

Stakeholder Engagement and Learning in ISA

Stakeholder Engagement

Integrated Sustainability Assessment (ISA) is a fundamentally participatory approach to sustainability assessment. Within the MATISSE project we have worked with stakeholders:

- To construct ‘visions’ of, and ‘pathways’ to, sustainable futures – that reflect the experiences, views and concerns of different stakeholders;
- To look at the different options (including options for transformation of and collaboration between stakeholders) and trade-offs between options that different pathways entail;
- To increase the mutual understanding of the science and policy and to improve the representation of the policy arena in the models we are developing;
- To test and improve participatory methods for policy assessment and social learning; and
- To disseminate our research and raise the profile of institutions involved in MATISSE.

Stakeholders have been formally engaged through workshops, in-depth interviews and questionnaires. In addition we had informal contact (via email, phone and face-to-face meetings) with several relevant groups (academics, government agencies, and industry representatives) who also acted as advisors

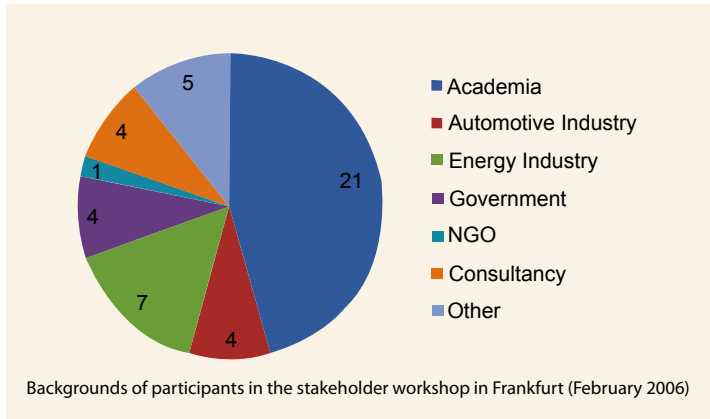
Topic	Activities
Dematerialisation	Workshop with stakeholders from the European Commission in October 2005. A second workshop within the framework of the EU-funded FORE-SCENE project in 2006.
Water	Stakeholder meetings in November 2005, March 2006 and March 2007. Final workshop is planned in February 2008. While the first workshop was only of an exploratory kind, the second and third meetings allowed carrying out several visioning and experimenting activities.
Agriculture, Forestry and Land Use	Workshop with stakeholders from the EU Commission and other relevant organisations in Brussels in October 2006.
Hydrogen/Mobility	Two workshops were held in Frankfurt (February 2006, June 2007). MATISSE researchers conducted focus groups with and distributed self-completion questionnaires to stakeholders with interests and expertise in sustainable transport and hydrogen transport technology. Two citizens’ workshops were organised in the UK as part of events to engage the public in science or environmental issues: the BA Festival of Science in September 2006, and the Norwich Forum Trust’s Earth Event in March 2007.
Environmental Technology – the Czech Republic	Two workshops were held in Prague in 2006 (April and September). A third workshop was held in November 2007 together with colleagues from the case study on dematerialisation.

Stakeholder Workshops in the MATISSE Project

and data providers. Furthermore, a high-level advisory group, comprising senior academics, politicians and industry representatives, has given feedback on the project as a whole and advised on how findings could be applied to real-world sustainability challenges.

As an example, the figure on the next page shows the backgrounds of participants in the first expert workshop held in the Hydrogen case study.

The questionnaires administered in several of the stakeholder workshops provided an opportunity to explore whether the stakeholder engagement methods had fostered social learning amongst stakeholders. For example, in the Hydrogen case study when asked what they had learned from the expert focus groups and citizens’ workshops, in total three-quarters of stakeholders (rising to 83 percent of citizens) felt they had learnt something. The table on next page shows that



in total, three out of ten stakeholders felt they had changed their views about the topics discussed in the groups. Responses often referred to learning about other participants' points of view, as well as technological aspects, transport in other countries, and the complexity of transport issues.

There has also, of course, been considerable learning within the project from the stakeholder activities. For example, the results of our stakeholder engagement work were vital for the scoping stage of the Hydrogen ISA. Rather than restricting the assessment to hydrogen-based transport as originally intended, it was broadened to encompass a range of technical and behavioural options for addressing 'unsustainable mobility'. We conclude that deliberative workshops provide valuable fora to co-construct knowledge

and elicit informed views of citizens and experts. They can also empower these groups to participate in important social issues related to sustainability.

Learning to do ISA

In addition to reporting on learning by stakeholders, it is important to report on findings about learning by researchers in the MATISSE project. This is particularly so because ISA is in its infancy and the project was, first and foremost, a methodology development and testing project, which responds to a gap in sustainability assessment practice. ISA is intended to fill this gap and the project tested ways to implement the ISA process architecture and analytical dimensions. ISA is

challenging, since it calls for capacities and features that are unconventional. Hence the most urgent task at this stage is to build awareness among scientists of these challenges and requirements.

The four steps of the ISA cycle were in principle useful in structuring the complex process of doing sustainability assessments. The scoping stage was an important step for all case studies to broaden the perspective of the issue and to put the case study into context. An important lesson seems to be that although the concept of ISA seems to be simple, logical and straightforward, it is not at all easy to apply to real life complex problems with multiple levels.

The degree and nature of stakeholder involvement varied in the case studies. Overall it broadened the scope of the case studies and

Do you feel the break-out discussion has changed your views about any of the topics discussed?	Citizens (Sept06) N=14	Citizens (Mar07) N=15	Experts (Feb06) N=44	Experts (Jun07) N=24	Total
Yes	21%	33%	33%	29%	29%
No	29%	27%	56%	42%	39%
Don't know	14%	-	12%	21%	12%
No answer	36%	40%	-	8%	21%
What, if anything, do you feel you have learned from the break-out discussion [workshop]?					Total
Total no. of responses indicating learning	79%	87%	73%	63%	76%

Stakeholder deliberation and learning outcomes from the workshops in the Hydrogen/Mobility case study

was an enriching experience. At the same time it was a major challenge for the case studies to engage stakeholders in the process and to keep them involved. An important lesson was that a lot of time and resources and professional skills are required to manage stakeholder processes. Also it has been a major challenge to include stakeholder input in the assessments in a consistent way.

Models and tools have played different roles in the various case studies. In some case studies models have been the central tool for analysis, in other cases prototypes of games and tools have been demonstrated to and even developed with potential users, or insights about stakeholder preferences have been used to tune new tools. An important insight gained by applying models in the case studies was that it helped the modelers to be explicit and think again about the underlying model assumptions. Team members have learned that it is not an easy task to adapt models for specific questions without challenging assumptions and model structures. And it is hard to change anything during a short-term process (in this case a research project): model development is a large investment which requires planning ahead. Finally, there was learning about needed improvements of methods and tools for ISA. This includes, for example, explicitly representing

or managing trade-offs, uncertainty analysis, modelling social dynamics, linking intensive and extensive participatory methods.

Evaluation and Learning in ISA

Previous experience shows that learning in assessment processes can range from simple learning in which new knowledge is absorbed through error correction, through more advanced learning in which underlying objectives, values and norms are also

modified as new knowledge becomes available, to more advanced 'learning to learn'.

Within the ISA concept, evaluation and learning are an explicit step in the assessment cycle. All sustainability assessment processes seek to generate and integrate information. The purpose of those forms of sustainability assessment most routinely used to support policy making is to develop evidence for immediate instrumental purposes, such as to



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screen policy alternatives for unintentional impacts. ISA distinguishes itself from those forms of assessment in its purpose to develop insights able to promote conceptual learning, reframing and other transformative outcomes.

ISA is designed as a participatory process through which participants gain insights, on the one hand, into the nature of context-specific problems of sustainable development and how these are embedded in the broader social-ecological system. On the other hand it focuses on different perspectives on these problems, including how issues (and solution possibilities) are framed presently. Whereas other sustainability assessment processes focus on projecting the impacts of proposed undertakings, ISA is more concerned with improving understanding among all those engaged in the assessment process about

- key relationships in the social-ecological system and how they relate to sustainability (sustainability learning);
- how issues are framed by different stakeholders and how these framings relate to the possibilities to resolve persistent problems of unsustainable development (social learning); and
- designing pathways toward more sustainable futures (transition learning).

Of critical importance is that ‘sustainability learning’ takes place through a participatory process of social learning so that it includes learning about (and reflection on) one’s own understanding, perspectives on and framing of the issues as well as others’ understandings, perspectives and framings. This is needed in order to establish shared visions of desirable futures and to provoke a process of social capital building around the exploration of pathways toward these, which is needed for ‘transition learning’.

However, there is another reason why learning and evaluation are essential in ISA. Perhaps one of the most important insights about ISA is that any specific ISA application will need to be tailored to its context of application. Both in the development of the general elements of the ISA approach and in customising ISA to the specifics of a particular application, ISA calls for a process of co-development of methods and tools involving mutual learning among those developing methods and tools and those using them. By implication the development of ISA methods and tools will have to be achieved through an adaptive ‘learning-by-doing’ approach involving interplay between tool developers and users supported by evaluation.

Evaluation will necessarily involve the stakeholders, since it is their experiences as users of the methods and tools and their insights into their ‘fitness-for-purpose’ that are needed to support adjustment and corrective action.

Further Reading

Barker, A., Bohunovsky, L. et al. (forthcoming). Using Environmental Tax Reform to Support Sustainable Development in Transition Economies: the case for the Czech Republic. MATISSE Working Paper 19. Available at: www.matisse-project.net

Schade, W., Wietschel, M. and Weaver, P.M. (2007). Reframing sustainable transport: exploring hydrogen strategies using Integrated Sustainability Assessment (ISA). MATISSE Working Paper 15. Available at: www.matisse-project.net

Tàbara, J.D., Pahl-Wostl, C. (2007). Sustainability learning in the management of social-ecological systems. MATISSE Working Paper 11. Available at: www.matisse-project.net

Tàbara, J.D., Roca, E., Madrid, C. (2007). Developing new methods and tools for the Integrated Sustainability Assessment of water. The MATISSE project and the Ebro River Basin. MATISSE Working Paper 8. Available at: www.matisse-project.net

Whitmarsh, L. (2007). Citizens’ workshops on sustainable futures: report on findings. MATISSE Working Paper 14. Available at: www.matisse-project.net