Sustainable treatment of municipal waste water

The main goal of the EU FP6 NEPTUNE program is to develop new and improve existing waste water treatment technologies (WWTT) and sludge handling technologies for municipal waste water, in accordance with the concepts behind the EU Water Framework Directive. As part of this work, the project will develop and implement a methodology to compare and prioritize these technologies and optimizations based on a holistic approach. This will be achieved through the use of life cycle assessment (LCA) along with cost/efficiency analysis with focus on the effects of nutrients, pathogens and micropollutants (i.e. heavy metals, pharmaceuticals and endocrine disruptors) in the waste water. As a novel approach, the potential ecotoxicity and human toxicity impacts from a high number of micropollutants and the potential impacts from pathogens will be included. In total, more than 20 different waste water and sludge treatment technologies are to be assessed. This paper will present the first LCA results from running existing life cycle impact assessment (LCIA) methodology on some of the waste water treatment technologies. Keywords: Sustainability, LCA, micropollutants, waste water treatment technologies.

General information
Publication status: Published
Organisations: Quantitative Sustainability Assessment, Department of Management Engineering, Innovation and Sustainability
Contributors: Hansen, P. A., Larsen, H. F.
Publication date: 2008
Peer-reviewed: No
Event: Poster session presented at SETAC Europe 18th Annual Meeting, Warsaw, Poland.
Keywords: LCA, Micropollutants, Sustainability, Waste water treatment technologies
Source: orbit
Source ID: 231988
Research output: Contribution to conference » Poster – Annual report year: 2008 » Research