Materials and Energy From Municipal Waste

July 1979

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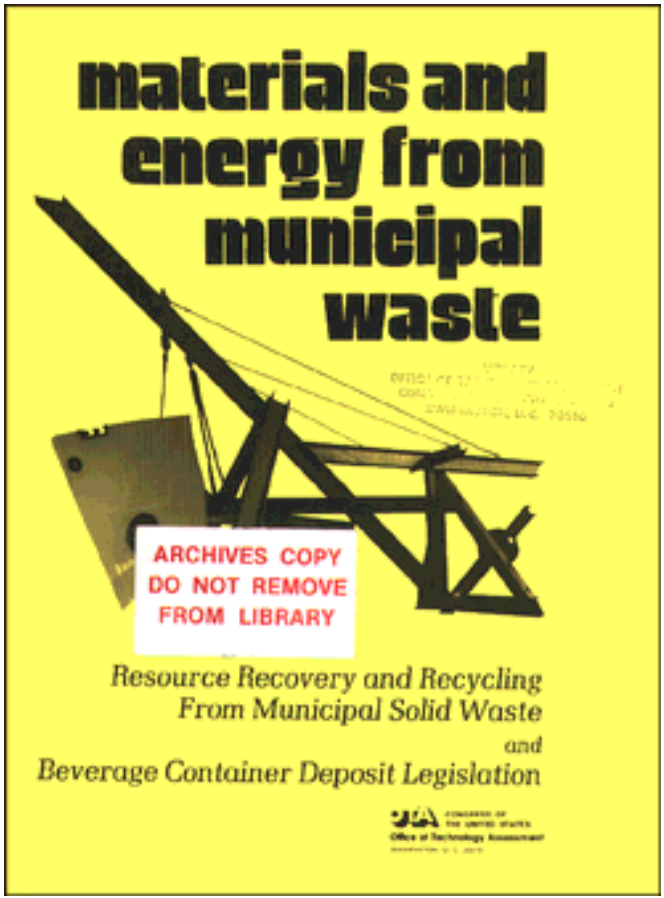

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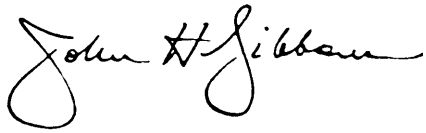
Foreword

The United States annually generates more than 135 million tons of municipal solid waste (MSW). Its disposal is a rapidly growing problem for many areas of the country, where such traditional methods as open dumping, landfill, uncontrolled incineration, and ocean burial are too expensive or environmentally unacceptable. At the same time, MSW contains over two-thirds of the national consumption of paper and glass, over one-fifth of the aluminum, and nearly one-eighth of the iron and steel, If burned, the combustible portion of MSW would be equivalent to about 1.9 percent of the Nation's annual energy use.

Resource recovery and recycling materials and energy from MSW can play significant roles in helping to solve waste generation and disposal problems. In addition, resource recovery, recycling, and reuse can contribute to the wise and efficient use of materials, to conserving materials and energy, to preserving the environment, and to improving the balance of trade by reducing our dependence on imported natural resources,

This report addresses important questions that have arisen about the feasibility of various approaches to resource recovery, recycling, and reuse. It presents the results of an examination of important technological, economic, and institutional factors. Federal incentives and other policies that might stimulate resource recovery, recycling, and reuse are identified and their effectiveness and impacts are assessed.

The study was requested by the Technology Assessment Board on behalf of the House Committee on Science and Technology and the Senate Committee on Commerce, Science, and Transportation. We hope that these committees, and others including the House Committee on Interstate and Foreign Commerce and the Senate Committee on Environment and Public Works, will find this report helpful as they confront the continuing problems and opportunities of solid waste management. resource recovery, recycling, energy supply and conservation. and product reuse.



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NOTE: The Advisory Panel and the Materials Advisory Committee provided advice and comment throughout the assessment, but do not necessarily approve, disapprove, or endorse the report for which OTA assumes full responsibility y.

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