

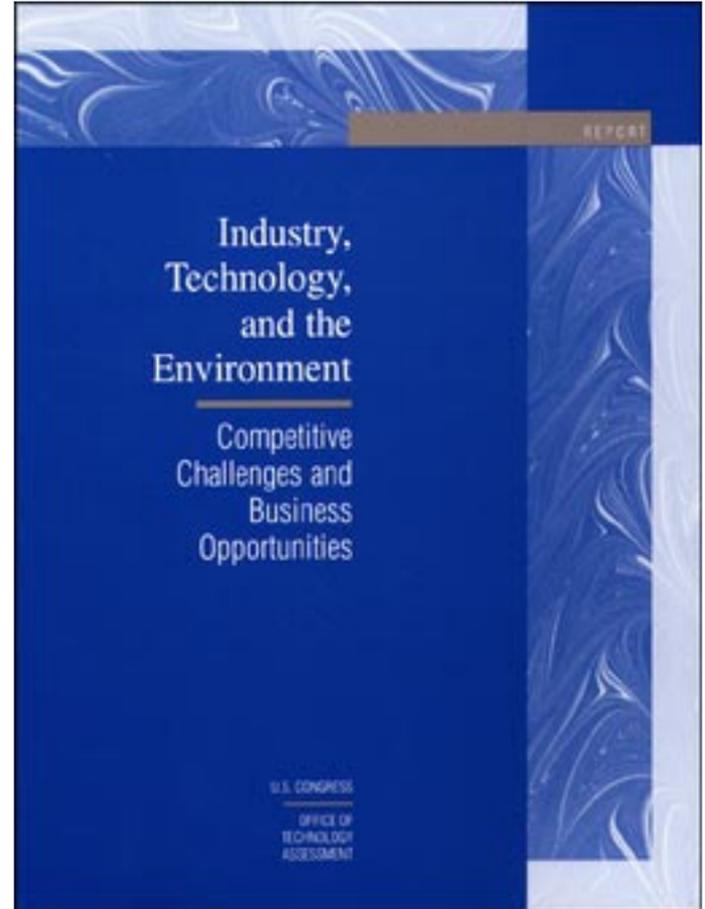
*Industry, Technology, and the Environment:
Competitive Challenges and Business
Opportunities*

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Foreword

Debate about environmental concerns and industrial competitiveness has been underway at least since the early 1970s, when the United States pioneered strong environmental standards. Today, the debate has new urgency: the world is becoming more aware of the global nature of many environmental problems at a time of intensifying international economic competition.

This report finds both competitive challenges and opportunities from these trends for two sets of American industries affected by environmental regulation: those in the business of making and selling environmental technologies, and the manufacturing firms that are among their major customers.

For U.S. environmental firms, the years ahead could pose unprecedented opportunities to expand into new markets as more countries develop or tighten environmental standards. Yet, as the report documents, they already face strong competition from firms in Europe, Japan, and from some newly industrialized countries.

Perhaps their greatest challenge in the long term will be to integrate environmental concerns into the next generation of manufacturing technologies. Compliance costs in many U.S. manufacturing sectors are already among the highest in the world. Cleaner, more cost effective production technologies could help these firms lower compliance costs while still meeting the U.S. standards that are likely to remain among the toughest in the world.

Policymakers, not only here but in Europe and Japan, are actively debating new approaches to address twin concerns about intensifying global economic competition and global environmental problems. More than is usually the case, government policies play a central role, since regulations both create markets for environmental technologies and the conditions for compliance faced by industry. Other policy areas not traditionally thought of as affecting environmental concerns, including manufacturing research and development, industrial extension, and export promotion, also affect competitive outcomes.

This is the final report in a series of three in OTA's assessment of American industry and the environment, which was requested by the Senate Committee on Finance, the House Committee on Energy and Commerce, and the House Committee on Foreign Affairs. The first publication, *Trade and Environment: Conflicts and Opportunities*, discusses the interactions between these two policy areas. The second, *Development Assistance, Export Promotion, and Environmental Technology*, explores links between foreign aid and export assistance.



Roger C. Herdman, Director

Advisory Panel

Roland W. Schmitt, *Chairman*
Rensselaer Polytechnic Institute

Edgar Berkey
National Environmental
Technology Applications Corp.
(NETAC)

Judith Dean
School of Advanced International
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James Selover
Selover Associates

Peg Seminario
Department of Occupational Safety
and Health
AFL-CIO

John J. Sheehan
United Steelworkers of America

Sally Shelton
Georgetown University

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Project Staff

Peter D. Blair, Assistant Director, OTA
Industry, Commerce, and International Security Division

Audrey B. Buyn, Program Manager
Industry, Technology, and Employment Program

Wendell Fletcher, Project Director

Robert Atkinson, Senior Analyst

Rodney Sobin, Analyst Robert Weissler, Senior Analyst

Sebastian Remoy Susan H. Lusi Takashi Mashiko

Elizabeth Sheley, Editor

ADMINISTRATIVE STAFF

Louise Staley,¹Office Administrator
Carol A. Bock,²Office Administrator
Diane D. White, Administrative Secretary
Madeline Gross, Contractor

CONTRACTORS

David T. Allen (UCLA)
Hirschhorn and Associates, Inc.
Stephen H. Lipmann
Curtis A. Moore and Alan S. Miller
N. McCubbin Consultants, Inc.
F.A. Steward Consulting, Inc.
Konrad von Moltke

PUBLISHING STAFF

Mary Lou Higgs, Manager, Publishing Services
Chip Moore Dorinda Edmondson Susan Hoffmeyer

¹From Oct. 1, 1993
²Until Sept. 30, 1993