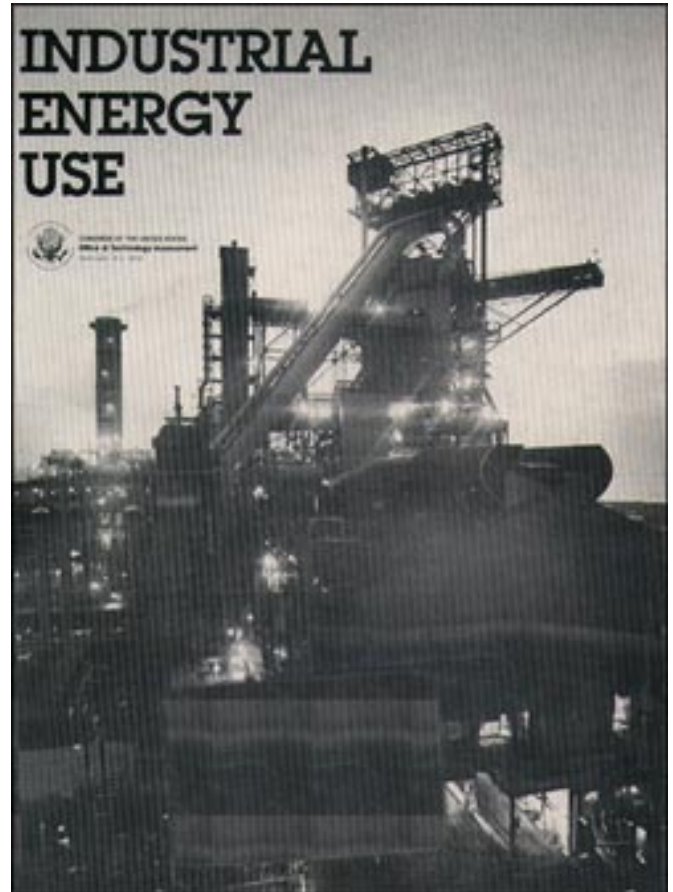


Industrial Energy Use

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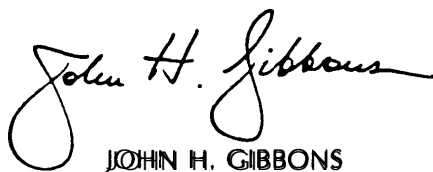
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Foreword

This report responds to a request by the Senate Committee on Finance and the House Committee on Energy and Commerce for an analysis of the prospects for energy efficiency in the U.S. industrial sector, the technologies available to improve industrial energy efficiency, and the effect of various legislative policies on stimulating increased efficiency. This report complements several recent OTA reports on energy efficiency: *Residential Energy Conservation*, *Energy Efficiency of Buildings in Cities*, and *Industrial and Commercial Cogeneration*.

OTA examined energy use in the industrial sector in general and in the largest energy-using industries—pulp and paper, petroleum refining, chemicals, and steel—in detail. The report identifies the major technical opportunities available to each industry to improve energy efficiency, the barriers to implementation of such technologies, and the factors that guide corporate decisions about energy efficiency-improving investments. The policy options chosen for assessment were the effects of: 1) the accelerated cost recovery system of the 1981 Economic Recovery Tax Act, 2) investment tax credits for energy-conserving capital expenditures, 3) a tax on petroleum and natural gas, and 4) increased capital availability through lower interest rates.

In the course of this assessment, OTA drew on the experience of many organizations and individuals. In particular, we appreciate the generous assistance of our distinguished advisory panel and workshop participants, as well as the efforts of the project's consultants and contractors. We would also like to acknowledge the help of the numerous reviewers who gave their time to ensure the accuracy and comprehensiveness of this report. To all of the above goes the gratitude of OTA, and the personal thanks of the project staff.



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