

WatAs

A project in the Thuringian Water Innovation Cluster

Field of Innovation
Assessing Water

Water Management Indicators

Integrative Water Assessment: Indicators for the Assessment for Sustainable Water Management

Outlet

Against the backdrop of climate change, increased industrial water use and the pollution of water with contaminants, more sustainable water management is of essential importance. This requires data on water consumption and water quality.

Accounting research has found that corporate reporting is particularly inadequate from a sustainability perspective. It has been shown that the available data is often either insufficient or inaccurate. Key indicators to specifically evaluate the sustainability of water utilization are lacking. There exists a pressing need to develop these indicators to establish a stronger focus on sustainability in water management systems.

Project

The research and development

carried out in the WatAs project aims to establish a contemporary and meaningful water accounting system, thereby supporting sustainable and equitable water-related decision-making processes in organizations. WatAs focuses on developing guidelines for multi-perspective and prognostic water assessment. In various case studies, indicator models will be examined and scientifically evaluated from sociological, ecological, and economic perspectives.

Based on current research in the field of Sustainable and Environmental Accounting, the project develops a common evaluation strategy that considers the value of water for different user groups and the impact this has on the environment.

Building on the experiences of Carbon Footprinting, where climate-relevant emissions associated with products, pro-

cesses, or the provision of services are identified and quantified, TP1 develops an approach to Water Footprinting. It focuses on ecological assessment methods, which are coupled with additional assessment approaches to develop and test a multi-criteria water assessment model.

TP2 examines the water-related impacts of (post-)mining operations using empirical data from two comparable sites in South Africa and Germany using a Full-Cost Accounting strategy. The aim is to make previously unaccounted for (externalized) follow-up costs visible. This is particularly important for the comprehensive assessment of the impacts of new mining projects in predominantly water-scarce commodity-producing countries in the Global South.

Water Accounting

ThWIC - Fact Sheet

Cluster of the Clusters4Future Initiative (BMBF)

Goals

1. New approaches to a safe water supply
2. Establishment of an integrated water assessment
3. Impact on economy and society

Consortium

28 partners from Business, Science and Associations

Structure

18 projects in
4 fields of innovation:
"Analysing Water"
"Cleaning Water"
"Assessing Water"
"Understanding and Explaining Water"
6 innovation-supporting frameworks

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Innovation Field "Assessing Water"

The projects categorized under "Assessing Water" are consolidated in the cluster. This facilitates research and development of assessment approaches for water management across a spectrum of natural and social science disciplines.

Projects

AutoQSPR – Prediction of the degradation behavior of new pollutants
WatAs – Indicators for sustainable water management
LeWa – Water pollution in the Global South
WaKu – Water as a (trans-)formative cultural force

TP3 focuses on exploring the possibilities of an assessment strategy based on the Multiple Water Approach in the field of municipal water management. As a result of the low-water strategy recently initiated in Thuringia, adjustments to existing accounting practices of municipal decision-makers are necessary. The project will conduct research to support this transition.

Fields of Application

The aim is to examine whether and how an organizational, regulatory or political implementation of the indicators developed in the project is possible. The evaluation procedure will enable the sustainability assessment of the water management of municipalities, companies, products and activities such as mining.

WatAs Joint Project Contacts

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Project Meeting in Jena



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