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ECONOMIC AND SUSTAINABILITY ISSUES FOR MUNICIPAL SOLID WASTE MANAGEMENT SYSTEMS

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ABSTRACT

Some economic feasibility and sustainability issues, which arise with respect to planning and sizing solid waste management (S.W.M.) facilities, are presented in this paper. General rules for comparing alternative S.W.M. systems and for evaluating new system components are suggested, taking into consideration environmental and social costs, municipal taxes, user charges, capital opportunity costs and government grants and subsidies. Through an example case study, the feasibility and sustainability of a material recovery facility (MRF) is examined. The significance of the analysis *viewpoint*, the *horizon length*, the government *subsidies* and the *discount rate* are discussed. It is shown that economic considerations alone are not sufficient in S.W.M. planning since they could lead to situations where municipal solid waste *reduction is undesirable.* The distribution of environmental benefits through subsidies for S.W.M. facilities is also referred to.