

103D CONGRESS
1ST SESSION

H. R. 3603

To promote the research and development of environmental technologies.

IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 21, 1993

Mr. BROWN of California (for himself, Mr. VALENTINE, Mr. MINETA, Mrs. LLOYD, Mr. BOEHLERT, Mr. SWETT, Mr. KLEIN, Ms. ESHOO, Mr. TRAFICANT, Mr. TANNER, Mr. BACCHUS of Florida, Mr. BARCIA of Michigan, Mr. FINGERHUT, Ms. HARMAN, Mr. JOHNSON of Georgia, Mr. COPPERSMITH, Ms. EDDIE BERNICE JOHNSON of Texas, Mr. MINGE, Mr. DEAL, Mr. SCOTT, Mr. BECERRA, and Mr. RUSH) introduced the following bill, which was referred jointly to the Committees on Science, Space, and Technology, the Judiciary, Education and Labor, Banking, Finance and Urban Affairs, Public Works and Transportation, Energy and Commerce, and Government Operations

A BILL

To promote the research and development of environmental technologies.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **TITLE I—GENERAL PROVISIONS**

4 **SEC. 101. SHORT TITLE; TABLE OF CONTENTS.**

5 (a) SHORT TITLE.—This Act may be cited as the
6 “Environmental Technologies Act of 1993”.

- 1 (b) TABLE OF CONTENTS.—The table of contents for
 2 this Act is as follows:

TITLE I—GENERAL PROVISIONS

- Sec. 101. Short title; table of contents.
- Sec. 102. Findings.
- Sec. 103. Purposes.
- Sec. 104. Definitions.

TITLE II—POLICY COORDINATION AND TECHNOLOGY PROGRAMS

Subtitle A—Policy Coordination and Program Planning

- Sec. 201. Coordination of environmental technology research and development.
- Sec. 202. Life-cycle assessments.
- Sec. 203. Environmental technologies in ongoing programs.

Subtitle B—Environmental Technology

- Sec. 211. Environmental Technologies Development and Integration Program.
- Sec. 212. Environmental remediation and monitoring technologies.
- Sec. 213. President's Total Environmental Quality Award and the National Environmentally Sound Technology Award.
- Sec. 214. Incorporation of information on environmental technologies into existing networks.
- Sec. 215. Use of Federal facilities for environmental technology demonstration.
- Sec. 216. Federal acquisition and use of environmentally efficient building materials.

TITLE III—EDUCATION

- Sec. 301. Environmentally advanced education.
- Sec. 302. General education in environmental technologies.

TITLE IV—STANDARDS

- Sec. 401. Performance standards.
- Sec. 402. Verification of environmental technologies.
- Sec. 403. Consumer claims on environmental technologies.

TITLE V—INTERNATIONAL PROGRAMS

- Sec. 501. Findings.
- Sec. 502. International environmental technology demonstration.
- Sec. 503. Promotion of environmental technology exports.
- Sec. 504. Financial assistance for technology adaptation to promote exports.

TITLE VI—FINANCIAL AND REGULATORY INCENTIVES

- Sec. 601. Use of environmental technology products by the Federal Government.
- Sec. 602. Study of regulatory influences on innovation in environmental technologies.
- Sec. 603. Study of the impact of tax incentives on innovation in environmental technologies.

TITLE VII—AUTHORIZATION OF APPROPRIATIONS

Sec. 701. Authorization of appropriations.

1 **SEC. 102. FINDINGS.**

2 The Congress finds the following:

3 (1) Promoting a sound economy and maintain-
4 ing a healthy environment are among the urgent
5 public policy challenges of the United States.

6 (2) The development and deployment of envi-
7 ronmental technologies will enhance the economic
8 standing of the United States and global environ-
9 mental security.

10 (3) Although better product and process de-
11 signs offer new opportunities for substantially im-
12 proved environmental performance in growing do-
13 mestic and international markets, current govern-
14 ment regulations and market barriers do not allow
15 these opportunities to be fully exploited.

16 (4) Although the Federal Government, research
17 institutes, universities, and industries are conducting
18 substantial basic environmental research and devel-
19 opment, environmental concerns must become a
20 more pervasive and central dimension of technology
21 research and development.

22 (5) The coordination of Federal, State, and
23 local activities for developing and adopting environ-
24 mental technologies will greatly enhance the effec-

1 tiveness of environmental policies of the United
2 States.

3 **SEC. 103. PURPOSES.**

4 It is the purpose of this Act—

5 (1) to improve coordination and integration of
6 environmental technology research and development
7 performed by and across Federal agencies;

8 (2) to assist and catalyze efforts of private in-
9 dustry, universities, nonprofit research centers, and
10 Federal laboratories in developing and deploying en-
11 vironmental technologies and, in the process, to pro-
12 mote the competitiveness of United States compa-
13 nies;

14 (3) to facilitate the development, diffusion, and
15 export of environmental technologies by improving
16 the availability of information;

17 (4) to promote industrial, academic, and public
18 knowledge of sustainable economic development;

19 (5) to promote the development of technical
20 standards for substitution of an environmentally
21 sound product or technology for a traditional one,
22 for environmental performance and efficacy of new
23 technologies and products, and for environmental
24 advertising and labeling of products;

1 (6) to encourage sustainable economic develop-
2 ment internationally and to promote United States
3 exports of environmental technologies; and

4 (7) to direct the study of tax and regulatory
5 changes that will provide for the more efficient de-
6 velopment and use of environmental technologies.

7 **SEC. 104. DEFINITIONS.**

8 For the purposes of this Act:

9 (1) The term “Administrator” means the Ad-
10 ministrator of the Environmental Protection Agency.

11 (2) The term “environmental technology”
12 means—

13 (A) a technology that is primarily intended
14 to improve the quality of the environment
15 through pollution reduction or remediation;

16 (B) a product, manufacturing process, or
17 service that is capable of cost-effectively replac-
18 ing the functions of an existing product, proc-
19 ess, or service, and as compared with the prod-
20 uct, process, or service it replaces, significantly
21 reducing overall pollution or significantly im-
22 proving the efficiency of energy or materials
23 use; or

24 (C) a technology within the meaning of
25 subparagraphs (A) and (B).

1 (3) The term “Federal laboratory” means a
2 Government-owned, Government-operated labora-
3 tory, or a Government-owned, contractor-operated
4 laboratory.

5 (4) The term “life-cycle assessment” means the
6 assessment of the complete systems involved in con-
7 verting resources to products, including resource ex-
8 traction, materials conversion, energy use, end use,
9 recycling, and disposal, and their associated costs.

10 (5) The term “sustainable economic develop-
11 ment” means the integration of environmental and
12 economic development concerns leading to long-term
13 economic development with reduced pollution and
14 the more efficient use of energy and materials.

15 (6) The term “United States company” means
16 a company described in section 28(d)(9)(B) of the
17 National Institute of Standards and Technology Act
18 (15 U.S.C. 278n(d)(9)(B)).

1 **TITLE II—POLICY COORDINA-**
2 **TION AND TECHNOLOGY PRO-**
3 **GRAMS**

4 **Subtitle A—Policy Coordination**
5 **and Program Planning**

6 **SEC. 201. COORDINATION OF ENVIRONMENTAL TECH-**
7 **NOLOGY RESEARCH AND DEVELOPMENT.**

8 (a) INTERAGENCY COORDINATION.—The Director of
9 the Office of Science and Technology Policy shall, in co-
10 ordination with the heads of other Federal agencies that
11 have substantial investment in the development and adop-
12 tion of environmental technologies, take any action nec-
13 essary—

14 (1) to ensure, to the maximum extent prac-
15 ticable, the coordinated, interagency promotion of
16 the research, development, and adoption of environ-
17 mental technologies; and

18 (2) to develop priorities for Federal environ-
19 mental technology research, development, and adop-
20 tion efforts.

21 (b) IMPLEMENTATION.—In carrying out this section,
22 the Director of the Office of Science and Technology
23 Policy shall—

24 (1) review current Federally funded programs,
25 including Federal budget outlays for these programs,

1 to determine their role in the development and dis-
2 semination of environmental technologies;

3 (2) recommend the specific responsibilities of
4 each appropriate Federal agency to achieve the goals
5 and priorities developed under this section;

6 (3) describe the recommended levels of Federal
7 funding required for each Federal agency to carry
8 out the specific responsibilities recommended in
9 paragraph (2);

10 (4) develop a means for ensuring, to the maxi-
11 mum extent practicable, that the principles of sus-
12 tainable economic development are integrated into
13 the research, development, and technology programs
14 of all Federal agencies;

15 (5) ensure that the efforts of the Federal Gov-
16 ernment are coordinated with the efforts of State
17 and local governments and private and nonprofit or-
18 ganizations promoting the research, development,
19 and demonstration of environmental technologies;
20 and

21 (6) submit to the Congress any recommenda-
22 tions regarding legislative or administrative action,
23 including recommendations on the roles of Federal
24 agencies, which may be required to carry out this
25 section.

1 (c) BUDGET COORDINATION.—The Director of the
2 Office of Science and Technology Policy shall annually as-
3 sess, before the President submits to the Congress the
4 budget for a fiscal year, the budget estimate of each rel-
5 evant Federal agency for consistency with the plans, re-
6 views, and priorities developed under this section. The Di-
7 rector shall make the results of the annual assessment
8 available to the appropriate elements of the Executive Of-
9 fice of the President, particularly the Office of Manage-
10 ment and Budget, for use in the preparation of such
11 budget.

12 (d) ANNUAL REVIEW AND PLAN.—The Director of
13 the Office of Science and Technology shall annually sub-
14 mit to the Congress a report containing an evaluation and
15 plan that assesses the progress of Federal efforts in ad-
16 vancing the research, development, and adoption of envi-
17 ronmental technologies.

18 (e) NON-FEDERAL PARTICIPATION.—The Director of
19 the Office of Science and Technology Policy shall establish
20 mechanisms to ensure the participation of non-Federal en-
21 tities, including State and local governments, United
22 States industry, institutions of higher education, worker
23 organizations, professional associations, and United States
24 nonprofit organizations, in carrying out this section, in-

cluding the development of the plans and reviews developed under this section.

SEC. 202. LIFE-CYCLE ASSESSMENTS.

(a) FINDINGS.—The Congress finds the following:

(1) Life-cycle assessments have much potential for identifying opportunities for achieving more environmentally sound products, processes, and services and enhanced industrial efficiency.

(2) Methods of life-cycle assessment are underused in both the public and private sectors, particularly as applied to sustainable economic development.

(3) The data necessary for meaningful life-cycle assessment are often difficult to acquire, and no system exists to make such data readily available to public and private groups.

(b) LIFE-CYCLE ASSESSMENT COORDINATION.—

(1) IN GENERAL.—The Director of the Office of Science and Technology Policy, as part of activities to coordinate environmental technology research, development, and adoption described in section 201, shall coordinate Federal activities and resources that are applied to life-cycle assessment in order to maximize the contribution of life-cycle assessments to sustainable economic development.

1 (2) IMPLEMENTATION.—In carrying out this
2 subsection, the Director of the Office of Science and
3 Technology Policy shall—

4 (A) ensure that the life-cycle assessment
5 resources of each Federal agency are developed
6 and disseminated in a coordinated fashion, par-
7 titioning agency responsibilities, where appro-
8 priate;

9 (B) coordinate with State and local govern-
10 ments developing life-cycle assessment re-
11 sources; and

12 (C) consider the life-cycle assessment capa-
13 bilities of the private sector.

14 (3) OTHER ACTIVITIES.—In carrying out this
15 subsection, the Director of the Office of Science and
16 Technology Policy shall also encourage appropriate
17 Federal agencies—

18 (A) to collect, develop, and disseminate in-
19 formation regarding analytic methods and, as
20 required, to develop such methods, that will sig-
21 nificantly enhance the ability of United States
22 companies and other organizations to evaluate
23 materials extraction, transportation, conversion,
24 end use, recycling, and disposal, and their asso-
25 ciated costs and environmental impacts;

1 (B) to utilize, to the fullest extent prac-
2 ticable, existing networks and supporting
3 databases providing ready access to
4 nonproprietary information that will facilitate
5 the use of life-cycle assessments; and

6 (C) to sponsor demonstrations for public
7 policy and business decisionmakers of the effec-
8 tive use of the database and methodologies de-
9 scribed in this section.

10 (c) ANNUAL REVIEW.—The Director of the Office of
11 Science and Technology Policy shall annually submit to
12 the Congress a report containing an evaluation of the life-
13 cycle assessment activities of the Federal Government.

14 **SEC. 203. ENVIRONMENTAL TECHNOLOGIES IN ONGOING**
15 **PROGRAMS.**

16 (a) STEVENSON-WYDLER AMENDMENTS.—The Ste-
17 venson-Wydler Technology Innovation Act of 1980 (15
18 U.S.C. 3701) is amended—

19 (1) in section 2(2), by inserting “greater envi-
20 ronmental sustainability,” after “employment oppor-
21 tunities,”;

22 (2) in section 3(1), by inserting “for sustainable
23 economic development” after “stimulate technology”;

24 (3) in section 4, by adding at the end the fol-
25 lowing new paragraph:

1 “(14) ‘Sustainable economic development’
2 means the integration of environment and economic
3 development concerns leading to long-term economic
4 development with reduced pollution and the more ef-
5 ficient use of energy and materials;”;

6 (4) in section 6(a), by inserting “and sustain-
7 able economic development in their regions” after
8 “enhance the competitiveness of American busi-
9 ness”;

10 (5) in section 6(d), by inserting “and sustain-
11 able economic development of their regions” after
12 “enhance the competitiveness of American busi-
13 nesses”;

14 (6) in section 7(a), by inserting “and sustain-
15 able economic development” after “enhance techno-
16 logical innovation”;

17 (7) in section 7(c)(1), by striking “economic
18 competitiveness” and inserting “sustainable eco-
19 nomic development”;

20 (8) in section 9(a), by inserting “and sustain-
21 able economic development” after “enhance techno-
22 logical innovation”; and

23 (9) in section 11(c)(1) by inserting “and would
24 enhance sustainable economic development” after
25 “commercial applications”.

1 (b) NIST AMENDMENTS.—The National Institute of
2 Standards and Technology Act (15 U.S.C. 271) is amend-
3 ed—

4 (1) in section 1(b)(1), by inserting “sustainable
5 economic development,” after “improved product re-
6 liability and manufacturing processes,”;

7 (2) in section 1, by adding after subsection (b)
8 the following new subsection:

9 “(c) For purposes of this section, the term ‘sustain-
10 able economic development’ means the integration of envi-
11 ronment and economic development concerns leading to
12 long-term economic development with reduced pollution
13 and the more efficient use of energy and materials;”; and

14 (3) in section 2(b)(1), by inserting “to enhance
15 sustainable economic development (as that term is
16 defined in section 1(c))” after “to improve quality,”.

17 (c) NASA AMENDMENTS.—The National Aero-
18 nautics and Space Act of 1958 (42 U.S.C. 2451 note) is
19 amended—

20 (1) in section 102(d)—

21 (A) by redesignating paragraphs (6), (7),
22 (8), and (9) as paragraphs (7), (8), (9), and
23 (10), respectively; and

24 (B) by inserting after paragraph (5) the
25 following new paragraph:

1 “(6) The making available to Federal and non-
2 Federal entities of the United States, technologies
3 that will enhance the sustainable economic develop-
4 ment of the Nation.”; and

5 (2) in section 103—

6 (A) by striking “; and” in paragraph (1)
7 and inserting a semicolon;

8 (B) by striking the period at the end of
9 paragraph (2) and inserting “; and”; and

10 (C) by adding at the end the following new
11 paragraph:

12 “(3) the term ‘sustainable economic develop-
13 ment’ means the integration of environment and eco-
14 nomic development concerns leading to long-term
15 economic development with reduced pollution and
16 the more efficient use of energy and materials.”.

17 (d) NSF AMENDMENTS.—

18 (1) FUNCTIONS.—Section 3(a) of the National
19 Science Foundation Act of 1950 (42 U.S.C. 1861 et
20 seq.) is amended—

21 (A) in paragraph (6), by striking “; and”
22 and inserting a semicolon;

23 (B) in paragraph (7), by striking the pe-
24 riod and inserting “; and”; and

1 (C) by adding at the end the following new
2 paragraph:

3 “(8) to foster education and research that
4 would promote sustainable economic development
5 nationally and internationally.”.

6 (2) DEFINITION.—Subsection (g) of section 14
7 of such Act is amended to read as follows:

8 “(g) For purposes of this Act:

9 “(1) The term ‘United States’ when used in a
10 geographical sense means the States, the District of
11 Columbia, the Commonwealth of Puerto Rico, and
12 all territories and possessions of the United States.

13 “(2) The term ‘sustainable economic develop-
14 ment’ means the integration of environment and eco-
15 nomic development concerns leading to long-term
16 economic development with reduced pollution and
17 the more efficient use of energy and materials.”.

18 (e) TITLE 10 AMENDMENTS.—

19 (1) IN GENERAL.—Section 2501(b) of title 10,
20 United States Code, is amended by striking “eco-
21 nomic growth” in paragraphs (1) and (2) and insert-
22 ing “sustainable economic development”.

23 (2) DEFINITION.—Section 2491 of such title is
24 amended by adding at the end the following new
25 paragraph:

1 “(13) The term ‘sustainable economic develop-
2 ment’ means the integration of environment and eco-
3 nomic development concerns leading to long-term
4 economic development with reduced pollution and
5 the more efficient use of energy and materials.”.

6 (f) TITLE 49 AMENDMENT.—Section 101(b)(4) of
7 title 49, United States Code, is amended by inserting “and
8 sustainable economic development (as defined in section
9 104(5) of the Environmental Technologies Act of 1993)”
10 after “technological advances”.

11 **Subtitle B—Environmental**
12 **Technology**

13 **SEC. 211. ENVIRONMENTAL TECHNOLOGIES DEVELOP-**
14 **MENT AND INTEGRATION PROGRAM.**

15 (a) ESTABLISHMENT.—There is established an Envi-
16 ronmental Technologies Development and Integration
17 Program, to be administered by the Administrator, to pro-
18 mote the research, development, and integration of tech-
19 nologies that will contribute significantly to sustainable
20 economic development.

21 (b) INTERAGENCY COORDINATION.—The Adminis-
22 trator shall administer the program established in sub-
23 section (a) in cooperation with the heads of other agencies
24 that have substantial capabilities in advanced technology
25 research and development.

1 (c) FINANCIAL ASSISTANCE.—To carry out the pro-
2 gram referred to in subsection (a), the Administrator may
3 enter into contracts and cooperative agreements with, and
4 award grants to, entities eligible for such assistance under
5 subsection (e).

6 (d) PROGRAM ELEMENTS.—Projects eligible for as-
7 sistance under this section are projects that—

8 (1) develop advanced, precommercial environ-
9 mental technologies, with emphasis on technologies
10 within the meaning of section 104(2)(B), that will
11 significantly contribute to sustainable economic de-
12 velopment; or

13 (2) develop and demonstrate the integration of
14 multiple steps in the conversion of materials that are
15 involved in the manufacture, reuse, or recycling of a
16 product, the recycling of process wastes, or the pro-
17 vision of a service.

18 (e) ELIGIBILITY FOR ASSISTANCE.—Entities shall be
19 eligible for financial assistance under subsection (c) only
20 if—

21 (1) the entity submits a proposal for such as-
22 sistance in the form, time, and manner required by
23 the Administrator;

24 (2) the entity is either a single company or a
25 partnership which may include—

1 (A) two or more companies;

2 (B) a nonprofit research corporation estab-
3 lished by two or more eligible firms; and

4 (C) as determined appropriate by the Ad-
5 ministrator, a Federal laboratory or labora-
6 tories, institutions of higher education, agencies
7 of State governments, and other entities that
8 participate in the partnership by supporting the
9 activities conducted by such firms or corpora-
10 tions under this section; and

11 (3) the company is a United States company
12 and the Administrator finds that the company's par-
13 ticipation in the Program would be in the economic
14 interest of the United States, as evidenced by—

15 (A) investments in the United States in re-
16 search, development, and manufacturing (in-
17 cluding manufacturing major components or
18 subassemblies in the United States);

19 (B) significant contributions to employ-
20 ment in the United States; and

21 (C) an agreement with respect to any tech-
22 nology arising from assistance provided under
23 this section to promote the manufacture within
24 the United States of products resulting from
25 that technology (taking into account the goals

1 of promoting the competitiveness of United
2 States industry), and to procure parts and ma-
3 terials from competitive suppliers.

4 (f) SELECTION OF PROPOSALS.—

5 (1) COMPETITIVE PROCESS.—The Adminis-
6 trator shall select proposals for financial assistance
7 under this section solely through a competitive,
8 merit-based evaluation process established by the
9 Administrator.

10 (2) SELECTION CRITERIA.—Criteria used to
11 evaluate proposals for financial assistance under this
12 section shall include the following:

13 (A) Significant improvement in environ-
14 mental soundness of the overall production
15 process.

16 (B) Contribution to industrial competitive-
17 ness, including new markets, reduced produc-
18 tion costs, and enhanced export potential.

19 (C) Improvement in the work environment.

20 (D) Applicability to other industrial proc-
21 esses.

22 (E) Improvement in technological capabil-
23 ity to recycle complex combinations of mate-
24 rials.

1 (F) Contribution to the environmental pri-
2 orities established pursuant to section 201.

3 (3) INTEGRATION OF INDUSTRY VIEWS.—The
4 Administrator shall develop mechanisms for inte-
5 grating the views of representatives of industry into
6 the process by which proposals for financial assist-
7 ance under this section are evaluated.

8 (g) AWARD CONDITIONS.—Financial assistance pro-
9 vided under this section shall be subject to the following
10 conditions:

11 (1) Such assistance may be made for not more
12 than three years for single firms and not more than
13 five years for partnerships.

14 (2) The Federal Government may provide not
15 more than a minority cost-share of the awards to
16 partnerships. The Administrator shall prescribe reg-
17 ulations to provide for consideration of in-kind con-
18 tributions by non-Federal Government participants
19 in a partnership for the purpose of determining the
20 share of the partnership costs that have been or are
21 being undertaken by such participant.

22 (h) OTHER ASSISTANCE AUTHORIZED.—The Admin-
23 istrator, in cooperation with the heads of other appro-
24 priate Federal agencies that have substantial capabilities
25 in advanced technology research and development, may

1 provide entities receiving financial assistance under this
2 section with any technical and other assistance the Admin-
3 istrator considers necessary to carry out this section. In
4 providing such assistance, the Administrator may make
5 available to a partnership any equipment and facilities of
6 Federal laboratories (including the scientists and engi-
7 neers at those laboratories) that the Administrator consid-
8 ers appropriate for the work to be performed by the
9 partnership.

10 (i) ANNUAL REVIEW.—The Administrator shall an-
11 nually submit to the Congress a report that contains an
12 evaluation of the program established under subsection
13 (a). The report shall evaluate the success of innovations
14 resulting from the program based on criteria that include
15 those described in subsection (f)(2).

16 (j) PROGRAM ADMINISTRATION.—

17 (1) IN GENERAL.—In administering the pro-
18 gram established under this section, the Adminis-
19 trator shall—

20 (A) monitor the manner in which tech-
21 nologies developed as a result of the program
22 are used, and report annually to the Congress
23 on the extent of any international transfer of
24 these technologies;

1 (B) provide for appropriate dissemination
2 of the results of research conducted under the
3 program; and

4 (C) take any other action the Administer
5 considers necessary to carry out the program
6 and to avoid unnecessary duplication of effort
7 by Federal agencies.

8 (2) APPLICABILITY OF FOIA.—Section 552 of
9 title 5, United States Code, shall not apply to the
10 following information obtained by the Federal Gov-
11 ernment on a confidential basis in connection with
12 the activities of any firm or partnership receiving
13 financial assistance under this section:

14 (A) Information on the operation of any
15 firm or member of a partnership.

16 (B) Trade secrets possessed by any busi-
17 ness or any member of the partnership.

18 (3) DISCLOSURE OF INTELLECTUAL PROP-
19 ERTY.—Intellectual property owned and developed
20 by any business or partnership receiving financial
21 assistance under this section or by any member of
22 such a partnership may not be disclosed by any offi-
23 cer or employee of the Federal Government except in
24 accordance with a written agreement between the

1 owner or developer of the intellectual property and
2 the Administrator.

3 (4) VESTING OF INTELLECTUAL PROPERTY
4 RIGHTS.—

5 (A) IN GENERAL.—Title to any intellectual
6 property arising from assistance provided under
7 this section shall vest in a company or compa-
8 nies incorporated in the United States or in an
9 institution of higher education in the United
10 States. The Federal Government may reserve a
11 nonexclusive, nontransferable, irrevocable paid-
12 up license, to have practiced for or on behalf of
13 the Federal Government, in connection with any
14 such intellectual property, but shall not, in the
15 exercise of such license, publicly disclose propri-
16 etary information related to the license. Title to
17 any such intellectual property shall not be
18 transferred or passed, except to a company in-
19 corporated in the United States, until the expi-
20 ration of the first patent obtained in connection
21 with such intellectual property.

22 (B) DEFINITION.—For purposes of this
23 paragraph, the term “intellectual property”
24 means an invention patentable under title 35,

1 United States Code, or any patent on such an
2 invention.

3 (C) EFFECT ON LICENSING.—Nothing in
4 this paragraph shall be construed to prohibit
5 the licensing to any company of intellectual
6 property rights arising from financial assistance
7 provided under this section.

8 (5) SUSPENSION OF FINANCIAL ASSISTANCE.—
9 The Administrator may, within 30 days after notice
10 to the Congress, suspend a company or partnership
11 from continued financial assistance under this sec-
12 tion if the Administrator determines that the com-
13 pany, the country of incorporation of the company
14 or a parent company, or the partnership has failed
15 to satisfy any of the requirements of this section,
16 and that it is in the national interest of the United
17 States to do so.

18 **SEC. 212. ENVIRONMENTAL REMEDIATION AND MONITOR-**
19 **ING TECHNOLOGIES.**

20 (a) FINDINGS.—The Congress finds the following:

21 (1) Existing permit and compliance policies and
22 practices are a key barrier to the widespread use of
23 innovative environmental monitoring and remedi-
24 ation technologies.

(b) INTERAGENCY COORDINATION IN REMEDIATION TECHNOLOGY DEVELOPMENT PROGRAMS.—Within one year after the date of the enactment of this Act, the Administrator, the Secretary of Energy, and the Secretary of Defense shall jointly submit to the Congress a detailed strategic plan for interagency coordination of Federal programs for the timely development, demonstration, and deployment of innovative environmental control and remediation technologies.

24 (a) FINDINGS.—The Congress finds the following:

1 (1) Award programs such as the Malcolm
2 Baldrige National Quality Award Program have
3 made substantial contributions to private enterprise
4 by providing a framework upon which organizations
5 can improve their operations and by focusing on is-
6 sues important to their competitiveness.

7 (2) A President's Total Environmental Quality
8 Award Program modeled on the Malcolm Baldrige
9 Award Program would contribute to environmental
10 quality and sustainable economic development by—

11 (A) helping to stimulate United States
12 companies to develop and deploy environmental
13 technologies;

14 (B) recognizing the achievements of such
15 companies which successfully develop and de-
16 ploy environmental technologies; and

17 (C) establishing guidelines and criteria
18 that can be used by business, industrial, gov-
19 ernmental, and other organizations in evaluat-
20 ing their own development and deployment of
21 environmental technologies.

22 (b) PURPOSE.—It is the purpose of this section to
23 provide for the establishment and conduct of a President's
24 Total Environmental Quality Award Program and a Na-
25 tional Environmentally Sound Technology Award Pro-

1 gram under which awards are given to recognize the suc-
2 cessful development and deployment of environmental
3 technologies and information is disseminated about such
4 success.

5 (c) ESTABLISHMENT OF AWARDS.—The Stevenson-
6 Wydler Technology Innovation Act of 1980 (15 U.S.C.
7 3701 et seq.) is amended by inserting after section 23 the
8 following new sections:

9 **“SEC. 24. PRESIDENT’S TOTAL ENVIRONMENTAL QUALITY**
10 **AWARD.**

11 “(a) ESTABLISHMENT.—There is hereby established
12 the President’s Total Environmental Quality Award (in
13 this section referred to as the ‘Award’).

14 “(b) DESIGN.—The Award shall be evidenced by a
15 medal bearing the inscription ‘President’s Total Environ-
16 mental Quality Award’.

17 “(c) AWARD SELECTION PROCESS.—The Secretary,
18 in cooperation with the Secretary of Energy and the Ad-
19 ministrator of the Environmental Protection Agency, shall
20 establish a process for the acceptance and evaluation of
21 Award applicants. The Secretary shall, to the maximum
22 extent practicable, use the same procedures and facilities
23 provided for the administration of the Malcolm Baldrige
24 Award, including the definition of award categories, the

1 delegation of responsibilities, and provisions for publicity,
2 evaluation feed-back, and information transfer.

3 “(d) PRESENTATION OF AWARD.—

4 “(1) RECOMMENDATIONS BY SECRETARY.—The
5 Secretary shall submit to the President the rec-
6 ommendations of the Secretary for the selection of
7 Award applicants.

8 “(2) SELECTION BY THE PRESIDENT.—On the
9 basis of recommendations received under paragraph
10 (1), the President shall periodically select for receipt
11 of the Award United States companies and other or-
12 ganizations which in the judgment of the President
13 have substantially benefited the environmental, eco-
14 nomic, and social well-being of the United States
15 through the development and deployment of environ-
16 mental technologies, and which as a consequence are
17 deserving of special recognition.

18 “(3) PRESENTATION CEREMONY.—The Presi-
19 dent or the Vice President shall present the Award
20 to recipients selected under paragraph (2) with such
21 ceremony as the President or the Vice President
22 considers to be appropriate.

23 “(e) LIMITATION.—The information gathered in eval-
24 uating Award applications may be used only for the eval-
25 uation of such applications and for publicity by winners

1 of the Award. Such information may not be used for regu-
2 latory or compliance purposes.

3 “(f) EVALUATION CRITERIA.—Criteria for evaluating
4 Award applications shall include the following:

5 “(1) The effectiveness of the organization’s de-
6 velopment and deployment of environmental tech-
7 nologies, as well as the organization’s provision for
8 environmental technologies in its future plans.

9 “(2) The effectiveness of energy and materials
10 use from the perspective of the life cycle of the pro-
11 duction, use, recycle, and disposal of a product.

12 “(3) The effective use of an integrated ap-
13 proach to pollution prevention and control that con-
14 sideres all environmental media (liquid, solid, gase-
15 ous).

16 “(g) FUNDING.—The Secretary may seek and accept
17 gifts from public and private sources to carry out this sec-
18 tion. The Secretary may provide for the imposition of a
19 fee upon the organizations applying for the Award.

20 “(h) REPORT.—Not later than 3 years after the date
21 of the enactment of this Act, the Secretary shall submit
22 to the President and the Congress a report on the progress
23 made in carrying out this section. The report shall include
24 any recommendations of the Secretary for any modifica-
25 tions of the Award the Secretary considers necessary.

1 **“SEC. 25. NATIONAL ENVIRONMENTALLY SOUND TECH-**
2 **NOLOGY AWARD.**

3 “(a) ESTABLISHMENT.—There is established a Na-
4 tional Environmentally Sound Technology Award for the
5 purpose of awarding individuals who have pioneered the
6 development and use of highly innovative environmental
7 technologies within the meaning of section 104(2)(B) of
8 the Environmental Technologies Act of 1993.

9 “(b) ADMINISTRATION.—Using the authority and
10 procedures established in section 24 and subject to the
11 conditions described in this section, the Secretary, in co-
12 operation with the Administrator of the Environmental
13 Protection Agency and the Secretary of Energy, shall re-
14 ceive and evaluate applications for the National Environ-
15 mentally Sound Technology Award and provide for presen-
16 tation of such Award.

17 “(c) QUALIFIED TECHNOLOGIES.—Technologies that
18 qualify for such Award shall include the following:

19 “(1) Manufacturing technologies.

20 “(2) Industrial or consumer products.

21 “(3) Consumer services.

22 “(4) Recycling technologies.

23 “(d) QUALIFIED APPLICANTS.—Any citizen or per-
24 manent resident of the United States may qualify for such
25 Award. Any such individual who is employed by or other-
26 wise works for a business, Federal laboratory, or other or-

1 ganization may qualify for such Award only if the individ-
2 ual was substantially involved in the invention or innova-
3 tion for which such Award is presented.

4 “(e) LIMITATION.—Not more than five such Awards
5 may be presented annually.”.

6 **SEC. 214. INCORPORATION OF INFORMATION ON ENVIRON-**
7 **MENTAL TECHNOLOGIES INTO EXISTING**
8 **NETWORKS.**

9 (a) IN GENERAL.—Not later than one year after the
10 date of the enactment of this Act, the Administrator,
11 through the Office of Research and Development of the
12 Environmental Protection Agency and in cooperation with
13 the Under Secretary for Technology of the Department
14 of Commerce and the heads of any other appropriate Fed-
15 eral agencies, shall, to the maximum extent practicable,
16 use existing information network capabilities of the Fed-
17 eral Government to provide access to data on environ-
18 mental technologies developed, tested, or verified under
19 programs established by this Act, and by other appro-
20 priate Federal and non-Federal sources. Such data shall
21 include information on—

22 (1) activities carried out under this Act and the
23 amendments made by this Act;

24 (2) performance standards regarding environ-
25 mental technologies;

1 (3) significant international developments in en-
2 vironmental technologies, fully coordinating with
3 other international technology information programs,
4 of the Federal Government; and

5 (4) other information determined by the Admin-
6 istrator to be of substantial value in promoting the
7 development and adoption of environmental tech-
8 nologies.

9 (b) USE OF EXISTING RESOURCES.—In carrying out
10 this section, the Administrator shall, to the maximum ex-
11 tent practicable—

12 (1) use existing public and private sector infor-
13 mation providers and carriers;

14 (2) add to existing data sources; and

15 (3) integrate data described in subsection (a)
16 into other technology databases maintained by the
17 Environmental Protection Agency, the Department
18 of Commerce, the Department of Energy, and other
19 appropriate Federal agencies.

20 (c) OUTREACH.—The Administrator shall conduct
21 appropriate outreach efforts to advertise, deliver, and dis-
22 seminate the information made available through the net-
23 works referred to in subsection (a), including information
24 on participation in Alliances referred to in subsection (d).

1 (d) ENVIRONMENTAL TECHNOLOGY TRANSFER AL-
2 LIANCES.—

3 (1) TECHNOLOGY TRANSFER.—The Adminis-
4 trator may enter into partnership agreements (in
5 this section referred to as “Alliances”) with an agen-
6 cy of a State or local government, a non-profit orga-
7 nization in which a State or local government is a
8 member, an institution of higher education des-
9 ignated by a State or local government, or a manu-
10 facturing extension and outreach service or regional
11 technical assistance service approved by the Federal
12 Government or a State in order to—

13 (A) facilitate access to information incor-
14 porated in the networks referred to in sub-
15 section (a); and

16 (B) transfer to entities referred to in para-
17 graph (2) other information that would enhance
18 the development and adoption of environmental
19 technologies.

20 (2) ENTITIES ELIGIBLE FOR ALLIANCE PAR-
21 TICIPATION.—Entities eligible for participation in an
22 Alliance include United States companies, United
23 States non-profit organizations, Federal laboratories,
24 United States institutions of higher education, spon-

soring organizations, and other organizations that the Administrator considers to be appropriate.

(3) ALLIANCE ACTIVITIES.—Under a partnership agreement referred to in paragraph (1), an Alliance—

(A) may disseminate information made available through the networks to any other entity the Alliance considers necessary to advance the goals of this section;

(B) is encouraged to collect, and disseminate to United States companies in the region, information regarding opportunities for the more efficient use of materials and energy and for waste minimization, materials conversion, and recycling;

(C) is encouraged to provide technical assistance to United States companies related to activities under this subsection; and

(D) may undertake any other activities the Administrator considers appropriate to carry out this subsection.

(4) USE OF EXISTING PROGRAMS.—In selecting partners for a partnership agreement referred to in paragraph (1), the Administrator shall, to the maximum extent practicable, use existing programs for

1 technical assistance and technical information dis-
2 semination.

3 (5) FINANCIAL ASSISTANCE.—

4 (A) IN GENERAL.—To carry out this sub-
5 section, the Administrator may provide financial
6 assistance to an Alliance under terms and con-
7 ditions prescribed by the Administrator.

8 (B) LIMITATIONS.—The Administrator
9 may not provide financial assistance to an Alli-
10 ance under this subsection—

11 (i) for construction of facilities; or

12 (ii) in an amount that exceeds a mi-
13 nority cost share of the activities carried
14 out by the Alliance under this subsection.

15 **SEC. 215. USE OF FEDERAL FACILITIES FOR ENVIRON-**
16 **MENTAL TECHNOLOGY DEMONSTRATION.**

17 (a) ESTABLISHMENT.—The Administrator shall es-
18 tablish a program to demonstrate the performance of envi-
19 ronmental technologies at Federal laboratories and other
20 Federal facilities.

21 (b) QUALIFYING TECHNOLOGY DEMONSTRATION
22 PROJECTS.—Technologies that qualify for demonstration
23 under such program include—

24 (1) environmental technologies that can be ap-
25 plied to a major pollution control or remediation

1 need, as determined by the Administrator, at a Fed-
2 eral laboratory or other Federal facility;

3 (2) environmental technologies the development
4 of which would be significantly advanced by unique
5 facilities or capabilities of a Federal laboratory or
6 other Federal facility; and

7 (3) other environmental technologies that the
8 Administration considers to have significant poten-
9 tial as an environmental technology that will contrib-
10 ute to sustainable economic growth.

11 (c) ADMINISTRATION.—As part of the program estab-
12 lished under this section, the Administrator—

13 (1) may enter into cooperative agreements with
14 other Federal departments and agencies for the pur-
15 pose of demonstrating the performance of environ-
16 mental technologies;

17 (2) may enter into contracts and cooperative
18 agreements for such purpose with organizations se-
19 lected under paragraph (7);

20 (3) except as provided in paragraph (4), may
21 not provide Federal resources under a cooperative
22 agreement referred to in paragraphs (1) and (2) in
23 an amount that exceeds one-half of the total cost of
24 carrying out services and activities under the agree-
25 ment;

1 (4) may make special provisions for small busi-
2 nesses, including the provision of Federal resources
3 under a cooperative agreement entered into with a
4 small business under paragraph (1) or (2) in an
5 amount that exceeds one-half of the total cost of car-
6 rying out services and activities under the agree-
7 ment;

8 (5) shall establish procedures to solicit and ac-
9 cept applications for environmental technologies for
10 demonstration under this program;

11 (6) shall, in consultation and cooperation with
12 other Federal agencies, make available information
13 through the networks described in section 214 and
14 make available through other means—

15 (A) the facilities and expertise available at
16 Federal laboratories that would be valuable to
17 the demonstration of environmental tech-
18 nologies; and

19 (B) sites at Federal laboratories or other
20 Federal facilities potentially available for test-
21 ing environmental technologies, characterized
22 by specific site characteristics, including site ge-
23 ology and site contaminants where appropriate;

24 (7) shall establish procedures for the merit-
25 based review of all applications for demonstration

1 projects under this program through a process that
2 includes representatives of industry and United
3 States nonprofit organizations and select organiza-
4 tions to carry out such projects based upon such
5 procedures;

6 (8) shall document the performance and cost of
7 characteristics of the environmental technology dem-
8 onstrated; and

9 (9) shall list and disseminate, through the
10 networks described in section 214, nonproprietary
11 information regarding the performance and cost
12 characteristics of the environmental technologies
13 demonstrated pursuant to this section.

14 (d) QUALIFYING ORGANIZATIONS.—Entities eligible
15 to carry out a demonstration project as part of the pro-
16 gram established under subsection (a) are United States
17 companies (including small businesses), United States
18 nonprofit organizations, United States institutions of
19 higher education, and other organizations that the Admin-
20 istrator considers appropriate.

21 (e) PROGRAM EVALUATION AND REPORTING.—The
22 Administrator shall, in cooperation with other Federal
23 agencies and in consultation with the United States com-
24 panies and United States nonprofit organizations, annu-

1 ally submit to the Congress a report that evaluates the
2 performance of the program, including a statement of—

3 (1) the number of environmental technologies
4 tested and the type of problems addressed;

5 (2) the number of environmental technologies
6 demonstrated in the program that have since become
7 commercially viable and their estimated impact; and

8 (3) the Federal and non-Federal financial re-
9 sources committed to the program.

10 **SEC. 216. FEDERAL ACQUISITION AND USE OF ENVIRON-**
11 **MENTALLY EFFICIENT BUILDING MATE-**
12 **RIALS.**

13 (a) DEMONSTRATION OF ACQUISITION AND USE OF
14 MATERIALS.—Not later than 90 days after the date of the
15 enactment of this Act, the Administrator shall establish
16 a 3-year pilot program to promote research on, and devel-
17 opment of, environmentally efficient building materials
18 through demonstration of the acquisition and use of envi-
19 ronmentally efficient building materials in the construc-
20 tion of new Federal facilities and buildings and in existing
21 Federal facilities and buildings.

22 (b) SELECTION CRITERIA.—In selecting environ-
23 mentally efficient building materials, the Administrator
24 shall use the criteria of—

1 (1) maximizing the conservation and preserva-
2 tion of natural resources;

3 (2) ensuring that the materials are similar in
4 quality and durability to comparable, more conven-
5 tional materials;

6 (3) ensuring that the materials are cost com-
7 petitive with comparable, more conventional mate-
8 rials on a life-cycle cost basis;

9 (4) ensuring that the materials meet appro-
10 prium environmental, public health, and safety
11 standards; and

12 (5) ensuring that the materials meet appro-
13 prium standards for energy efficiency.

14 (c) PREFERENCES AMONG ENVIRONMENTALLY EF-
15 FICIENT BUILDING MATERIALS.—When making choices
16 between comparable environmentally efficient building ma-
17 terials that meet all the criteria under subsection (b), the
18 Administrator shall give preference to those materials that
19 best satisfy such criteria.

20 (d) REPORT.—Not later than 30 days after comple-
21 tion of the pilot program established under this section,
22 the Administrator shall submit to the Congress a report
23 on the implementation of the pilot program. The report
24 shall include—

1 (1) a listing of the type and quantities of envi-
2 ronmentally efficient building materials used;

3 (2) a statement of the cost and performance of
4 such materials compared to comparable, more con-
5 ventional materials;

6 (3) an assessment of the extent to which the ac-
7 quisition and use of such materials can be expanded
8 beyond the scope of the pilot program;

9 (4) an assessment of how well the materials
10 meet the criteria under subsection (b)(1); and

11 (5) an assessment of the extent to which re-
12 search on, and development of, such materials oc-
13 curred as a result of the pilot program and the ex-
14 tent to which further support is needed to stimulate
15 such research and development.

16 (e) INTEGRATION OF OTHER VIEWS.—In carrying
17 out this section, the Administrator shall develop mecha-
18 nisms for integrating the views of the Administrator of
19 General Services, the Army Corps of Engineers, and rep-
20 resentatives of the environmental community, the con-
21 struction industry (including small business), manufactur-
22 ing companies (including small businesses) that produce
23 environmentally efficient materials, and the scientific and
24 technical community.

1 (f) GUIDELINES TO FEDERAL AGENCIES.—The Ad-
2 ministrator shall, after consultation with the Adminis-
3 trator of General Services, promulgate regulations con-
4 taining guidelines to Federal agencies on minimizing the
5 creation of solid waste and on maximizing the use of envi-
6 ronmentally efficient building materials in the construc-
7 tion of Federal buildings. Such regulations shall include—

8 (1) a requirement that any bid or proposal for
9 Federal contracts for the construction of Federal
10 buildings include a plan for minimizing the genera-
11 tion of solid waste and for maximizing the use of en-
12 vironmentally efficient building materials in such
13 construction; and

14 (2) standards for an acceptable plan that satis-
15 fies the requirement under paragraph (1).

16 (g) DEFINITIONS.—For purposes of this section:

17 (1) The term “agency” means an Executive
18 agency as defined under section 105 of title 5, Unit-
19 ed States Code, and any agency of the judicial
20 branch of Government.

21 (2) The term “environmentally efficient mate-
22 rials” means any recycled, recovered, reclaimed, or
23 reused material whose production, manufacture,
24 fabrication, and use conserves and preserves natural
25 resources when compared to the production, manu-

1 facture, fabrication, and use of comparable, more
2 conventional materials.

3 (3) The term “environmentally efficient build-
4 ing materials” means any environmentally efficient
5 material which may be used in the construction of
6 a building or facility.

7 (4) The term “solid waste” means any garbage,
8 refuse, sludge from a waste treatment plant, water
9 supply treatment plant, or air pollution control facil-
10 ity and other discarded material, including solid, liq-
11 uid, semisolid, or contained gaseous material result-
12 ing from industrial, commercial, mining, and agri-
13 cultural operations, and from community activities,
14 but does not include solid or dissolved material in
15 domestic sewage, or solid or dissolved materials in
16 irrigation return flows or industrial discharges which
17 are point sources subject to permits under section
18 402 of the Federal Water Pollution Control Act (33
19 U.S.C. 1342) or source, special nuclear, or byprod-
20 uct material as defined by the Atomic Energy Act of
21 1954 (42 U.S.C. 2011 et seq.).

22 (5) The term “construction” with respect to
23 any project of construction under this section,
24 means—

1 (A) the erection or building of new struc-
2 tures and acquisition of lands or interests
3 therein, or the acquisition, replacement, expan-
4 sion, remodeling, alteration, modernization, or
5 extension of existing structures;

6 (B) the acquisition and installation of ini-
7 tial equipment of, or required in connection
8 with, new or newly acquired structures or the
9 expanded, remodeled, altered, modernized or ex-
10 tended part of existing structures (including
11 trucks and other motor vehicles, and tractors,
12 cranes, and other machinery) necessary for the
13 proper utilization and operation of the facility
14 after completion of the project, including pre-
15 liminary planning to determine the economic
16 and engineering feasibility and the public health
17 and safety aspects of the project, the engineer-
18 ing, architectural, legal, fiscal, and economic in-
19 vestigations and studies, and any surveys, de-
20 signs, plans, working drawings, specifications,
21 and other action necessary for the carrying out
22 of the project; and

23 (C) the inspection and supervision of the
24 process of carrying out the project to comple-
25 tion.

TITLE III—EDUCATION

SEC. 301. ENVIRONMENTALLY ADVANCED EDUCATION.

(a) FINDINGS.—The Congress finds the following:

(1) With the exception of environmental engineering curricula, environmental considerations are typically not integrated into the required design course work for the various engineering disciplines.

(2) The integration of environmental considerations into all engineering, industrial, design, and other technology-oriented curricula in a timely fashion is essential to better achieving sustainable economic development.

(b) PURPOSE.—The purpose of this title is to encourage the National Science Foundation to provide assistance to colleges and universities for comprehensive research and education activities that will integrate environmental considerations into the design, manufacturing, and production processes.

(c) NATIONAL SCIENCE FOUNDATION ENGINEERING ENVIRONMENTALLY ADVANCED EDUCATION PROGRAMS.—The Director of the National Science Foundation shall support undergraduate and graduate activities in the development of coursework materials and curricula in all scientific, engineering and technical disciplines to incorporate environmental soundness and total cost account-

1 ing principles into the corresponding curricula. In carrying
2 out this section, the Director of the National Science
3 Foundation shall cooperate with the Environmental Pro-
4 tection Agency and other appropriate Federal agencies
5 and consult with appropriate private sector organizations,
6 including the Accreditation Board for Engineering and
7 Technology.

8 (d) SOCIALLY AND ECONOMICALLY DISADVANTAGED
9 INDIVIDUALS.—

10 (1) IN GENERAL.—In carrying out this section,
11 the Director of the National Science Foundation
12 shall encourage the participation of socially dis-
13 advantaged individuals and economically disadvan-
14 tagged individuals.

15 (2) DEFINITIONS.—For purposes of this sub-
16 section:

17 (A) The term “economically disadvantaged
18 individuals” has the meaning given such term
19 in section 8(a)(6)(A) of the Small Business Act,
20 15 U.S.C. 637(a)(6)(A), and includes women.

21 (B) The term “socially disadvantaged indi-
22 viduals” has the meaning given such term in
23 section 8(a)(5) of the Small Business Act, 15
24 U.S.C. 637(a)(5), and includes women.

1 (e) SPECIAL NEEDS.—In carrying out the provisions
2 of this section, the Director of the National Science Foun-
3 dation shall take into account any special needs of 2-year
4 colleges, as applicable.

5 **SEC. 302. GENERAL EDUCATION IN ENVIRONMENTAL TECH-**
6 **NOLOGIES.**

7 (a) IN GENERAL.—The Director of the Office of Re-
8 search and Development of the Environmental Protection
9 Agency, in consultation and coordination with other Fed-
10 eral agencies (including the National Science Foundation)
11 and agencies of State and local governments, shall develop
12 and support programs and related efforts to improve un-
13 derstanding of the relationships between technology and
14 the environment, including—

15 (1) information on—

16 (A) relations between economic activity
17 and the environment and opportunities for im-
18 provement in such relations; and

19 (B) systems which encompass resource ex-
20 traction or introduction, transformation, con-
21 sumption, recycle and disposal, and the energy
22 and resources consumed and the value-yielding
23 results; and

24 (2) any other information the Director of the
25 Office of Research and Development of the Environ-

1 mental Protection Agency, in consultation with other
2 Federal agencies (including the National Science
3 Foundation) and agencies of State and local govern-
4 ments, considers appropriate.

5 (b) PROGRAM FUNCTIONS AND ACTIVITIES.—The
6 programs and efforts referred to in subsection (a) shall
7 include, at a minimum—

8 (1) the development and widest dissemination
9 practicable of model curricula, educational materials,
10 and training programs for technical college, second-
11 ary, and elementary students and other interested
12 groups;

13 (2) the provision of information to local edu-
14 cation agencies, State education and natural re-
15 source agencies, and others; and

16 (3) the training of education professionals in
17 the development and delivery of the environmental
18 education materials developed under this Act.

19 **TITLE IV—STANDARDS**

20 **SEC. 401. PERFORMANCE STANDARDS.**

21 (a) AUTHORIZATION.—The Secretary of Commerce,
22 in cooperation with the Administrator, the Secretary of
23 Energy, and the heads of other appropriate Federal agen-
24 cies, and in consultation with non-Federal standards orga-
25 nizations, shall establish a program to support the clari-

1 fication of standards of performance for environmental
2 technologies to clarify quality, performance, and substitut-
3 ability for conventional products.

4 (b) EXISTING PROGRAMS.—In developing the pro-
5 gram established in subsection (a), the Secretary of Com-
6 merce shall, to the maximum extent practicable, coordi-
7 nate efforts under such program with existing non-Federal
8 standards activities that affect environmental tech-
9 nologies.

10 (c) NON-FEDERAL PROGRAM CERTIFICATION.—The
11 Secretary of Commerce, in cooperation with the Adminis-
12 trator and the Secretary of Energy, shall establish a mech-
13 anism for recognizing non-Federal organizations engaged
14 in environmental standards setting and associated product
15 performance verification activities for the purpose of en-
16 suring quality and enhancing consumer confidence and
17 international recognition.

18 (d) INTERNATIONAL HARMONIZATION.—The Sec-
19 retary of Commerce shall work with domestic and inter-
20 national standards organizations to insure harmonization
21 of domestic standards with international standards.

22 **SEC. 402. VERIFICATION OF ENVIRONMENTAL TECH-**
23 **NOLOGIES.**

24 (a) ENVIRONMENTAL TECHNOLOGY VERIFICATION
25 CENTERS.—The Administrator may enter into joint agree-

1 ments with State and local governments and private sector
2 representatives to support Environmental Technology Ver-
3 ification Centers (in this section referred to as “Verifica-
4 tion Centers”) that verify, evaluate, and disseminate infor-
5 mation on the performance and cost of environmental
6 technologies.

7 (b) FUNCTIONS.—Verification Centers may, under
8 subsection (a)—

9 (1) evaluate cost and performance data for en-
10 vironmental technologies;

11 (2) provide information that describes whether
12 the environmental technology evaluated and veri-
13 fied—

14 (A) meets the performance criteria of ap-
15 plicable law (including regulations issued by the
16 Administrator) under tested conditions;

17 (B) meets the performance criteria of ap-
18 plicable law (including regulations issued by the
19 Administrator) at comparable or lower costs;
20 and

21 (C) constitutes a significant advance with
22 broad applicability.

23 (c) ADMINISTRATION.—The Administrator shall—

24 (1) establish procedures for soliciting applica-
25 tions for and selecting, pursuant to criteria referred

1 to in subsection (d), Verification Centers to perform
2 functions under this section;

3 (2) establish criteria for eligibility to act as a
4 Verification Center;

5 (3) certify appropriate protocols developed by
6 Verification Centers to verify the quality and credi-
7 bility of cost and performance data submitted by
8 Verification Centers;

9 (4) ensure that information regarding environ-
10 mental technologies verified and evaluated under this
11 program is disseminated through the networks re-
12 ferred to in section 214;

13 (5) ensure that fees charged by Verification
14 Centers are reasonable and include—

15 (A) lower fees for small businesses, non-
16 profit organizations, and institutions of higher
17 education; and

18 (B) lower fees for verifying environmental
19 technologies that provide source reduction; and

20 (6) consult with other Federal agencies to make
21 available the sources and expertise of Federal lab-
22 oratories through cooperative agreements with the
23 Verification Centers.

24 (d) SELECTION CRITERIA.—The Administrator, in
25 consultation with other Federal agencies, State and local

1 governments, and private sector organizations, shall select
2 Verification Centers based on the following criteria:

3 (1) The capabilities of the applicant to provide
4 a thorough and credible technical and financial eval-
5 uation of environmental technologies.

6 (2) The clarity and efficiency of the proposed
7 procedures for the receipt and review of applications
8 for technology verification.

9 (3) The likelihood of the continued viability of
10 the Verification Center.

11 (4) The existence of a plan for disseminating
12 nonproprietary information regarding technologies
13 verified by the Verification Center.

14 (5) Other criteria that the Administrator con-
15 sider appropriate.

16 (e) MERIT-BASED SELECTION PROCESS.—Verifica-
17 tion Centers supported under this section shall be selected
18 only through a merit-based selection process, established
19 by the Administrator, pursuant to the criteria described
20 in subsection (d).

21 (f) FINANCIAL ASSISTANCE.—The Administrator
22 may provide financial assistance to a Verification Center
23 under this section. Such financial assistance shall—

24 (1) be for not more than 5 years; and

1 (2) provide not more than 30 percent of the
2 cost of operating the Verification Center.

3 (g) DIRECT PARTNERSHIPS.—If the Administrator
4 determines that Verification Centers cannot adequately
5 verify the performance of environmental technologies be-
6 cause of scale or complexity, the Administrator may en-
7 gage directly with private sector organizations through di-
8 rect verification partnerships to verify the performance of
9 such technologies. The Administrator may engage in a
10 direct verification partnership under this subsection only
11 if—

12 (1) the Administrator documents that the ver-
13 ification cannot be conducted at a Verification Cen-
14 ter, or comparable commercial service, established
15 under this section for reasonable cost;

16 (2) the Federal Government provides not more
17 than 30 percent of the cost-share of the project; and

18 (3) the Administrator determines that the ver-
19 ification will make a significant contribution to sus-
20 tainable economic development.

21 (h) JUDICIAL REVIEW.—

22 (1) DECISION TO LIST OR NOT LIST.—The ver-
23 ification or evaluation of a technology under this sec-
24 tion shall not—

1 (A) constitute a final action by the Admin-
2 istrator; and

3 (B) be subject to judicial review.

4 (2) FAILURE TO COMPLY.—If a technology veri-
5 fied, evaluated and listed pursuant to this section
6 fails to comply with any applicable law (including
7 regulations issued by the Administrator), the ver-
8 ification, evaluation, or listing shall not constitute a
9 defense in an enforcement action or suit and shall
10 not create a cause of action against the Environ-
11 mental Protection Agency.

12 **SEC. 403. CONSUMER CLAIMS ON ENVIRONMENTAL TECH-**
13 **NOLOGIES.**

14 The Federal Trade Commission shall—

15 (1) conduct a study of scientific and techno-
16 logical information needed for the fair evaluation of
17 commercial performance claims regarding environ-
18 mental technologies; and

19 (2) develop a plan for close collaboration with
20 Federal agencies, including the Environmental Pro-
21 tection Agency, the Department of Energy, and the
22 Department of Commerce, that have expertise in en-
23 vironmental technologies to ensure the use of the
24 best available scientific and technological informa-

1 tion by the Federal Trade Commission in evaluating
2 such claims.

3 **TITLE V—INTERNATIONAL**
4 **PROGRAMS**

5 **SEC. 501. FINDINGS.**

6 The Congress finds the following:

7 (1) The global market for environmental tech-
8 nologies, goods, and services is currently
9 \$270,000,000,000 and is estimated to grow to
10 \$500,000,000,000 by the year 2000.

11 (2) Such market represents a major oppor-
12 tunity to increase high-quality jobs in the United
13 States and to assist nations in implementing sus-
14 tainable economic development programs.

15 (3) Although the United States has historically
16 been an international leader in the development of
17 environmental technologies, United States companies
18 have not gained a corresponding share of the inter-
19 national market, in part because other nations have
20 more extensive programs to assist in promoting the
21 export of environmental technologies.

22 **SEC. 502. INTERNATIONAL ENVIRONMENTAL TECHNOLOGY**
23 **DEMONSTRATION.**

24 (a) IN GENERAL.—The Administrator, in cooperation
25 with the Secretary of Commerce, the Secretary of Energy,

1 and the heads of other appropriate Federal agencies and
2 utilizing, to the maximum extent practicable, existing Fed-
3 eral programs, is encouraged to support programs in other
4 nations for the purpose of enhancing United States ex-
5 ports of environmental technologies and promoting the
6 contribution of United States environmental technologies
7 to international sustainable economic development.

8 (b) ACTIVITIES AND SERVICES.—Activities and serv-
9 ices under subsection (a) shall include—

10 (1) providing scientific and technical data and
11 other information to the host government or organi-
12 zations designated by the host government that
13 would illustrate the value of United States environ-
14 mental technologies in achieving environment policy
15 goals of that nation;

16 (2) identifying United States sources of exper-
17 tise or technology that could assist the host nation
18 in achieving its environmental goals;

19 (3) providing assistance in conducting scientific
20 and technological environmental policy assessments
21 conducted by the host government to illustrate the
22 benefits of different options and the contributions to
23 be made through science and technology; and

24 (4) providing other services authorized by the
25 Administrator that would carry out this section.

1 (c) COOPERATIVE ASSESSMENTS.—The Adminis-
2 trator may enter into cooperative agreements with the host
3 government or organizations designated by the host gov-
4 ernment to carry out the activities and services described
5 in subsection (b).

6 (d) USER FEES.—The Administrator may impose
7 fees to defray the costs of activities and services under
8 this section.

9 (e) GRANT RECEIPT.—To carry out this section, the
10 Administrator may receive unconditional grants of finan-
11 cial support from the host government or nonprofit philan-
12 thropic Foundations. Such grants may be accepted only
13 if they are unconditional and in no way influence the direc-
14 tion of activities and services under this section.

15 (f) EVALUATION AND REPORT.—Within 2 years after
16 the establishment of the program under this section, and
17 annually thereafter, the Administrator shall submit to the
18 Congress a report that contains an evaluation of the pro-
19 gram and the effectiveness of the activities and services
20 carried out under the program with respect to each host
21 nation. The evaluation shall provide recommendations for
22 continuation, improvement, or termination of such activi-
23 ties and services.

1 **SEC. 503. PROMOTION OF ENVIRONMENTAL TECHNOLOGY**
2 **EXPORTS.**

3 (a) ESTABLISHMENT.—The Secretary of Commerce,
4 in consultation with the Administrator and the heads of
5 other appropriate agencies and utilizing, to the maximum
6 extent practicable, existing programs of the Federal and
7 State governments, shall support activities to promote the
8 export of United States environmental technologies.

9 (b) SERVICES.—Services and activities under this
10 section may include the provision of—

11 (1) information on international market oppor-
12 tunities, including trade fairs, international environ-
13 mental regulations, and applicable technical and fi-
14 nancial assistance programs;

15 (2) education and training that will assist in
16 adapting and developing environmental technologies
17 and services with substantial potential for export to
18 major international markets; and

19 (3) training, in cooperation with the Adminis-
20 trator of the Agency for International Development,
21 to individuals from nations other than the United
22 States concerning the operation, maintenance, and
23 full value of United States environmental tech-
24 nologies and services.

25 (c) OTHER ASSISTANCE AUTHORIZED.—The Sec-
26 retary of Commerce may provide technical and other as-

1 sistance to carry out this section. Such assistance may in-
2 clude equipment and facilities of Federal laboratories (in-
3 cluding the scientists and engineers at those laboratories).
4 The Secretary shall coordinate with the heads of other
5 Federal agencies to make the capabilities of the Federal
6 laboratories available under this section.

7 (d) COORDINATION WITH OTHER PROGRAMS.—The
8 Secretary of Commerce shall coordinate the activities and
9 services under this section with other programs of the
10 Federal Government, including programs carried out by
11 the Environmental Protection Agency, the Department of
12 Energy, the Agency for International Development, and
13 the Overseas Private Investment Corporation, to avoid re-
14 dundancy and ensure maximum use of the Federal
15 investment.

16 (e) ANNUAL REVIEW.—The Secretary of Commerce
17 shall annually submit to the Congress a report containing
18 a review of activities and services carried out under this
19 section.

20 **SEC. 504. FINANCIAL ASSISTANCE FOR TECHNOLOGY ADAP-**
21 **TATION TO PROMOTE EXPORTS.**

22 (a) ESTABLISHMENT.—There is established a revol-
23 ving fund to be known as the Environmental Technology
24 Export Revolving Fund for the purpose of providing finan-
25 cial assistance for the adaptation and demonstration of

1 United States environmental technologies to enhance ex-
2 ports to major international markets.

3 (b) FORMS OF FINANCIAL ASSISTANCE.—To carry
4 out this section, the Secretary of Commerce may, to the
5 extent provided in appropriations Acts, use the Fund for
6 the purpose of making loans, loan guarantees, or other
7 forms of financial assistance to United States companies,
8 independent research centers, institutions of higher edu-
9 cation, and other organizations the Secretary considers
10 appropriate.

11 (c) PRIORITIES.—In providing financial assistance
12 under this section, the Secretary of Commerce shall give
13 priority to environmental technologies—

14 (1) that require modifications through further
15 research and development to enable commercializa-
16 tion in international markets;

17 (2) that have substantial potential for use in ex-
18 port markets; and

19 (3) for which substantial manufacture will re-
20 main in the United States.

21 (d) OPERATING PLAN.—Not later than January 1,
22 1995, the Secretary of Commerce shall submit to the Con-
23 gress an operating plan to carry out this section. The plan
24 shall contain a description of coordination efforts with
25 other sources of export finance assistance, including the

1 Agency for International Development and the Overseas
2 Private Investment Corporation, and an evaluation of al-
3 ternative approaches to carrying out this section (includ-
4 ing priorities referred to in subsection (c)). The Secretary
5 shall develop recommendations, as appropriate, to carry
6 out this section in the most effective and efficient manner
7 achievable. The recommendations shall include a descrip-
8 tion of the system of evaluation used under this sub-
9 section.

10 (e) TERMS AND CONDITIONS FOR FINANCIAL ASSIST-
11 ANCE.—

12 (1) LIMITATION ON PROJECT AMOUNT.—Loans,
13 loan guarantees, and other forms of financial assist-
14 ance made under this section shall be in such form
15 and under such terms and conditions as the Sec-
16 retary of Commerce may prescribe by regulation.
17 The amount of assistance provided under this sec-
18 tion for a project may not exceed 50 percent of the
19 total eligible project costs. The term “total eligible
20 project costs” shall be defined by the Secretary of
21 Commerce by regulation.

22 (2) LIMITATION ON TOTAL COST.—Financial
23 assistance under this section shall be made under
24 such terms and conditions as are necessary to en-
25 sure that the cost of carrying out this section shall

1 not exceed 15 percent of the corresponding credit
2 authority to carry out this section. For purposes of
3 this paragraph—

4 (A) the term “cost” has the meaning given
5 such term in section 502(5) of the Federal
6 Credit Reform Act of 1990 (2 U.S.C. 661a);
7 and

8 (B) the term “credit authority” has the
9 meaning given such term in section 3(10) of the
10 Congressional Budget Act of 1974 (2 U.S.C.
11 622(10)).

12 (f) REPAYMENT.—Repayment on loans made under
13 this section and the proceeds from any other agreement
14 entered into by the Secretary of Commerce under this sec-
15 tion shall be credited to the Fund. A loan or loan guaran-
16 tee agreement under this section may, at the discretion
17 of the Secretary of Commerce, include a requirement—

18 (1) that a portion of any royalties received in
19 connection with a technology developed with finan-
20 cial assistance under this section be paid to the
21 United States; and

22 (2) in any case in which the technology is used
23 by the recipient of such financial assistance for the
24 production and sale of goods, that a payment equal
25 to the amount paid under paragraph (1) in connec-

1 tion with the technology be paid to the United
2 States.

3 (g) INTEREST.—Interest on a loan, or portion of a
4 loan, awarded or guaranteed by the Federal Government
5 under this section shall be at a rate determined by the
6 Secretary of the Treasury, at the time such loan is made,
7 to equal the then current average market yield on out-
8 standing debt obligations of the United States with re-
9 maining periods to maturity comparable to the maturity
10 of such loan, plus an additional charge of up to 1 percent
11 applied by the Secretary of Commerce to cover expected
12 defaults and reasonable administrative costs of carrying
13 out this section. For purposes of this section, the term
14 “default” shall be defined by the Secretary of Commerce
15 by regulation.

16 (h) MANAGEMENT OF THE FUND.—The Secretary of
17 Commerce shall manage the Fund and shall annually sub-
18 mit to the Congress a report on the financial condition
19 and the results of operation of the Fund during the pre-
20 ceding fiscal year.

21 (i) TECHNICAL ASSISTANCE.—The Secretary of Com-
22 merce shall, upon request, provide technical assistance and
23 services, as appropriate and needed, to awardees under
24 this section and shall ensure that awardees have ready ac-
25 cess to such assistance. The Secretary may charge fees

1 for technical assistance and services. The Secretary may
2 waive such fees on a case-by-case basis. Fees paid to the
3 United States under this section shall be deposited in the
4 revolving fund.

5 (j) COORDINATION WITH OTHER FEDERAL ACTIVITIES.—The Secretary of Commerce shall, to the maximum
6 extent practicable, coordinate the activities under this sec-
7 tion with similar Federal activities to avoid unnecessary
8 duplication of effort.

10 (k) OUTREACH TO ECONOMICALLY DEPRESSED
11 AREAS.—The Secretary of Commerce shall seek to ensure
12 that qualified business concerns located in areas deter-
13 mined by the Secretary to have a depressed economy, or
14 a significant concentration of defense-related industries,
15 or chronically high unemployment, are notified of the
16 availability of financial assistance under this section and,
17 to the extent practicable, to encourage and facilitate the
18 participation of such qualified business concerns in activi-
19 ties for which financial assistance is provided under this
20 section.

**TITLE VI—FINANCIAL AND
REGULATORY INCENTIVES**

SEC. 601. USE OF ENVIRONMENTAL TECHNOLOGY PRODUCTS BY THE FEDERAL GOVERNMENT.

(a) ESTABLISHMENT.—The President shall establish a program for evaluating and approving the purchase by the Federal Government of environmental technology products. The President shall—

(1) work with the performance standards programs established under section 401 to ensure substitutability of environmental technologies for conventional technologies for the purposes of the Federal Government;

(2) establish a priority list of technologies for inclusion under the program; and

(3) implement a plan for the procurement of environmental technologies.

(b) REPORT.—Within one year after the date of the enactment of this Act and annually thereafter, the President shall submit to the Congress a report describing the progress made in carrying out this section and plans for carrying out this section for the three years immediately following the year in which the report is submitted.

1 **SEC. 602. STUDY OF REGULATORY INFLUENCES ON INNO-**
2 **VATION IN ENVIRONMENTAL TECHNOLOGIES.**

3 (a) REVIEW.—The Administrator, working with
4 State regulatory agencies, shall conduct a study of current
5 environmental regulations and their effect upon innovation
6 in environmental technologies and the introduction of new
7 environmental products.

8 (b) REPORT.—The Administrator shall, within one
9 year after the date of the enactment of this Act, submit
10 to the Congress a report on the results of the study de-
11 scribed in subsection (a). The report shall contain any
12 suggestions of the Administrator for actions that could be
13 taken to increase the regulatory incentives for industrial
14 use of new environmental technologies.

15 **SEC. 603. STUDY OF THE IMPACT OF TAX INCENTIVES ON**
16 **INNOVATION IN ENVIRONMENTAL TECH-**
17 **NOLOGIES.**

18 The President shall study the potential for efficiently
19 encouraging the development and use of environmental
20 technologies through tax incentives. The study shall—

21 (1) review existing environmental and tech-
22 nology development tax incentives and estimate their
23 impact on the development and use of environmental
24 technologies;

25 (2) assess the potential of alternative tax incen-
26 tives that are considered promising for accelerating

1 the development and use of environmental tech-
 2 nologies; and

3 (3) in coordination with the study of regulatory
 4 effects on innovation in environmental technologies
 5 established in section 602, assess the relationship
 6 between existing regulations and proposed regulatory
 7 reforms on the influence of existing and potential
 8 tax incentives.

9 **TITLE VII—AUTHORIZATION OF** 10 **APPROPRIATIONS**

11 **SEC. 701. AUTHORIZATION OF APPROPRIATIONS.**

12 (a) IN GENERAL.—Except as provided in subsection
 13 (b), there is hereby authorized to be appropriated for fiscal
 14 years 1995 and 1996 such sums as may be necessary to
 15 carry out this Act and the amendments made by this Act.

16 (b) ENVIRONMENTAL TECHNOLOGIES DEVELOP-
 17 MENT AND INTEGRATION PROGRAM.—There is hereby au-
 18 thorized to be appropriated to carry out the Environ-
 19 mental Technologies Development and Integration Pro-
 20 gram established in section 211—

21 (1) \$80,000,000 for fiscal year 1995; and

22 (2) \$120,000,000 for fiscal year 1996.

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