



First implementation of the ISO 14008 standard in a database on monetary values of environmental impacts and related aspects

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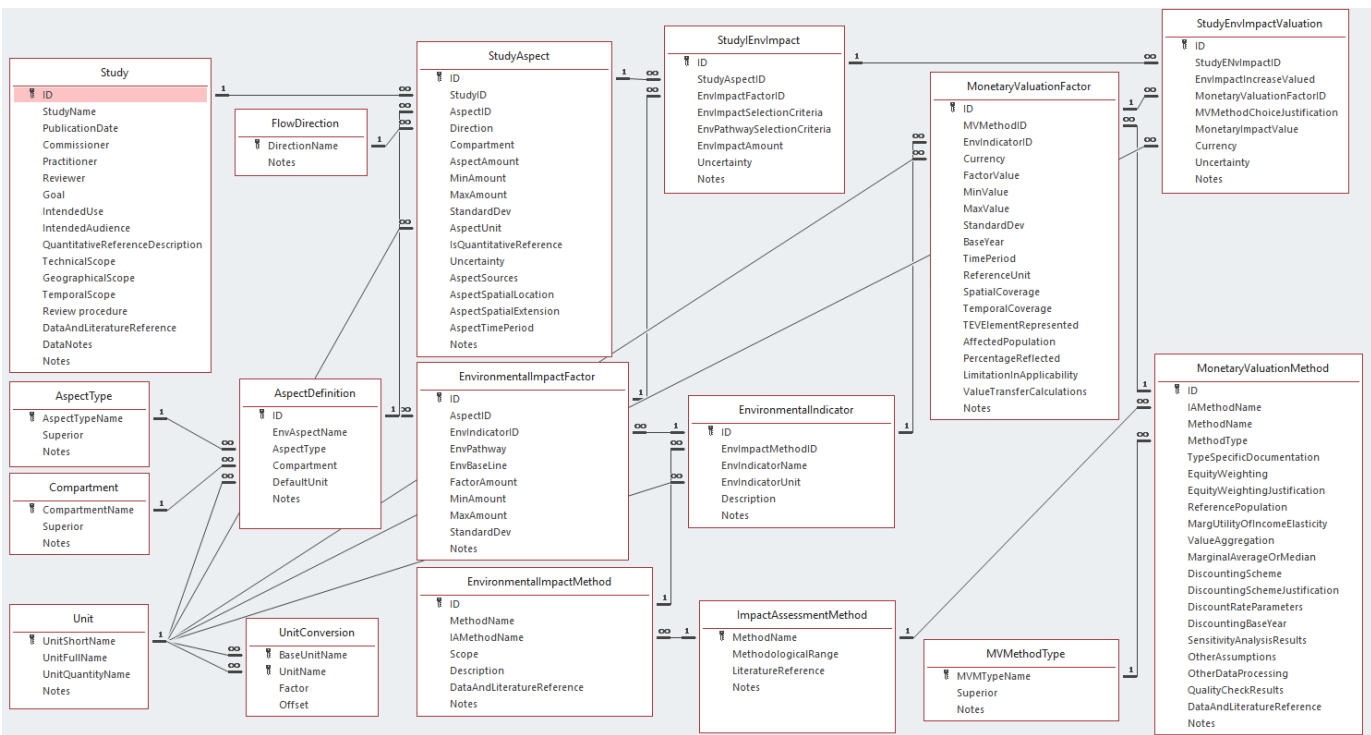
Introduction

A new international standard, ISO 14008, offers a framework for monetary valuation of impacts from emissions and use of resources. The standard contains requirements and recommendations on defining and documenting goal and scope, on methodology and on reporting. Our goal in the work reported here is to make monetary values of environmental impacts and related aspects available by a database based on ISO 14008.

Method

The technical solution is a relational database. The database consists of 17 interlinked tables as shown below. We have initiated a Swedish project called "Natural Capital and Value Creation", where we develop and offer an environmental damage cost price list for materials and processes to organizations, which make case studies.

Result



Learnings, conclusions

- The requirements and recommendations for documentation and reporting in ISO 14008 is possible to store in our relational database. As in the case for LCA, it is more or less necessary to use databases and software for assessments of monetary values of organizations environmental aspects.
- Access to real data on monetary values for environmental impacts is key to integrate environmental and ecological economics in life cycle management. Already now, several working groups within the ISO Environmental managing project is developing standards, which may be supported by ISO 14008, such as the ISO 14007 on costs and benefits of environmental management, ISO 14030 on green finance and 14097 on climate finance. A new technical committee has been started within ISO on sustainable finance.
- The establishment of the relational database on monetary values of environmental impacts is a quite straightforward process, but some of the present valuation methods lack information required by the standard. Although the standard ensures transparency in terms of traceability, the inherent complexity of monetary valuation is a challenge in communicating with non-experts.

Applications

Monetary values for environmental impacts have a very broad application in environmental management. Of particular interest here is the potential of including externalities in circular economy.

Acknowledgement

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