hand.

Model used (if any, mathematical, geological...)

Not applicable.

System and/or parameters considered

Can be, in principle, applied to any kind of system.

Time / Space / Resolution / Accuracy

Temporal and spatial resolution depend on the available data.

Indicators / Outputs / Units

Output of the method will be a conceptual model for the Drivers, Pressures, States, Indicators, and possible Responses within the system under investigation.

Treatment of uncertainty, verification, validation

Verification and validation are only possible with hindsight, but can become compromised by the complexity of the issues in hand.

Main publications / references

Smeets, E., Weterings, R. (1999): Environmental indicators: Typology and overview.- EEA Technical report No. 25: 19 p., Copenhagen (European Environment Agency), http://www.eea.europa.eu/publications/TEC25/at_download/file (accessed 30.06.16).

Related methods

Relevance Tree.

Operational tools

No applicable.

Key relevant contacts

-> list relevant organisations that could provide further expertise and help with the methods described above. We do not necessarily need to name specific ones just describe the type of organization/ expert somebody should seek help from e.g a geological survey, an LCA practitioner etc.

No applicable.