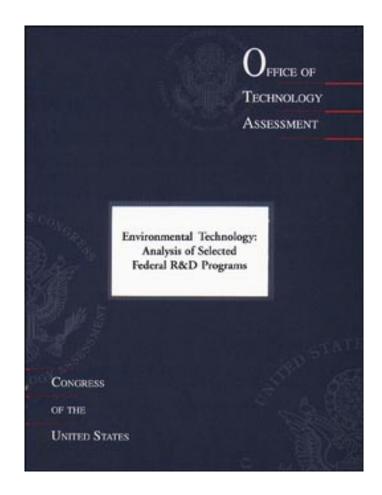
### Environmental Technology: Analysis of Selected Federal R&D Programs

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## Foreword

n recent years, federal agencies have given increasing attention to environmental technology research and development (R&D). The Department of Energy and the Department of Defense account for the lion's share of the spending on environmental technology R&D and precommercial demonstrations, but six other departments and agencies spent more than \$30 million each on such activities in fiscal year 1994. The total spent is debatable, given different assumptions about what projects count as environmental technology, but the 1994 estimates range between \$2.5 billion and \$3.5 billion. (Total federal R&D expenditures for *all* purposes in 1994 exceeded \$70 billion).

Getting the federal government's own environmental house in order is one rationale for this R&D. Federal agencies now spend several billion dollars a year to clean up or manage wastes at their facilities, and to operate in compliance with environmental requirements. The R&D could result in more cost-effective technologies that could help lower future expenditures or help agencies address specialized problems more effectively. Several federal agencies also conduct or support R&D on technologies that could help state and local governments or the private sector reduce the environmental impact of their activities, with the largest amount by far aimed at reducing the significant environmental impact of energy production and use.

This Background Paper responds to a request by the staff of the House Committee on Science for information about federal environmental technology R&D programs. It discusses estimates of environmental technology R&D spending, interagency coordination mechanisms, and major federal programs, including programs administered by the Department of Energy, the Department of Defense, the Environmental Protection Agency, and several other agencies. The analysis is by no means comprehensive; evaluation of program effectiveness was outside the scope of this paper. The Background Paper is the first product in a broader assessment of development and diffusion of innovative environmental technologies requested by the Science Committee and the Senate Environment and Public Works Committee. The final report in this assessment is due in the spring of 1996.

ROGER C. HERDMAN

Director

# **Advisory Panel**

#### Thomas Gladwin (Chairman)

Leonard N. Stern School of Business New York University New York, NY

#### Alvin Alm

SAIC McLean, VA

#### **Carol Andress**

Environmental Defense Fund Washington, DC

#### **Darryl Banks**

World Resources Institute Washington, DC

#### Mary Bernhard

U.S. Chamber of Commerce Washington, DC

#### Harry Fatkin

Polaroid Corporation Cambridge, MA

#### **Robert Frosch**

John F. Kennedy School of Government Harvard Univesity Cambridge, MA

#### **Stephen Gage**

Great Lakes Manufacturing Technology Center Cleveland, OH

#### Kenneth Geiser

University of Massachusetts-Lowell Lowell, MA

#### **Gary Hunt**

North Carolina Office of Waste Reduction Raleigh, NC

### **Greg Pitts**

Microelectronics and Computer Technology Corporation Cambridge, MA

#### Robert Pojasek

Cambridge Environmental, Inc. Cambridge, MA

#### Linda Giannelli Pratt

San Diego County Department of Environmental Health San Diego, CA

#### Elizabeth Rose

Northern Telecom, Ltd. Mississauga, Ontario, Canada

#### C. Thomas Sciance

Sciance Consulting Services, Inc Wilmington, DE

#### John Sheehan

United Steel Workers of America Washington, DC

#### William Sonntag, Jr.

National Association of Metal Finishers Washington, DC

# Project Staff

Peter D. Blair

Assistant Director, OTA Industry, Commerce, and International Security Division

Audrey B. Buyrn

Program Director<sup>1</sup>
Industry, Technology, and
Employment Program

Andrew W. Wyckoff

Program Director<sup>2</sup>
Industry, Telecommunications,
and Commerce Program

PRINCIPAL STAFF

ITC Program

Wendell Fletcher
Project Director

Rodney Sobin Analyst

Michael G. Snyder

Analyst

**Gregory Tsarnas** 

Contractor

Environment Program

Kirsten U. Oldenburg

Senior Analyst

**OTHER CONTRIBUTORS** 

**Paul Doremus** 

Analyst

Joyce K. Smith

Congressional Fellow

**Ball and Associates** 

Contractors

<u>ADMINISTRATIVE</u> STAFF

Liz Emanuel

Office Administrator

**Karry Fornshill** 

Secretary

Diane Jackson

Administrative Secretary

Karolyn St. Clair

PC Specialist

PUBLISHING STAFF

**Mary Lou Higgs** 

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Electronic Publishing Specialist

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Graphic Designer

<sup>1</sup>Through October1994

<sup>2</sup>From November 1994