

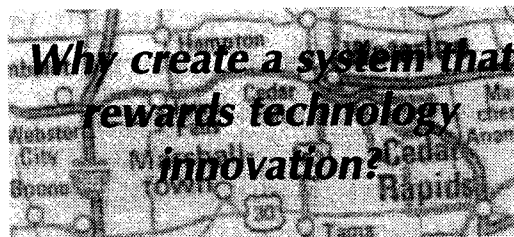
230F96004



United States
Environmental
Protection Agency
Innovative Technology Council

EPA 230-F-96-004

May 1996



To Protect Public Health

ETI encourages the creation and use of innovative environmental technologies that provide cleaner air, safer drinking water, and cleaner sites for economic development. Companies and communities throughout the United States want to take advantage of innovative technologies to prevent pollution, reduce their use of toxics, energy, and non-renewable resources, and develop new tools to reduce health risks. In many cases, technologies exist which can address public health concerns, but smaller businesses and communities may not be aware of them or may need assistance putting them in place. State permitting authorities may also lack the resources to assess the value of these innovations. ETI investments create public-private partnerships among stakeholders who do not have the support to pursue technology innovation opportunities on their own.

To Protect the Environment

By supporting state, local, and private efforts to find innovative technological solutions to their environmental problems, ETI plays an integral role in EPA's efforts to reinvent regulation by moving from "command and control" approaches to new, more flexible, performance-based systems. ETI is providing incentives and removing barriers to

Environmental Technology Initiative

The Environmental Technology Initiative, (ETI), is an interagency effort led by the U.S. Environmental Protection Agency, (EPA). Launched by President Clinton in 1993, ETI is supporting more than 250 partnerships and projects throughout the United States to improve public health and environmental protection by removing barriers to technology innovation. Environmental technologies prevent pollution, control and treat air and water pollution, remediate contaminated soil and groundwater, reduce greenhouse gas emissions, assess and monitor pollution levels, and manage environmental information.



Environmental Technology Initiative

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PERFORMANCE VERIFICATIONS MAKE TECHNOLOGIES APPROVABLE

- ETI partnership with EPA, California EPA, NSF International (Michigan), Sandia National Laboratory (New Mexico), University of Illinois and other
- Partners verify the cost and performance of new pollution prevention, drinking water treatment, characterization and monitoring, and indoor air technologies
- Enhances our capability to more cost effectively protect public health and the environment by providing regulators with credible performance data that supports the use of new or improved technologies
- Pilot projects will assess whether public-private verification partnerships are effective in moving technologies to market



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PUBLIC AND PRIVATE PARTNERS EASE INTRODUCTION OF SAFER SUBSTITUTES



- ETI partnership with EPA, Midwest Research Institute, American Furniture Manufacturers Association, and numerous furniture and coatings manufacturers
- Eases introduction of safer substitutes for hazardous solvents, furniture coatings, and industrial chemicals used by many different companies
- Protects public health and the environment by reducing emissions of chemicals that create smog and respiratory problems

COMMON SENSE APPROACHES TO METAL FINISHING



- ETI partnership involving the Metal Finishing Association of Southern California, metal finishing companies, the California Manufacturing Technology Center, state and local regulatory agencies, community members, and EPA Region 9.
- Protects public health and the environment by reducing toxic emissions and workplace chemical exposures. Results can be transferred to over 3,000 facilities employing 75,000 people
- e.g., Marlene McCloud of Ontario, California's Danco Metals is using reverse osmosis technology to recycle black dye and nickel acetate from the rinse water back to the process baths and clean water back to the rinse tanks to reduce wastewater flows.



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Selected ETI Projects

COMPANIES AND COMMUNITIES GET TOP DOLLAR FOR RECYCLING PAPER, GLASS, AND PLASTICS

- ETI partnership with EPA, the Chicago Board of Trade, New York State Office of Recycling Market Development, the U.S. EPA, the Clean Washington Center, and the National Recycling Coalition/Recycling Advisory Council

• Market-based approach to trading recyclable paper, glass and using the Chicago Board of Trade electronic commodities exchange cuts the environment by reducing demand for waste disposal facilities (e.g., landfills and incinerators)

Provides economic opportunities for companies and value-added production in communities that can create jobs by making recycled products

COMPANIES MEET AIR QUALITY STANDARDS WITH FLEXIBLE PERMITS WHILE THEY RE-ENGINEER PRODUCT LINES



- ETI partnership with the EPA, State of Connecticut, CYTEC Industries and others
- Injects flexibility into Clean Air Act Title V air permits
- Protects public health with flexible operating permits that meet air quality standards while accommodating companies' needs
 - Ensures compliance, while saving companies time and money

CLEANER TECHNOLOGIES MAKE PRINTED CIRCUIT BOARD (PWBs) COMPANIES MORE COMPETITIVE

- ETI partnership with EPA's Design for the Environment Program, Institute for Interconnecting and Packaging Electronic Circuits, Silicon Valley Toxics, University of Tennessee, Microelectronics and Computer Technology Corp., and PWB companies nationwide
- Protects public health by providing small business technologies that reduce exposure to toxic chemicals. Companies reduce energy and water use, making them more competitive.

Rory Roper, VP of Process Engineering of H-R Industries plans to use test results to pick technologies for a new plant in Richardson, Texas that will double daily production and reduce water usage by 70% and sludge by 85%.

ETI FACTS

- \$104 Million Invested
- 274 Projects and Partnerships
- Over 4,000 Stakeholders Nationwide

using new technologies by piloting technology verification programs to give decision-makers more credible information and injecting more flexibility in regulations and approval procedures. These actions can move the regulated community "beyond compliance", cutting the cost of meeting federal and state standards, while gaining superior environmental results.

To Provide Economic Opportunity

ETI helps the U.S. capitalize on its head-start in the environmental technology market. By encouraging the creation and use of innovative technologies, ETI is creating jobs, cutting compliance costs, making companies more efficient and competitive, and improving environmental services.

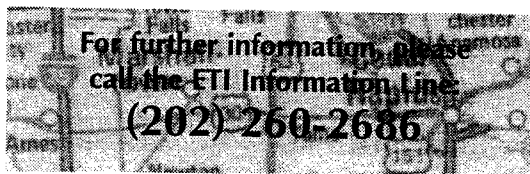
Environmental technology is a high-wage, high-growth industry. More than one million Americans are employed by more than 50,000 environmental technology companies nationwide, many of whom are small businesses. The United States is by far the largest single market for environmental technology, estimated by Environmental Business International at \$165 billion in 1994. Global markets are expected to grow to as much as \$500 billion by the year 2000. Our trade competitors, Japan and Germany, recognize environmental technology as a leading 21st century industry and are positioning themselves to compete aggressively in the global market. ETI assists the U.S. to win this competition for global markets.

How are partnerships and projects chosen for ETI funding?

ETI projects are selected through an open competition process. ETI funding is strategically invested in partnerships and projects that have been evaluated by federal interagency committees and scientifically peer-reviewed by non-government experts.

How have ETI resources been invested?

In Fiscal Years 1994 and 1995, ETI invested \$104 million in 274 partnerships and projects throughout the United States. Awards range from several thousand dollars to more than a million. Many projects' partners are investing 3 to 4 dollars for every ETI dollar invested.



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