SOCIAL ASSESSMENT OF HEALTHCARE WASTE MANAGEMENT

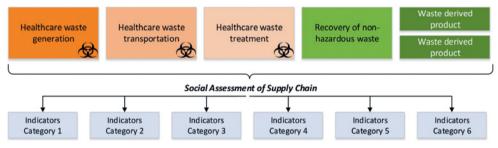
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Abstract – Circular economy targets clearly define recovery and recycling as predominant actions for future waste management. However, circularity-oriented actions might not be easily implemented for some types of waste. Healthcare sectors generate non-hazardous municipal waste (up to 80-85 % of all generated waste according to the World Health Organization data) and hazardous infectious waste. Due to public health and the spread of infection risks, healthcare waste treatment needs to be organized in a special manner and moreover, recovered materials need to be tested repeatedly. The present paper aims to analyse the social aspects of health care waste recovery technologies along the supply chain (gate-to-gate approach) - from health care waste collection at medical care institutions to recovered materials at treatment plants. Rotoclave and chemical treatment healthcare waste treatment technologies were analysed as case studies. Methodological approach of the study is based on the UNEP/SETAC guidelines for social life-cycle assessment (S-LCA) of products and questionnaire-based indicators. The results of the assessment will bring the framework for improvement of social aspects of healthcare waste management.

Keywords – Circularity; indicator analysis; infectious waste; medical waste; social life cycle assessment



Social assessment framework of the healthcare waste management.

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