

Interlinking and improving existing tools for Integrated Sustainability Assessment **WP 8**

Methods and Tools for Integrated Sustainability Assessment



Overview

This WP explores the possibilities of interlinking existing tools and methods for ISA. Especially interlinkage deficiencies between natural science oriented models on the one hand and (socio-) economic models on the other hand have to be addressed in order to gain policy impact. Thus, existing tools and instruments of established credibility in their respective communities will be integrated and used in the case studies. A limited set of global and European scenarios will be developed.

Objectives

The overall objective of this WP is to develop improved and interlinked quantitative ISA modeling tools that can be applied and evaluated in the case studies and provide a major contribution to the improvement of the available tools portfolio for conducting ISAs in the European context.

Activities

Currently available modeling tools from the natural sciences and the socio-economic sciences are being interlinked to produce expanded numerical frameworks for exploring ISA on the basis of existing but hitherto still separate tools. To this end, available tools have been selected, adapted, and interlinked through coupling modules or data interfaces, and will be evaluated as joint modelling systems. The emerging new ISA-tools will be demonstrated in the case studies and their potential for ISA will be documented.

The models used for integrated assessments so far (IAMs) are generally not currently fully adequate for use in Integrated Sustainability Assessments, neither are models developed for simulating the dynamics of particular subsystems, for example the natural or the agricultural systems. The capacity of IAMs should be improved both substantially, by interlinkage with other models and modules, and formally, by improving their flexibility and performance.

About the MATISSE project

MATISSE aims to achieve a step-wise advance in Integrated Sustainability Assessment (ISA) of EU policies. The core activity of MATISSE is to improve the tools available for conducting Integrated Sustainability Assessments. The case studies provide the real-world contexts within which the ISA methodology and tools can be assessed. Stakeholders have a central role within ISA.

What is ISA?

Integrated Sustainability Assessment (ISA) is a cyclical, participatory process of scoping, envisioning, experimenting, and learning through which a shared interpretation of sustainability for a specific context is developed and applied in an integrated manner, in order to explore solutions to persistent problems of unsustainable development.

Other Briefing Sheets

- Conceptual framework for ISA
- Current Use of ISA Policies and Tools
- Agriculture, Forestry and Land Use Case Study
- Dematerialisation Case Study
- Water Case Study
- Environmental Technologies Case Study
- Developing New ISA Tools
- Dissemination

The ISA-models will be run with a common set of European scenarios.

This design philosophy has resulted in a set of four sub-workpackages. These follow a generic pattern of work tasks:

- Agreement on major framework conditions concerning spatial and temporal coverage, spatial and temporal resolution, basic scenario assumptions, and case study application
- Development of interlinkages between existing models especially linking natural science models to socio-economic models
- Development and application of interlinked tools to one or more case studies
- Application of revised interlinked tools to one or more case studies
- Evaluation of the results of case studies and consequences for further development of ISA-tools, i.e. applicability and limits for interlinked tools

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MATISSE



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Find more information at www.matisse-project.net



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