

Union Calendar No. 296

103^D CONGRESS
2^D SESSION

H. R. 3870

[Report No. 103-536]

To promote the research and development of environmental technologies.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 22, 1994

Mr. BROWN of California (for himself, Mr. VALENTINE, Mr. MINETA, Mrs. LLOYD, Mr. BOEHLERT, Mrs. MORELLA, Mr. SWETT, Mr. KLEIN, Mr. McHALE, Ms. ESHOO, Mr. TRAFICANT, 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, Mr. BARCA of Wisconsin, Mr. RUSH, Mr. SANDERS, Mr. OLVER, and Ms. SLAUGHTER) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

JUNE 8, 1994

Additional sponsors: Mr. INSLEE, Mr. MORAN, Mr. MAZZOLI, Mr. FROST, Mr. ROMERO-BARCELÓ, Mr. GUTIERREZ, Mr. JEFFERSON, Mr. NADLER, and Mr. HINCHEY

JUNE 8, 1994

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in italic]

[For text of introduced bill, see copy of bill as introduced on February 22, 1994]

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 “En-*
 6 *vironmental Technologies Act of 1994”.*

7 (b) *TABLE OF CONTENTS.*—*The table of contents for*
 8 *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 Innovation Initiative

- Sec. 211. Establishment and administration of initiative.*
- Sec. 212. Innovative environmental technology program.*
- 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. Study of factors affecting innovation in environmental technologies.*

Subtitle C—Other Research Activities

- Sec. 221. Environmentally advanced engineering research.*

TITLE III—PERFORMANCE MEASUREMENTS

- Sec. 301. Performance measurements.*

Sec. 302. Verification of environmental technologies.

Sec. 303. Use of certain environmental technologies by the Federal government.

TITLE IV—DEPARTMENT OF ENERGY ENVIRONMENTAL
TECHNOLOGY DEVELOPMENT

Sec. 401. Environmental restoration and waste management technology development.

Sec. 402. Metals recycling demonstration program.

Sec. 403. Funding and authorization.

Sec. 404. Coordination.

TITLE V—AUTHORIZATION OF APPROPRIATIONS

Sec. 501. Authorization of appropriations.

Sec. 502. Limitation on appropriations.

Sec. 503. Competition requirement for awards of financial assistance.

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 pub-*
5 *lic policy challenges of the United States.*

6 *(2) The research, development, and demonstra-*
7 *tion of environmental technologies will enhance the*
8 *economic standing of the United States and global en-*
9 *vironmental security.*

10 *(3) Although better designs for products and*
11 *processes offer new opportunities for substantially im-*
12 *proved environmental performance in growing domes-*
13 *tic and international markets, current government*
14 *regulations and market barriers do not allow these*
15 *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 develop-*

1 *ment, environmental concerns must become a more*
2 *pervasive and central dimension of technology re-*
3 *search and development.*

4 *(5) The coordination of Federal, State, and local*
5 *activities for the research, development, and dem-*
6 *onstration of environmental technologies will greatly*
7 *enhance the effectiveness of environmental policies of*
8 *the United States.*

9 **SEC. 103. PURPOSES.**

10 *It is the purpose of this Act—*

11 *(1) to improve coordination and integration of*
12 *environmental technology research and development*
13 *performed by and across Federal agencies;*

14 *(2) to assist and catalyze efforts of private indus-*
15 *try, universities, nonprofit research centers, and Fed-*
16 *eral laboratories in the research, development, and*
17 *demonstration of environmental technologies and, in*
18 *the process, to promote the competitiveness of United*
19 *States companies;*

20 *(3) to facilitate the dissemination of information*
21 *regarding innovations in environmental technologies;*

22 *(4) to promote the development of technical per-*
23 *formance measurements of environmentally sound*
24 *products; and*

1 (5) to direct the study of policy changes that will
2 provide for the more efficient research, development,
3 and demonstration of environmental technologies.

4 **SEC. 104. DEFINITIONS.**

5 For the purposes of this Act:

6 (1) The term “Administrator” means the Admin-
7 istrator of the Environmental Protection Agency.

8 (2) The term “design-for-environment” means
9 the process of synthesis in which waste prevention
10 and the efficient management of materials during a
11 product’s life cycle are treated as design objectives, in
12 addition to conventional attributes such as cost, per-
13 formance, manufacturability, and safety.

14 (3) The term “environmental technology” means
15 a technology that is primarily intended to improve
16 the quality of the environment through pollution pre-
17 vention, pollution monitoring, pollution control, pol-
18 lution remediation, reuse, recycling, or disposal, or
19 that is capable of cost-effectively offering significant
20 environmental benefits when compared with a tech-
21 nology it replaces.

22 (4) The term “Federal laboratory” has the mean-
23 ing given the term “laboratory” in section 12(d)(2) of
24 the Stevenson-Wydler Technology Innovation Act of
25 1980 (15 U.S.C. 3710a(d)(2)).

1 (5) *The term “life-cycle assessment” means an*
2 *inventory of the resource use and waste generation in-*
3 *volved in developing a technology, including materials*
4 *extraction, materials conversion, transportation, en-*
5 *ergy use, end use, recycling, and disposal, and their*
6 *associated costs and environmental impacts.*

7 (6) *The term “small business concern” means a*
8 *United States company that is a small business con-*
9 *cern within the meaning given such term in the*
10 *Small Business Act (15 U.S.C 631 et seq.).*

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

17 (8) *The term “technology” means a product, a*
18 *manufacturing process, a system, a service, or any*
19 *other method by which individual or societal needs*
20 *are met through technical activities.*

21 (9) *The term “United States company” means a*
22 *company described in section 28(d)(9)(B) of the Na-*
23 *tional Institute of Standards and Technology Act (15*
24 *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 President,
9 acting through the Director of the Office of Science and
10 Technology Policy or other entity designated by the Presi-
11 dent and in coordination with the heads of other Federal
12 agencies that have substantial capabilities in the research,
13 development, and demonstration of environmental tech-
14 nologies, shall develop an interagency strategy that—

15 (1) ensures, to the maximum extent practicable,
16 the coordinated, interagency promotion of the re-
17 search, development, and demonstration of environ-
18 mental technologies; and

19 (2) develops priorities for Federal environmental
20 technology research, development, and demonstration
21 efforts, by using scientifically objective information,
22 data, and assessments of risk.

23 (b) *IMPLEMENTATION.*—In carrying out this section,
24 the President, acting through the Director of the Office of

1 *Science and Technology Policy or other entity designated*
2 *by the President, shall—*

3 (1) *review current Federally funded programs,*
4 *including Federal budget outlays for these programs,*
5 *to determine their role in the research, development,*
6 *and demonstration of environmental technologies;*

7 (2) *recommend the specific responsibilities of*
8 *each appropriate Federal agency to achieve the prior-*
9 *ities developed under this section;*

10 (3) *describe the recommended levels of Federal*
11 *funding required for each Federal agency to carry out*
12 *the specific responsibilities recommended in para-*
13 *graph (2);*

14 (4) *develop a means for ensuring, to the maxi-*
15 *mum extent practicable, that the principles of sus-*
16 *tainable economic development are integrated into the*
17 *research, development, and technology programs of all*
18 *Federal agencies;*

19 (5) *ensure that programs and activities estab-*
20 *lished under this Act are fully coordinated with exist-*
21 *ing Federal capabilities and an overall Federal strat-*
22 *egy for the research, development, and demonstration*
23 *of environmental technologies;*

24 (6) *ensure that the efforts of the Federal Govern-*
25 *ment are coordinated with the efforts of State and*

1 *local governments and private and nonprofit organi-*
2 *zations promoting the research, development, and*
3 *demonstration of environmental technologies;*

4 *(7) ensure that programs and activities estab-*
5 *lished under this Act develop technologies that could*
6 *assist States and regional associations of States to*
7 *comply with existing environmental regulations, in-*
8 *cluding air pollution regulations; and*

9 *(8) submit to the Congress any recommendations*
10 *regarding legislative or administrative action, includ-*
11 *ing recommendations on the roles of Federal agencies,*
12 *which may be required to carry out this section.*

13 *(c) BUDGET COORDINATION.—The Director of the Of-*
14 *fice of Science and Technology Policy shall annually assess,*
15 *in conjunction with other entities designated by the Presi-*
16 *dent and before the President submits to the Congress the*
17 *budget for a fiscal year, the budget estimate of each relevant*
18 *Federal agency for consistency with the plans, reviews, and*
19 *priorities developed under this section. The Director shall*
20 *make the results of the annual assessment available to the*
21 *appropriate elements of the Executive Office of the Presi-*
22 *dent, particularly the Office of Management and Budget,*
23 *for use in the preparation of such budget.*

24 *(d) STRATEGIC PLAN AND ANNUAL REVIEW.—The Di-*
25 *rector of the Office of Science and Technology Policy or*

1 *other entity designated by the President shall submit to the*
2 *Congress—*

3 *(1) within one year after the date of the enact-*
4 *ment of this Act and periodically thereafter, a report*
5 *on the strategy referred to in subsection (a) and any*
6 *revisions to the strategy for executing interagency co-*
7 *ordination of programs and activities conducted*
8 *under this section, including the timely research, de-*
9 *velopment, and demonstration of innovative environ-*
10 *mental control and remediation technologies; and*

11 *(2) annually a report that describes the progress*
12 *made in implementing the strategy, including the*
13 *programs and activities conducted under this Act,*
14 *and the amendments made by this Act, in achieving*
15 *the purposes of this Act.*

16 *(e) NON-FEDERAL PARTICIPATION.—The Director of*
17 *the Office of Science and Technology Policy shall establish*
18 *mechanisms to ensure the participation of non-Federal enti-*
19 *ties, including State and local governments, United States*
20 *companies, United States industrial associations and con-*
21 *sortia, United States institutions of higher education,*
22 *United States worker organizations, United States profes-*
23 *sional associations, and United States nonprofit organiza-*
24 *tions, in carrying out this section, including the develop-*

1 *ment of the plans, reviews, and recommendations developed*
2 *under this section.*

3 **SEC. 202. LIFE-CYCLE ASSESSMENTS.**

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

5 *(1) Consideration of life-cycle consequences of the*
6 *development of a technology can greatly assist in the*
7 *achievement of more environmentally sound products,*
8 *processes, and services and enhanced industrial effi-*
9 *ciency. Life-cycle assessments and other design-for-en-*
10 *vironment resources can facilitate this achievement by*
11 *clarifying materials flows and energy flows and by*
12 *enhancing capabilities to assess these flows in the de-*
13 *sign of such products, processes, and services.*

14 *(2) Methods of life-cycle assessment and other de-*
15 *sign-for-environment resources are underused in both*
16 *the public and private sectors, particularly as applied*
17 *to sustainable economic development.*

18 *(3) The data necessary for meaningful life-cycle*
19 *assessment and other design-for-environment resources*
20 *are often difficult to acquire, and no system exists to*
21 *make such data readily available to public and pri-*
22 *vate groups.*

23 *(b) LIFE-CYCLE ASSESSMENT COORDINATION.—*

24 *(1) IN GENERAL.—As part of activities to coordi-*
25 *nate environmental technology research, development,*

1 *and demonstration described in section 201, the Di-*
2 *rector of the Office of Science and Technology Policy*
3 *or other entity designated by the President shall co-*
4 *ordinate Federal activities and resources that are ap-*
5 *plied to life-cycle assessment and other design-for-en-*
6 *vironment resources in order to maximize the con-*
7 *tribution of life-cycle assessments and other design-*
8 *for-environment resources to the efficient design, de-*
9 *velopment, and use of technologies, and to sustainable*
10 *economic development.*

11 *(2) IMPLEMENTATION.—In carrying out this sub-*
12 *section, the Director of the Office of Science and Tech-*
13 *nology Policy or other entity designated by the Presi-*
14 *dent shall—*

15 *(A) ensure that the life-cycle assessment and*
16 *other design-for-environment resources of each*
17 *Federal agency are developed and disseminated*
18 *in a coordinated fashion, partitioning agency re-*
19 *sponsibilities where appropriate;*

20 *(B) coordinate with State and local govern-*
21 *ments developing life-cycle assessment and other*
22 *design-for-environment resources; and*

23 *(C) consult with industry, professional,*
24 *nonprofit, and other appropriate private-sector*
25 *organizations to take into account the life-cycle*

1 *assessment and other design-for-environment ca-*
2 *pabilities of the private sector in carrying out*
3 *this section.*

4 (3) *OTHER ACTIVITIES.*—*In carrying out this*
5 *subsection, the Director of the Office of Science and*
6 *Technology Policy or other entity designated by the*
7 *President shall also encourage appropriate Federal*
8 *agencies—*

9 (A) *to collect and disseminate information*
10 *regarding analytic methods (and, as required, to*
11 *develop such methods) that will significantly en-*
12 *hance the ability of United States companies*
13 *and other organizations to evaluate materials ex-*
14 *traction, materials conversion, transportation,*
15 *energy use, end use, recycling, and disposal, and*
16 *their associated costs and environmental im-*
17 *pacts;*

18 (B) *to utilize, to the fullest extent prac-*
19 *ticable, existing networks and supporting*
20 *databases which provide access to publicly avail-*
21 *able information that will facilitate the use of*
22 *life-cycle assessments and other design-for-envi-*
23 *ronment resources;*

24 (C) *to sponsor demonstrations for public*
25 *policy and business decisionmakers of the effec-*

1 *tive use of life-cycle assessment and other design-*
2 *for-environment data and methods described in*
3 *this section; and*

4 *(D) to ensure that private-sector life-cycle*
5 *assessment and other design-for-environment ca-*
6 *pabilities are, and continue to be, fully inte-*
7 *grated into activities under this section.*

8 *(4) LIMITATION.—Nothing in this section shall*
9 *be considered to require the use of life-cycle assessment*
10 *or other design-for-environment data or methods by*
11 *any Federal agency.*

12 *(c) ANNUAL REVIEW.—The Director of the Office of*
13 *Science and Technology Policy or other entity designated*
14 *by the President shall annually submit to the Congress a*
15 *report containing an evaluation of the life-cycle assessment*
16 *or other design-for-environment activities of the Federal*
17 *Government.*

18 **SEC. 203. ENVIRONMENTAL TECHNOLOGIES IN ONGOING**
19 **PROGRAMS.**

20 *(a) STEVENSON-WYDLER AMENDMENTS.—The Steven-*
21 *son-Wydler Technology Innovation Act of 1980 (15 U.S.C.*
22 *3701) is amended—*

23 *(1) in section 2(2), by inserting “greater envi-*
24 *ronmental sustainability,” after “employment oppor-*
25 *tunities,”;*

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

3 (3) in section 4, by adding at the end the follow-
4 ing new paragraph:

5 “(14) ‘Sustainable economic development’ means
6 the integration of environmental and economic devel-
7 opment concerns leading to continuous and long-term
8 economic development with reduced pollution and the
9 more efficient use of energy and materials.”;

10 (4) in section 6(a), by inserting “and sustainable
11 economic development in their regions” after “en-
12 hance the competitiveness of American business”;

13 (5) in section 6(d), by inserting “and sustainable
14 economic development in their regions” after “en-
15 hance the competitiveness of American businesses”;

16 (6) in section 7(a), by inserting “and sustainable
17 economic development” after “enhance technological
18 innovation”;

19 (7) in section 7(c)(1), by striking “economic
20 competitiveness” and inserting “sustainable economic
21 development”;

22 (8) in section 9(a), by inserting “and sustainable
23 economic development” after “enhance technological
24 innovation”; and

1 (9) in section 11(c)(1), by inserting “and would
2 enhance sustainable economic development” after
3 “commercial applications”.

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

7 (1) in section 1(b)(1), by inserting “sustainable
8 economic development,” after “improved product reli-
9 ability and manufacturing processes,”;

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

12 “(c) For purposes of this section, the term ‘sustainable
13 economic development’ means the integration of environ-
14 mental and economic development concerns leading to con-
15 tinuous and long-term economic development with reduced
16 pollution and the more efficient use of energy and mate-
17 rials.”; and

18 (3) in section 2(b)(1), by inserting “to enhance
19 sustainable economic development (as that term is de-
20 fined in section 1(c)),” after “to improve quality,”.

21 (c) TECHNICAL AMENDMENT.—Section 214 of the Na-
22 tional Aeronautics and Space Administration Authoriza-
23 tion Act, Fiscal Year 1989 (42 U.S.C. 2451 note) is amend-
24 ed—

1 (1) by striking “102(c)” and inserting “102(d)”;
2 and

3 (2) by striking “2451(c)” and inserting
4 “2451(d)”.

5 (d) NASA AMENDMENTS.—The National Aeronautics
6 and Space Act of 1958 (42 U.S.C. 2451 note) is amended—

7 (1) in section 102(d)—

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

11 (B) by inserting after paragraph (5) the fol-
12 lowing new paragraph:

13 “(6) The making available to Federal and non-
14 Federal entities of the United States, technologies that
15 will enhance the sustainable economic development of
16 the Nation.”; and

17 (2) in section 103—

18 (A) by striking “; and” in paragraph (1)
19 and inserting a semicolon;

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

22 (C) by adding at the end the following new
23 paragraph:

24 “(3) the term ‘sustainable economic development’
25 means the integration of environmental and economic

1 *development concerns leading to continuous and long-*
2 *term economic development with reduced pollution*
3 *and the more efficient use of energy and materials.”.*

4 *(e) NSF AMENDMENTS.—*

5 *(1) FUNCTIONS.—Section 3(a) of the National*
6 *Science Foundation Act of 1950 (42 U.S.C. 1861 et*
7 *seq.) is amended—*

8 *(A) in paragraph (6), by striking “; and”*
9 *and inserting a semicolon;*

10 *(B) in paragraph (7), by striking the period*
11 *and inserting “; and”; and*

12 *(C) by adding at the end the following new*
13 *paragraph:*

14 *“(8) to foster education and research that would*
15 *promote sustainable economic development nationally*
16 *and internationally.”.*

17 *(2) DEFINITION.—Subsection (g) of section 14 of*
18 *such Act is amended as follows:*

19 *(A) By striking “(g) For purposes of this*
20 *Act, the term” and inserting the following:*

21 *“(g) For purposes of this Act:*

22 *“(1) The term”.*

23 *(B) By adding after paragraph (1), as des-*
24 *ignated by subparagraph (A) of this paragraph,*
25 *the following new paragraph:*

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

7 **Subtitle B—Environmental**
8 **Technology Innovation Initiative**

9 **SEC. 211. ESTABLISHMENT AND ADMINISTRATION OF INI-**
10 **TIATIVE.**

11 (a) *ESTABLISHMENT.*—There is established an inter-
12 agency Environmental Technologies Innovation Initiative,
13 to be implemented as part of, and consistent with, the over-
14 all Federal environmental technology strategy established in
15 section 201, to promote the research, development, and dem-
16 onstration of technologies that will contribute significantly
17 to sustainable economic development. The Administrator
18 shall administer the initiative in collaboration with the
19 heads of other Federal agencies, including the Secretary of
20 Commerce, the Secretary of Energy, the Secretary of De-
21 fense, and the Director of the National Science Foundation,
22 that have substantial capabilities in advanced technology
23 research and development.

1 (b) *CONDUCT OF INITIATIVE PROGRAMS AND ACTIVITIES.*—The initiative referred to in subsection (a) shall include—

2
3
4 (1) *the administration and award of the President's Total Environmental Quality Award established under section 24 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), as added by section 213, and of the National Environmentally Sound Technology Award established under section 25 of such Act, as added by section 213;*

5
6
7
8
9
10
11
12 (2) *the conduct of the Innovative Environmental Technology Program described in section 212, the information activities described in section 214, and the environmental technology demonstration program described in section 215; and*

13
14
15
16
17 (3) *the study provided for in section 216.*

18 (c) *AGREEMENTS WITH OTHER AGENCIES; ASSISTANCE.*—

19
20 (1) *IN GENERAL.*—To carry out a section referred to in subsection (b)(2), the Administrator may enter into an agreement with the head of another Federal agency, and enter into contracts and cooperative agreements with, and award grants to, entities eligible for financial assistance under that section.

1 (2) *COMPETITIVE PROCESS.*—The Administrator
2 (or the head of a Federal agency under an agreement
3 under paragraph (1)) shall select proposals for finan-
4 cial assistance under a section referred to in sub-
5 section (b)(2) solely through a competitive, merit-
6 based evaluation process.

7 (3) *INTEGRATION OF INDUSTRY AND OTHER*
8 *VIEWES.*—The Administrator (or the head of a Federal
9 agency under an agreement under paragraph (1))
10 shall develop mechanisms for integrating the views of
11 representatives of industry and nonprofit and other
12 appropriate organizations into the process by which
13 proposals for financial assistance under a section re-
14 ferred to in subsection (b)(2) are evaluated and se-
15 lected.

16 (d) *OTHER ASSISTANCE AUTHORIZED.*—The Adminis-
17 trator, in collaboration with the heads of other appropriate
18 Federal agencies that have substantial capabilities in ad-
19 vanced technology research and development and as appro-
20 priate, may provide an entity receiving financial assistance
21 under a section referred to in subsection (b)(2) with any
22 technical and other assistance, including any equipment
23 and facilities of Federal laboratories (including the sci-
24 entists and engineers at those laboratories), necessary to
25 carry out such section.

1 (e) *ANNUAL INTERAGENCY PLAN AND REVIEW.*—The
2 Administrator, in collaboration with the heads of other ap-
3 propriate Federal agencies (including the Secretary of Com-
4 merce and the Secretary of Energy) and in consultation
5 with representatives of industry, nonprofit, and other ap-
6 propriate organizations, shall develop a strategic plan for
7 the programs and activities referred to in subsection (b)(2)
8 as part of, and consistent with, the overall Federal environ-
9 mental technology strategy established in section 201 and
10 shall report to the Congress on the performance of such pro-
11 grams and activities as part of the annual report described
12 in section 201(d). Such report shall include an evaluation
13 of—

14 (1) the success of innovations resulting from such
15 programs and activities; and

16 (2) the nature and extent of participation of so-
17 cially disadvantaged individuals and economically
18 disadvantaged individuals, as such terms are defined
19 in paragraphs (6)(A) and (5) of section 8(a) of the
20 Small Business Act (15 U.S.C. 637(a)(6)(A),(5)), re-
21 spectively, including women, including an evaluation
22 of any steps taken to encourage the participation of
23 such individuals.

24 (f) *ADMINISTRATION.*—

1 (1) *IN GENERAL.*—*In administering the pro-*
2 *grams and activities referred to in subsection (b)(2),*
3 *the Administrator shall—*

4 (A) *monitor the manner in which any tech-*
5 *nologies developed as a result of the programs*
6 *and activities are used, and report periodically*
7 *to the Congress on the extent of any inter-*
8 *national transfer of these technologies;*

9 (B) *provide for appropriate dissemination*
10 *of the results of any research conducted under*
11 *such program and activities; and*

12 (C) *take any other action the Administrator*
13 *considers necessary to carry out the programs*
14 *and activities and to avoid unnecessary duplica-*
15 *tion of effort by Federal agencies.*

16 (2) *APPLICABILITY OF OTHER LAW.*—*Paragraphs*
17 *(5), (6), (7), (8), and (11) of section 28(d) of the Na-*
18 *tional Institute of Standards and Technology Act (15*
19 *U.S.C. 278n(d)) shall apply to the administration of*
20 *the programs and activities referred to in subsection*
21 *(b)(2).*

22 (3) *PARTICIPATION OF SOCIALLY AND ECONOMI-*
23 *CALLY DISADVANTAGED INDIVIDUALS.*—*In carrying*
24 *out the sections referred to in subsection (b)(2), the*
25 *Administrator shall encourage the participation of so-*

1 cially disadvantaged individuals and economically
2 disadvantaged individuals, as such terms are defined
3 in paragraphs (6)(A) and (5) of section 8(a) of the
4 Small Business Act (15 U.S.C. 637(a)(6)(A),(5)), re-
5 spectively, including women.

6 (g) *ECONOMICALLY DEPRESSED AREAS.*—The Admin-
7 istrator, in collaboration with the heads of other appro-
8 priate Federal agencies, shall seek to ensure that entities
9 eligible for assistance under a section referred to in sub-
10 section (b)(2) and located in areas determined by the Ad-
11 ministrator to have a depressed economy, or a significant
12 concentration of defense-related industries, or chronically
13 high unemployment, are notified of the assistance made
14 available under that section and, to the extent practicable,
15 to encourage and facilitate the participation of such entities
16 in activities for which assistance is provided under that sec-
17 tion.

18 (h) *LIMITATION ON CONSTRUCTION OF FACILITIES.*—
19 The Administrator may not provide financial assistance to
20 an entity under a section referred to in subsection (b)(2)
21 for the construction of facilities.

22 (i) *MANAGEMENT.*—The Administrator shall prescribe
23 any regulations necessary to carry out each section referred
24 to in subsection (b)(2), including regulations—

1 (1) *prescribing the form, time, and manner in*
2 *which proposals for financial assistance under such*
3 *section shall be submitted; and*

4 (2) *providing consideration of in-kind contribu-*
5 *tions by a non-Federal Government entity participat-*
6 *ing in a program or activity conducted under such*
7 *section for the purpose of determining the share of the*
8 *costs of participating in the program or activity that*
9 *have been or are being undertaken by that entity.*

10 **SEC. 212. INNOVATIVE ENVIRONMENTAL TECHNOLOGY**
11 **PROGRAM.**

12 (a) *ESTABLISHMENT.*—*The Administrator, in collabo-*
13 *ration with the heads of other appropriate Federal agencies*
14 *(including the Secretary of Commerce, the Secretary of En-*
15 *ergy, and the Secretary of Defense), shall conduct an inter-*
16 *agency innovative environmental technology program to de-*
17 *velop or demonstrate advanced precommercial environ-*
18 *mental technologies and which, to avoid redundancy and*
19 *ensure efficiency, will be fully coordinated with the overall*
20 *Federal environmental strategy established in section 201.*

21 (b) *ELIGIBILITY FOR FINANCIAL ASSISTANCE.*—*An en-*
22 *tity shall be eligible for financial assistance to conduct a*
23 *demonstration or development project under the program*
24 *established under subsection (a) only if the entity is either*
25 *a single United States company or a partnership which—*

1 (1) *includes two or more United States compa-*
2 *nies; and*

3 (2) *may include, as determined appropriate by*
4 *the Administrator, a Federal laboratory or labora-*
5 *tories, United States nonprofit organizations, United*
6 *States institutions of higher education, agencies of*
7 *States governments, and other entities that partici-*
8 *pate in the partnership by supporting the activities*
9 *conducted by such companies or corporations under*
10 *this section.*

11 (c) *CRITERIA FOR SELECTION OF PROPOSALS.—The*
12 *Administrator shall give priority consideration to the fol-*
13 *lowing criteria in evaluating proposals for financial assist-*
14 *ance under this section:*

15 (1) *Contribution to the priorities established*
16 *pursuant to section 201(a)(2).*

17 (2) *Significant improvement in environmental*
18 *soundness of the production process.*

19 (3) *Contribution to industrial competitiveness,*
20 *including new markets, reduced production costs, and*
21 *enhanced global competitiveness.*

22 (4) *Improvement in the environment of the work-*
23 *place.*

24 (5) *Applicability to other industrial processes.*

1 (6) *Improvement in technological capability to*
2 *recycle complex combinations of materials.*

3 (7) *Innovative application of post-consumer ma-*
4 *terials.*

5 (8) *Direct application to environmental tech-*
6 *nologies needed for United States business and indus-*
7 *try.*

8 (9) *Other criteria established by the Adminis-*
9 *trator.*

10 (d) *AWARD CONDITIONS.—Financial assistance pro-*
11 *vided under this section shall be subject to the following con-*
12 *ditions:*

13 (1) *Such assistance may be made for not more*
14 *than three years for single United States companies*
15 *and not more than five years for partnerships.*

16 (2) *Except as provided in paragraph (3), the*
17 *Federal Government may provide financial assistance*
18 *to a partnership under this section in an amount that*
19 *is not more than a minority share of the cost of the*
20 *project conducted by the partnership.*

21 (3) *The Federal share of the cost of a project con-*
22 *ducted by a partnership under this section may ex-*
23 *ceed the limitation described in paragraph (2) if—*

24 (A) *the partnership is composed entirely of*
25 *small business concerns; or*

1 (B) the Administrator determines that it
2 would be appropriate under the circumstances
3 and would serve the purpose of the program to
4 provide more than a minority cost-share of the
5 project conducted by the partnership.

6 (4) The Administrator has determined that—

7 (A) an applicant for any such assistance
8 has made reasonable efforts to obtain non-Fed-
9 eral funding for the Federal cost share sought to
10 be received under this section; and

11 (B) such non-Federal funding could not be
12 reasonably obtained.

13 (5) Each project under this section shall be car-
14 ried out under such terms and conditions as the Ad-
15 ministrator shall require to ensure the protection of
16 human health and the environment.

17 (e) *EVALUATION AND REPORT.*—As part of the annual
18 evaluation referred to in section 211(e), the Administrator
19 shall conduct an evaluation of—

20 (1) the extent to which technologies developed
21 pursuant to the program established under subsection
22 (a) are used;

23 (2) the contribution of such technologies to re-
24 duced pollution and the more efficient use of energy
25 and materials; and

1 (3) *the contribution of such technologies to eco-*
2 *nom ic development.*

3 (f) *RECOUPMENT.—*

4 (1) *IN GENERAL.—Not later than 180 days after*
5 *the date of the enactment of this Act, the Adminis-*
6 *trator shall establish procedures and criteria for*
7 *recoupment in connection with any project, for which*
8 *financial assistance is provided under this section,*
9 *which has led to the development of a product or*
10 *process which is marketed or used.*

11 (2) *REQUIREMENT AS CONDITION FOR AWARD.—*

12 (A) *IN GENERAL.—Except as provided in*
13 *subparagraph (B), such recoupment shall be re-*
14 *quired as a condition for the provision of finan-*
15 *cial assistance under this section, shall be pro-*
16 *portional to the Federal share of the cost of the*
17 *project, and shall be derived from the proceeds of*
18 *royalties or licensing fees received in connection*
19 *with such product or process.*

20 (B) *EXCEPTION.—In the case of a product*
21 *or process which is used by the recipient of fi-*
22 *nancial assistance under this section for the pro-*
23 *duction and sale of its own products or processes,*
24 *the recoupment shall consist of a payment equiv-*

1 *alent to the payment which would be made*
2 *under subparagraph (A).*

3 (3) *WAIVER.—The Administrator may at any*
4 *time waive or defer all or some of the recoupment re-*
5 *quirements of this subsection as necessary, depending*
6 *on—*

7 (A) *the commercial competitiveness of the*
8 *entity or entities developing or using the product*
9 *or process;*

10 (B) *the profitability of the project; and*

11 (C) *the commercial viability of the product*
12 *or process used.*

13 ***SEC. 213. PRESIDENT'S TOTAL ENVIRONMENTAL QUALITY***
14 ***AWARD AND THE NATIONAL ENVIRON-***
15 ***MENTALLY SOUND TECHNOLOGY AWARD.***

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

17 (1) *Award programs such as the Malcolm*
18 *Baldrige National Quality Award Program have*
19 *made substantial contributions to private enterprise*
20 *by providing a framework upon which organizations*
21 *can improve their operations and by focusing on is-*
22 *ssues important to their competitiveness.*

23 (2) *A President's Total Environmental Quality*
24 *Award Program modeled on the Malcolm Baldrige*
25 *National Quality Award Program would contribute to*

1 *environmental quality and sustainable economic de-*
2 *velopment by—*

3 *(A) helping to stimulate United States com-*
4 *panies to research, develop, and demonstrate en-*
5 *vironmental technologies;*

6 *(B) recognizing the achievements of such*
7 *companies which successfully research, develop,*
8 *and demonstrate environmental technologies; and*

9 *(C) establishing guidelines and criteria that*
10 *can be used by business, industrial, govern-*
11 *mental, and other organizations in evaluating*
12 *their own research, development, and demonstra-*
13 *tion of environmental technologies.*

14 *(b) PURPOSE.—It is the purpose of this section to pro-*
15 *vide for the establishment and conduct of a President’s*
16 *Total Environmental Quality Award Program and a Na-*
17 *tional Environmentally Sound Technology Award Program*
18 *under which awards are given to recognize the successful*
19 *research, development, and demonstration of environmental*
20 *technologies, and information is disseminated about such*
21 *success.*

22 *(c) ESTABLISHMENT OF AWARDS.—The Stevenson-*
23 *Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701*
24 *et seq.) is amended by inserting after section 23 the follow-*
25 *ing new sections:*

1 **“SEC. 24. PRESIDENT’S TOTAL ENVIRONMENTAL QUALITY**
2 **AWARD.**

3 “(a) *ESTABLISHMENT.*—*There is hereby established the*
4 *President’s Total Environmental Quality Award (in this*
5 *section referred to as the ‘Award’).*

6 “(b) *DESIGN.*—*The Award shall be evidenced by a*
7 *medal bearing the inscription ‘President’s Total Environ-*
8 *mental Quality Award’.*

9 “(c) *AWARD SELECTION PROCESS.*—*The Secretary, in*
10 *collaboration with the Secretary of Energy, the Adminis-*
11 *trator of the Environmental Protection Agency, and the*
12 *Secretary of Defense, shall establish a process for the accept-*
13 *ance and evaluation of Award applicants. The Secretary*
14 *shall, to the extent practicable, refer to the procedures used*
15 *in the administration of the Malcolm Baldrige National*
16 *Quality Award, including the definition of award cat-*
17 *egories, the delegation of responsibilities, and provisions for*
18 *publicity, evaluation feed-back, and information transfer,*
19 *as a model for the President’s Total Environmental Quality*
20 *Award.*

21 “(d) *PRESENTATION OF AWARD.*—

22 “(1) *RECOMMENDATIONS BY SECRETARY.*—*The*
23 *Secretary shall submit to the President the rec-*
24 *ommendations of the Secretary for the selection of*
25 *Award applicants.*

1 “(2) *SELECTION BY THE PRESIDENT.*—On the
2 basis of recommendations received under paragraph
3 (1), the President shall periodically select for receipt
4 of the Award United States companies and other or-
5 ganizations which in the judgment of the President
6 have substantially benefited the environmental, eco-
7 nomic, and social well-being of the United States
8 through the research, development, and demonstration
9 of environmental technologies and the effective inte-
10 gration of environmental concerns into its operations
11 and management, and which as a consequence are de-
12 serving of special recognition.

13 “(3) *PRESENTATION CEREMONY.*—The President
14 or the Vice President shall present the Award to re-
15 cipients selected under paragraph (2) with such cere-
16 mony as the President or the Vice President considers
17 to be appropriate.

18 “(e) *LIMITATION.*—The information gathered in evalu-
19 ating Award applications may be used only for the evalua-
20 tion of such applications and for publicity by winners of
21 the Award. Such information may not be used for regu-
22 latory or compliance purposes.

23 “(f) *EVALUATION CRITERIA.*—Criteria for evaluating
24 Award applications shall include the following:

1 “(1) *The effectiveness of the organization’s devel-*
2 *opment and demonstration of environmental tech-*
3 *nologies, as well as the organization’s provision for*
4 *environmental technologies in its future plans.*

5 “(2) *The effectiveness of the integration of envi-*
6 *ronmental concerns into the operations and manage-*
7 *ment of the organization.*

8 “(3) *The effectiveness of energy and materials*
9 *use from the perspective of the life-cycle of the produc-*
10 *tion, use, recycle, and disposal of a product.*

11 “(4) *The effective use of an integrated approach*
12 *to pollution prevention and control that considers all*
13 *environmental media (liquid, solid, gaseous).*

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

18 “(h) *REPORT.*—*Not later than 3 years after the date*
19 *of the enactment of the Environmental Technologies Act of*
20 *1994 and biennially thereafter, the Secretary shall submit*
21 *to the President and the Congress a report on the progress*
22 *made in carrying out this section, including a report on*
23 *any indications that the Award has influenced the practices*
24 *of United States companies and other organizations. The*
25 *report shall include any recommendations of the Secretary*

1 *for any modifications of the Award the Secretary considers*
2 *necessary.*

3 **“SEC. 25. NATIONAL ENVIRONMENTALLY SOUND TECH-**
4 **NOLOGY AWARD.**

5 *“(a) ESTABLISHMENT.—There is established a Na-*
6 *tional Environmentally Sound Technology Award for the*
7 *purpose of awarding individuals who have pioneered the*
8 *development and use of highly innovative environmental*
9 *technologies within the meaning of section 104(3) of the En-*
10 *vironmental Technologies Act of 1994.*

11 *“(b) ADMINISTRATION.—Using the authority and pro-*
12 *cedures established in section 24 and subject to the condi-*
13 *tions described in this section, the Secretary, in collabora-*
14 *tion with the Administrator of the Environmental Protec-*
15 *tion Agency and the Secretary of Energy, shall receive and*
16 *evaluate applications for the National Environmentally*
17 *Sound Technology Award and provide for presentation of*
18 *such Award.*

19 *“(c) QUALIFIED TECHNOLOGIES.—Technologies that*
20 *qualify for such Award may include the following:*

21 *“(1) Manufacturing technologies.*

22 *“(2) Industrial or consumer products.*

23 *“(3) Consumer services.*

24 *“(4) Recycling technologies.*

1 “(5) *Pollution monitoring and control tech-*
2 *nologies.*

3 “(6) *Pollution remediation technologies.*

4 “(7) *Other technologies as appropriate.*

5 “(d) *QUALIFIED APPLICANTS.*—Any citizen or perma-
6 *nent resident of the United States may qualify for such*
7 *Award. Any such individual who is employed by or other-*
8 *wise works for a business, Federal laboratory, or other orga-*
9 *nization may qualify for such Award only if the individual*
10 *was substantially involved in the invention or innovation*
11 *for which such Award is presented.*

12 “(e) *LIMITATION.*—Not more than five such Awards
13 *may be presented annually.*

14 “(f) *REPORT.*—Not later than 2 years after the date
15 *of the enactment of the Environmental Technologies Act of*
16 *1994 and biennially thereafter, the Secretary shall submit*
17 *to the Congress a report on the progress made in carrying*
18 *out this section. The report shall contain an evaluation of*
19 *the performance of such Award, including an assessment*
20 *of the extent to which the public recognizes such Award and*
21 *such Award encourages innovation of environmental tech-*
22 *nologies.”.*

1 **SEC. 214. INCORPORATION OF INFORMATION ON ENVIRON-**
2 **MENTAL TECHNOLOGIES INTO EXISTING NET-**
3 **WORKS.**

4 (a) *IN GENERAL.*—Not later than one year after the
5 date of the enactment of this Act, the Administrator,
6 through the Office of Research and Development of the En-
7 vironmental Protection Agency and in collaboration with
8 the Under Secretary for Technology of the Department of
9 Commerce and the heads of any other appropriate Federal
10 agencies, shall, to the maximum extent practicable, use ex-
11 isting information network capabilities of the Federal Gov-
12 ernment and coordinate with the Federal environmental
13 technology strategy established in section 201 to provide co-
14 ordinated access to data on environmental technologies or
15 protocols developed, tested, verified, or certified under pro-
16 grams established by this Act, and by other appropriate
17 Federal and non-Federal sources. Such data shall include—

18 (1) *information on—*

19 (A) *activities carried out under this Act*
20 *and the amendments made by this Act;*

21 (B) *performance standards regarding envi-*
22 *ronmental technologies;*

23 (C) *significant international developments*
24 *in environmental technologies, fully coordinating*
25 *with other international technology information*
26 *programs of the Federal Government; and*

1 (D) cost-effectiveness and performance of en-
2 vironmental technologies; and

3 (2) other information determined by the Admin-
4 istrator to be of substantial value in promoting the
5 research, development, and demonstration of environ-
6 mental technologies.

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

10 (1) use existing public and private sector infor-
11 mation providers and carriers; and

12 (2) coordinate with the heads of other appro-
13 priate Federal agencies to make data described in
14 subsection (a) accessible through appropriate database
15 systems of those Federal agencies.

16 (c) *OUTREACH.*—The Administrator, through the Of-
17 fice of Research and Development of the Environmental
18 Protection Agency and in collaboration with the Under Sec-
19 retary for Technology of the Department of Commerce and
20 the heads of any other appropriate Federal agencies, shall
21 conduct outreach efforts to advertise, deliver, and dissemi-
22 nate the information made available pursuant to subsection
23 (a). As part of such efforts, the Administrator shall consult
24 with United States industrial associations and take appro-
25 priate action to ensure access to such information by indus-

1 *trial assistance organizations and programs supported by*
2 *a State or local government, a non-profit organization in*
3 *which a State or local government is a member, an institu-*
4 *tion of higher education designated by a State or local gov-*
5 *ernment, a manufacturing extension and outreach service*
6 *or regional technical assistance service approved by the*
7 *Federal Government, or a Federal laboratory.*

8 (d) *EVALUATION AND REPORT.*—*As part of the annual*
9 *evaluation referred to in section 211(e), the Administrator*
10 *shall conduct an evaluation of the extent to which the data*
11 *provided pursuant to this section are used.*

12 **SEC. 215. USE OF FEDERAL FACILITIES FOR ENVIRON-**
13 **MENTAL TECHNOLOGY DEMONSTRATION.**

14 (a) *ESTABLISHMENT.*—*The Administrator shall estab-*
15 *lish a program, in collaboration with the heads of appro-*
16 *priate Federal agencies (including the Secretary of Energy,*
17 *the Secretary of Commerce, and the Secretary of Defense)*
18 *and in coordination with the Federal environmental tech-*
19 *nology strategy established in section 201, to demonstrate*
20 *the performance of environmental technologies at Federal*
21 *laboratories and other Federal facilities.*

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

1 (1) *environmental technologies that can be ap-*
2 *plied to a major pollution control or remediation need*
3 *at a Federal laboratory or other Federal facility;*

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

8 (3) *other environmental technologies that have*
9 *significant potential as an environmental technology*
10 *that will contribute to sustainable economic develop-*
11 *ment or that will make a significant contribution to*
12 *the cleanup of communities significantly affected by*
13 *pollution.*

14 (c) *ADMINISTRATION.*—*As part of the program estab-*
15 *lished under this section, the Administrator—*

16 (1) *may enter into a cooperative agreement with*
17 *any other Federal agency to make available, as ap-*
18 *propriate, any expertise, site, or facility under the ju-*
19 *risdiction of such agency to an eligible entity under*
20 *subsection (d) for the purpose of demonstrating the*
21 *performance of an environmental technology;*

22 (2) *shall establish application procedures for an*
23 *eligible entity under subsection (d) to apply to dem-*
24 *onstrate an environmental technology at an available*
25 *site or facility, including—*

1 (A) provisions for sharing the cost of dem-
2 onstrating the technology with an applicant that
3 limit the Federal share of the cost to not more
4 than 50 percent of the total cost of demonstrating
5 the technology; and

6 (B) provisions that provide special consider-
7 ation of the needs of small business concerns;

8 (3) shall establish criteria for verification of the
9 efficacy of demonstrated environmental technologies;

10 (4) shall establish specific procedures for the
11 management and oversight of demonstration activities
12 conducted under this section;

13 (5) shall, pursuant to section 214, in consulta-
14 tion and collaboration with other Federal agencies,
15 and consistent with the Federal environmental tech-
16 nology strategy established in section 201, make
17 available for entities eligible under subsection (d) in-
18 formation regarding—

19 (A) the facilities and expertise available at
20 Federal laboratories that would be valuable to
21 the demonstration of environmental technologies;
22 and

23 (B) sites at Federal laboratories or other
24 Federal facilities potentially available for dem-
25 onstrating environmental technologies, character-

1 *ized by specific site characteristics, including site*
2 *geology and site contaminants where appro-*
3 *priate;*

4 *(6) shall document the performance and cost*
5 *characteristics of each environmental technology dem-*
6 *onstrated pursuant to this section; and*

7 *(7) shall list and disseminate, pursuant to sec-*
8 *tion 214, nonproprietary information regarding the*
9 *performance and cost characteristics of the environ-*
10 *mental technologies demonstrated pursuant to this*
11 *section.*

12 *(d) ENTITIES ELIGIBLE FOR PARTICIPATION.—Enti-*
13 *ties eligible to carry out a demonstration project as part*
14 *of the program established under subsection (a) are United*
15 *States companies (including small business concerns),*
16 *United States nonprofit organizations, United States insti-*
17 *tutions of higher education, and other entities that the Ad-*
18 *ministrator considers appropriate.*

19 *(e) PROGRAM EVALUATION AND REPORTING.—In the*
20 *report required by section 211(e), the Administrator shall*
21 *evaluate the performance of the program established under*
22 *this section, including an evaluation and statement of—*

23 *(1) the number of environmental technologies*
24 *demonstrated and the type of problems addressed;*

1 (2) *the Federal and non-Federal financial re-*
2 *sources committed to the program; and*

3 (3) *the extent to which technologies demonstrated*
4 *pursuant to this section are used.*

5 (f) *SAVINGS PROVISION.*—*Nothing in this section shall*
6 *be construed to supersede any other provision of law that*
7 *provides authority to a Federal agency to demonstrate envi-*
8 *ronmental technologies.*

9 **SEC. 216. STUDY OF FACTORS AFFECTING INNOVATION IN**
10 **ENVIRONMENTAL TECHNOLOGIES.**

11 (a) *STUDY.*—*The Administrator shall enter into an*
12 *agreement with the National Research Council to conduct*
13 *a study of the influences on technological innovation in en-*
14 *vironmental technologies of economic, governmental, and*
15 *other incentives and barriers.*

16 (b) *REPORT.*—*The Administrator shall include in the*
17 *agreement referred to in subsection (a) a requirement that*
18 *the National Research Council complete a report describing*
19 *the results of the study referred to in such subsection not*
20 *later than two years after the date of the enactment of this*
21 *Act. The Administrator shall submit the report to the Com-*
22 *mittee on Science, Space, and Technology of the House of*
23 *Representatives and the Committee on Environment and*
24 *Public Works of the Senate within 30 days after receiving*
25 *the report from the National Research Council.*

1 **Subtitle C—Other Research**
2 **Activities**

3 **SEC. 221. ENVIRONMENTALLY ADVANCED ENGINEERING**
4 **RESEARCH.**

5 (a) *IN GENERAL.*—The Director of the National
6 Science Foundation shall take appropriate actions to sup-
7 port research activities that will advance the integration
8 of engineering practices and environmental protection in
9 the development of advanced technologies.

10 (b) *INTERAGENCY COLLABORATION.*—The Director of
11 the National Science Foundation shall collaborate with the
12 heads of other appropriate Federal agencies, including the
13 Administrator, in carrying out this section.

14 (c) *INTEGRATION OF INFORMATION.*—The Director of
15 the National Science Foundation shall, to the maximum ex-
16 tent practicable, provide for the dissemination of informa-
17 tion developed as a result of the research activities referred
18 to in subsection (a) through education activities of the
19 Foundation and through the information dissemination ac-
20 tivities developed pursuant to section 214.

21 **TITLE III—PERFORMANCE**
22 **MEASUREMENTS**

23 **SEC. 301. PERFORMANCE MEASUREMENTS.**

24 (a) *AUTHORIZATION.*—The Secretary of Commerce,
25 through the Director of the National Institute of Standards

1 *and Technology, in collaboration with the Administrator*
2 *and the heads of other appropriate Federal agencies, in con-*
3 *sultation with non-Federal standards organizations, and*
4 *consistent with the Federal environmental technology strat-*
5 *egy established in section 201, shall establish a program to*
6 *support the clarification of measurements of performance—*

7 (1) *for environmental technologies (not including*
8 *technologies primarily intended to improve the qual-*
9 *ity of the environment through pollution control, pol-*
10 *lution remediation, pollution monitoring, and dis-*
11 *posal), to clarify performance and substitutability for*
12 *conventional technologies and for the fair evaluation*
13 *of performance claims regarding such environmental*
14 *technologies; and*

15 (2) *to develop appropriate standard reference*
16 *materials required to implement paragraph (1).*

17 (b) *EXISTING NON-FEDERAL PROGRAMS.—In develop-*
18 *ing the program established in subsection (a), the Director*
19 *of the National Institute of Standards and Technology shall,*
20 *to the maximum extent practicable, coordinate efforts under*
21 *such program with existing non-Federal standards activi-*
22 *ties that affect the environmental technologies covered by*
23 *subsection (a)(1).*

24 (c) *COORDINATION WITH OTHER FEDERAL AGEN-*
25 *CIES.—The Secretary of Commerce, through the Director of*

1 *the National Institute of Standards and Technology, shall*
2 *coordinate with the heads of other appropriate Federal*
3 *agencies to ensure, to the maximum extent practicable, the*
4 *use of the best available scientific and technical information*
5 *in the evaluation of environmental performance claims by*
6 *such agencies.*

7 (d) *GLOSSARY OF TERMS.—The Secretary of Com-*
8 *merce, through the Director of the National Institute of*
9 *Standards and Technology, shall work with the heads of ap-*
10 *propriate Federal agencies and private-sector standards or-*
11 *ganizations to facilitate the development and maintenance*
12 *of a glossary of standard definitions of terms used in the*
13 *evaluation of environmental performance claims.*

14 (e) *INTERNATIONAL HARMONIZATION.—The Secretary*
15 *of Commerce, through the Director of the National Institute*
16 *of Standards and Technology, shall work with domestic and*
17 *international standards organizations to ensure harmoni-*
18 *zation of domestic performance measurements with inter-*
19 *national performance measurements.*

20 **SEC. 302. VERIFICATION OF ENVIRONMENTAL TECH-**
21 **NOLOGIES.**

22 (a) *DESIGNATION OF ENTITIES TO PERFORM ENVI-*
23 *RONMENTAL TECHNOLOGY VERIFICATION.—The Adminis-*
24 *trator may, in accordance with this section and consistent*
25 *with the Federal environmental technology strategy devel-*

1 *oped in section 201, designate entities to perform the func-*
2 *tions described in paragraphs (1) through (3) of subsection*
3 *(b). The Administrator may enter into joint agreements*
4 *with Federal agencies, State and local governments, and*
5 *nonprofit, private-sector representatives to support entities*
6 *designated by the Administrator under this section.*

7 *(b) FUNCTIONS.—Each entity designated under sub-*
8 *section (a)—*

9 *(1) shall verify, evaluate, and, to the maximum*
10 *extent practicable, certify the performance, cost-effec-*
11 *tiveness, and ecological benefits of environmental tech-*
12 *nologies;*

13 *(2) shall disseminate information on the charac-*
14 *teristics referred to in paragraph (1), including infor-*
15 *mation that describes whether each environmental*
16 *technology evaluated and verified—*

17 *(A) meets the performance criteria of appli-*
18 *cable law (including regulations issued by the*
19 *Administrator) under tested conditions at com-*
20 *parable or lower costs than other existing envi-*
21 *ronmental technologies; and*

22 *(B) constitutes a significant advance in the*
23 *development of environmental technologies with*
24 *broad applicability;*

1 (3) shall submit to the Administrator data and
2 other information compiled by the entity with respect
3 to each environmental technology verified and evalu-
4 ated by the entity under this section; and

5 (4) may use support provided under this section
6 to develop technologies necessary for effective verifica-
7 tion and evaluation under paragraph (1) and may
8 charge appropriate fees for such verification and eval-
9 uation.

10 (c) REVIEW BY ADMINISTRATOR.—After receiving data
11 and other information from an entity designated under sub-
12 section (a) with respect to an environmental technology
13 under subsection (b)(1), the Administrator shall conduct
14 appropriate review of the data, other information, and pro-
15 tocols developed by such entity with respect to such tech-
16 nology.

17 (d) ADMINISTRATION.—In carrying out this section,
18 the Administrator shall—

19 (1) establish procedures for soliciting applica-
20 tions for and selecting, pursuant to criteria referred
21 to in subsection (e), entities to perform functions de-
22 scribed in subsection (b) and, as appropriate, des-
23 ignate model entities;

24 (2) establish eligibility criteria for entities to be
25 designated under this section;

1 (3) *in collaboration with the heads of other ap-*
2 *propriate Federal agencies, including the Director of*
3 *the National Institute of Standards and Technology,*
4 *certify, and as appropriate develop, common protocols*
5 *to evaluate the cost and performance of environmental*
6 *technologies;*

7 (4) *make generally available through guidance*
8 *manuals or other appropriate methods information*
9 *regarding testing protocols for environmental tech-*
10 *nologies and establish a regular process for approving*
11 *and updating such protocols;*

12 (5) *ensure that information regarding environ-*
13 *mental technologies verified and evaluated under this*
14 *program is disseminated pursuant to section 214;*

15 (6) *develop mechanisms to facilitate the verifica-*
16 *tion of—*

17 (A) *environmental technologies developed or*
18 *demonstrated by small business concerns, non-*
19 *profit organizations, and United States institu-*
20 *tions of higher education; and*

21 (B) *environmental technologies that provide*
22 *source reduction; and*

23 (7) *consult with the heads of other Federal agen-*
24 *cies to make available, through cooperative agree-*
25 *ments with the entities designated under this section,*

1 *sources and expertise of Federal laboratories for use*
2 *by such entities in performing the functions described*
3 *in subsection (b).*

4 *(e) SELECTION CRITERIA.—The Administrator, in*
5 *consultation with the heads of other Federal agencies, State*
6 *and local governments, and private sector organizations,*
7 *shall select entities under this section based on the following*
8 *criteria:*

9 *(1) The capabilities of the applicant to provide*
10 *a thorough and credible technical and financial eval-*
11 *uation of environmental technologies.*

12 *(2) The clarity and efficiency of the proposed*
13 *procedures for the receipt and review of applications*
14 *for technology verification.*

15 *(3) The likelihood of the continued viability of*
16 *the entity.*

17 *(4) The existence of a plan for disseminating*
18 *nonproprietary information regarding technologies*
19 *verified by the entity.*

20 *(5) Other criteria that the Administrator consid-*
21 *ers appropriate.*

22 *(f) MERIT-BASED SELECTION PROCESS.—Entities*
23 *supported under this section shall be selected only through*
24 *a merit-based selection process, established by the Adminis-*
25 *trator, pursuant to the criteria described in subsection (e).*

1 (g) *AUTHORITY OF ADMINISTRATOR.*—*The Adminis-*
2 *trator may enter into cooperative agreements and contracts*
3 *to carry out this section.*

4 (h) *DIRECT VERIFICATION.*—*If the Administrator de-*
5 *termines that entities designated under this section cannot*
6 *adequately verify the performance of environmental tech-*
7 *nologies because of scale or complexity, the Administrator*
8 *may enter into direct agreements to verify the performance*
9 *of such technologies.*

10 (i) *REVIEW.*—

11 (1) *IN GENERAL.*—*Any action by the Adminis-*
12 *trator to verify or evaluate a technology (or to review*
13 *a verification or evaluation) under this section shall*
14 *not constitute a final action by the Administrator*
15 *and shall not be subject to judicial review.*

16 (2) *FAILURE TO COMPLY.*—*If a technology veri-*
17 *fied, evaluated, or reviewed pursuant to this section*
18 *fails to comply with any applicable law (including*
19 *regulations issued by the Administrator), the verifica-*
20 *tion, evaluation, or confirmation shall not constitute*
21 *a defense in an enforcement action or suit and shall*
22 *not create a cause of action against the Environ-*
23 *mental Protection Agency.*

24 (j) *REPORT.*—*The Administrator, in consultation with*
25 *the heads of other appropriate Federal agencies, and indus-*

1 *try, nonprofit, and other appropriate organizations, shall*
2 *annually submit to the Congress a report that evaluates the*
3 *implementation of this section. The report shall include a*
4 *description of the technologies verified pursuant to this sec-*
5 *tion, the number of the technologies verified, and the extent*
6 *of their use.*

7 **SEC. 303. USE OF CERTAIN ENVIRONMENTAL TECH-**
8 **NOLOGIES BY THE FEDERAL GOVERNMENT.**

9 (a) *ESTABLISHMENT.*—*The President shall establish a*
10 *program for evaluating and approving the purchase by the*
11 *Federal Government of environmental technologies covered*
12 *by section 301(a)(1). The President shall consider perform-*
13 *ance standards that clarify the substitutability of such envi-*
14 *ronmental technologies for conventional technologies to es-*
15 *tablish a priority list of such environmental technologies*
16 *for approval for purchase under the program and imple-*
17 *ment a plan for the procurement of such technologies.*

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

1 **TITLE IV—DEPARTMENT OF EN-**
2 **ERGY ENVIRONMENTAL TECH-**
3 **NOLOGY DEVELOPMENT**

4 **SEC. 401. ENVIRONMENTAL RESTORATION AND WASTE**
5 **MANAGEMENT TECHNOLOGY DEVELOPMENT.**

6 (a) *PROGRAM.*—The Secretary of Energy (in this title
7 referred to as the “Secretary”) shall conduct programs of
8 research, development, and demonstration on—

9 (1) *new and improved technologies for environ-*
10 *mental restoration and waste management (including*
11 *waste minimization);*

12 (2) *training for environmental technicians, engi-*
13 *neers, and scientists; and*

14 (3) *technologies for reducing worker exposure to*
15 *radioactivity in association with site remediation.*

16 *In carrying out this section, the Secretary shall appro-*
17 *priately consider the strategic plan submitted under section*
18 *201.*

19 (b) *IMPLEMENTATION AUTHORITY.*—*In implementing*
20 *this section, the Secretary may award grants to, and enter*
21 *into contracts, cooperative agreements, and other appro-*
22 *priate arrangements with institutions of higher education,*
23 *industry, the National Laboratories, and other Federal*
24 *agencies.*

1 (c) *COORDINATION.*—*The Secretary shall ensure that*
2 *the activities conducted pursuant to this section are appro-*
3 *priately coordinated with the activities conducted pursuant*
4 *to the Environmental Technologies Innovation Initiative es-*
5 *tablished under section 211.*

6 **SEC. 402. METALS RECYCLING DEMONSTRATION PROGRAM.**

7 (a) *ESTABLISHMENT.*—*The Secretary shall establish a*
8 *program to demonstrate the technological and economic fea-*
9 *sibility of recycling and reusing radioactively*
10 *uncontaminated and decontaminated metals and equip-*
11 *ment, and of other waste minimization techniques. Such*
12 *program shall seek to demonstrate that sufficient private*
13 *sector commitment to provide decontamination services and*
14 *to purchase uncontaminated and decontaminated metals*
15 *and equipment either exists or can be generated to support*
16 *such a program of recycling and reuse.*

17 (b) *SCOPE.*—*The demonstration program established*
18 *under subsection (a) shall provide for the recycling and*
19 *reuse of the metals and equipment at a minimum of 3 Na-*
20 *tional Laboratories or former nuclear weapons production*
21 *facilities, and shall be of sufficient scope, and shall include*
22 *an appropriate variety of materials, to demonstrate the fea-*
23 *sibility of recycling and reusing radioactively*
24 *uncontaminated and decontaminated metals and equip-*
25 *ment at all National Laboratories and former nuclear*

1 *weapons production facilities. Such demonstration program*
2 *shall be carried out for a period of 3 years.*

3 (c) *DECONTAMINATION TECHNOLOGIES.*—*In the course*
4 *of carrying out the demonstration program, the Secretary*
5 *shall seek to promote the development of decontamination*
6 *technologies.*

7 (d) *IMPLEMENTATION AUTHORITY.*—*In implementing*
8 *this section, the Secretary may award grants to, and enter*
9 *into contracts, cooperative agreements, and other appro-*
10 *priate arrangements with institutions of higher education,*
11 *industry, the National Laboratories, and other Federal*
12 *agencies.*

13 (e) *WASTE STORAGE CONTAINERS.*—*As part of the*
14 *demonstration program, the Secretary shall seek to dem-*
15 *onstrate the technological and economic feasibility of using*
16 *only materials owned by the Department of Energy on the*
17 *date of enactment of this Act for containers to store or dis-*
18 *pose of radioactively contaminated metals and equipment.*

19 (f) *REPORTS TO CONGRESS.*—

20 (1) *REQUIREMENT.*—*The Secretary shall—*

21 (A) *annually during the course of the dem-*
22 *onstration program established under this sec-*
23 *tion, report to the Congress on the progress made*
24 *in the previous year under such program; and*

1 (B) within 6 months after the completion of
2 such demonstration program, transmit a final
3 report to the Congress on the results of the pro-
4 gram.

5 (2) CONTENTS OF FINAL REPORT.—The report
6 required under paragraph (1)(B) shall include—

7 (A) the findings of the Secretary on the suc-
8 cess of the demonstration program at achieving
9 its purposes under this section;

10 (B) a comparison of recycling and reusing
11 radioactively contaminated metals and equip-
12 ment with the alternative of containing and dis-
13 posing of such metals and equipment;

14 (C) the quantitative assessment described in
15 paragraph (3) of this subsection; and

16 (D) a proposal, including any recommenda-
17 tions for necessary legislation, for expanding the
18 demonstration program to cover radioactively
19 uncontaminated and decontaminated metals and
20 equipment at all National Laboratories and
21 former nuclear weapons production facilities.

22 (3) QUANTITATIVE ASSESSMENT.—To enable the
23 Secretary to carry out paragraph (2)(D), the Sec-
24 retary shall develop a quantitative estimate of—

1 (A) *all metals and equipment owned by the*
2 *Department at the National Laboratories and*
3 *former nuclear weapons production facilities*
4 *that are not radioactively contaminated and that*
5 *are suitable for resale or recycling;*

6 (B) *all metals and equipment owned by the*
7 *Department at the National Laboratories and*
8 *former nuclear weapons production facilities*
9 *that have been radioactively contaminated but*
10 *can be recycled or reused by the Department;*
11 *and*

12 (C) *all metals and equipment owned by the*
13 *Department at the National Laboratories and*
14 *former nuclear weapons production facilities*
15 *that have been radioactively contaminated but*
16 *can be decontaminated and may be appropriate*
17 *for sale to the public.*

18 (4) *FACTORS IN COMPARISON.—In making the*
19 *comparison required under paragraph (2)(B), the*
20 *Secretary shall consider the full life cycle costs of each*
21 *alternative, including revenues or savings realized*
22 *and the costs of treatment, containment, storage, dis-*
23 *posal, monitoring, and replacement. Disposal costs*
24 *shall be calculated on the basis of the costs of such dis-*
25 *posal to commercial disposal companies.*

1 **SEC. 403. FUNDING AND AUTHORIZATION.**

2 (a) *RESEARCH AND DEVELOPMENT FUNDING.*—The
3 Secretary shall incrementally increase the proportion of the
4 annual budget request for the Environmental Restoration
5 and Waste Management program that is attributable to re-
6 search and development until such proportion is at least
7 10 percent.

8 (b) *AUTHORIZATION OF APPROPRIATIONS.*—Of those
9 funds requested under subsection (a) and made available
10 for the Environmental Restoration and Waste Management
11 program that are attributable to research and development,
12 there are authorized to be appropriated—

13 (1) \$10,000,000 for fiscal year 1995; and

14 (2) \$11,500,000 for fiscal year 1996,

15 for nondefense research and development activities of the Of-
16 fice of Technology Development, including the advanced ro-
17 botics program, for the development of safer, less expensive,
18 and more efficient environmental restoration and waste
19 management technologies.

20 **SEC. 404. COORDINATION.**

21 The Secretary shall, where appropriate, coordinate the
22 implementation of this title with the implementation of sec-
23 tions 212 and 215 of this Act.

1 **TITLE V—AUTHORIZATION OF**
2 **APPROPRIATIONS**

3 **SEC. 501. AUTHORIZATION OF APPROPRIATIONS.**

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

8 (b) *ENVIRONMENTAL TECHNOLOGIES INNOVATION INI-*
9 *TIATIVE.*—There is hereby authorized to be appropriated to
10 carry out the Environmental Technologies Innovation Ini-
11 tiative established in subtitle B of title II the following:

12 (1) For fiscal year 1995, \$80,000,000, of which
13 \$500,000 is authorized to be appropriated for the
14 President's Total Environmental Quality Award es-
15 tablished in section 213 for fiscal year 1995 and
16 \$700,000 is authorized to be appropriated for the
17 study referred to in section 216.

18 (2) For fiscal year 1996, \$120,000,000, of which
19 \$1,500,000 is authorized to be appropriated for the
20 President's Total Environmental Quality Award es-
21 tablished in section 213.

22 **SEC. 502. LIMITATION ON APPROPRIATIONS.**

23 Notwithstanding any other provision of this Act, no
24 funds are authorized to be appropriated for any fiscal year
25 after fiscal year 1996 for carrying out the programs and

1 *activities for which funds are authorized by this Act, or the*
2 *amendments made by this Act.*

3 **SEC. 503. COMPETITION REQUIREMENT FOR AWARDS OF FI-**
4 **NANCIAL ASSISTANCE.**

5 (a) *COMPETITION REQUIREMENT.*—No financial as-
6 *sistance (including a grant, a contract, or any other award*
7 *of financial assistance) may be provided under a section*
8 *of this Act for research, development, or demonstration ac-*
9 *tivities, or for the construction of research, development, or*
10 *precommercial demonstration facilities, unless a competi-*
11 *tive, merit-based evaluation process consistent with such*
12 *section is used to award the financial assistance.*

13 (b) *REQUIREMENT OF SPECIFIC MODIFICATION OF*
14 *COMPETITION PROVISION.*—

15 (1) *IN GENERAL.*—A provision of law may not
16 *be construed as modifying or superseding subsection*
17 *(a), or as requiring that financial assistance (includ-*
18 *ing a grant, a contract, or any other type of financial*
19 *assistance) be awarded under a section of this Act in*
20 *a manner inconsistent with subsection (a), unless*
21 *such provision of law—*

22 (A) *specifically refers to this section;*

23 (B) *specifically states that such provision of*
24 *law modifies or supersedes subsection (a); and*

1 (C) specifically identifies the person to be
2 awarded the financial assistance and states that
3 the financial assistance to be awarded pursuant
4 to such provision of law is being awarded in a
5 manner inconsistent with subsection (a).

6 (2) NOTICE AND WAIT REQUIREMENT.—No fi-
7 nancial assistance (including a grant, a contract, or
8 any other type of financial assistance) may be award-
9 ed pursuant to a provision of law that requires or au-
10 thorizes the award of the financial assistance under
11 this Act in a manner inconsistent with subsection (a)
12 until—

13 (A) the head of the Federal agency intend-
14 ing to award the financial assistance submits to
15 the Congress a written notice of the intent to
16 award the financial assistance; and

17 (B) 180 days has elapsed after the date on
18 which the notice is received by the Congress.

HR 3870 RH—2

HR 3870 RH—3

HR 3870 RH—4

HR 3870 RH—5

HR 3870 RH—6

Union Calendar No. 296

103D CONGRESS
2D SESSION

H. R. 3870

[Report No. 103-536]

A BILL

To promote the research and development of
environmental technologies.

JUNE 8, 1994

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed