

103<sup>D</sup> CONGRESS  
1<sup>ST</sup> SESSION

# H. R. 2078

To amend the Solid Waste Disposal Act to require comprehensive plans and cooperative programs for the recycling of plastics, automobiles, and appliances.

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## IN THE HOUSE OF REPRESENTATIVES

MAY 11, 1993

Mr. TORRICELLI introduced the following bill; which was referred to the Committee on Energy and Commerce

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## A BILL

To amend the Solid Waste Disposal Act to require comprehensive plans and cooperative programs for the recycling of plastics, automobiles, and appliances.

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

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Recycling Research  
5 and Development Act of 1993”.

6 **SEC. 2. COOPERATIVE RECYCLING PROGRAMS.**

7 (a) PLASTICS, AUTOMOBILE, AND APPLIANCE RECY-  
8 CLING.—Subtitle D of the Solid Waste Disposal Act (42

1 U.S.C. 6941 et seq.) is amended by adding at the end  
2 the following new sections:

3 **“SEC. 4011. PLASTICS RECYCLING.**

4 “(a) COMPREHENSIVE PLASTICS RECYCLING  
5 PLAN.—

6 “(1) INITIAL PLAN.—Not later than 180 days  
7 after the date of the enactment of the Recycling Re-  
8 search and Development Act of 1993, the Secretary  
9 of Energy, acting through the Office of Conservation  
10 and Renewable Energy and after consultation with  
11 the persons and industries specified in subsection  
12 (b)(1), shall prepare and transmit to the Congress a  
13 comprehensive plastics recycling plan that includes—

14 “(A) research priorities critical to im-  
15 proved plastics recycling;

16 “(B) identification of ongoing research in  
17 industry, academia, and the Federal Govern-  
18 ment, including research efforts carried out at  
19 the National Laboratories;

20 “(C) strategies for the cooperative program  
21 established under subsection (b), including tech-  
22 nical milestones to be achieved toward specific  
23 goals during each fiscal year, for all major Fed-  
24 eral activities and projects under the program;

1           “(D) coordination by the Secretary of En-  
2           ergy of ongoing research projects under the  
3           program established under subsection (b), in-  
4           cluding associated or related activities such as  
5           materials research.

6           “(2) UPDATED PLANS.—The Secretary of En-  
7           ergy shall update and submit to the Congress the  
8           plan prepared under paragraph (1) whenever the  
9           Secretary proposes significant changes to the plan.

10          “(b) COOPERATIVE PROGRAM.—

11           “(1) ESTABLISHMENT.—The Secretary of En-  
12           ergy shall establish a cooperative program with the  
13           plastics industry and other appropriate persons and  
14           industries with expertise in solid waste planning,  
15           management and disposal, source reduction, and re-  
16           cycling, and the recycling centers established under  
17           subsection (c), to conduct joint and cooperative recy-  
18           cling technology research and development projects,  
19           including research—

20           “(A) to determine which plastic products  
21           and materials are present in large amounts in  
22           the solid waste stream but not currently recy-  
23           cled in significant amounts, and how to promote  
24           increased recycling of such products and mate-  
25           rials;

1           “(B) to develop improved methods for col-  
2           lecting, sorting, and reclaiming plastics, includ-  
3           ing—

4                   “(i) fast, automated identification sys-  
5                   tems to identify plastic parts for accurate  
6                   separation;

7                   “(ii) chemical, mechanical, or  
8                   rheological technologies to improve the  
9                   compatibility of plastics; and

10                   “(iii) chemical or mechanical tech-  
11                   nologies to improve the quality of plastic  
12                   materials recovery and recycling;

13           “(C) to develop new commercial applica-  
14           tions for recycled plastic products and materials  
15           and ways to expand commercial markets for re-  
16           cycled plastic products and materials; and

17           “(D) to develop plastics recycling methods  
18           and systems that conserve energy inherent in  
19           recycled plastic products and materials.

20           “(2) REQUESTS FOR PROPOSALS.—The Sec-  
21           retary of Energy shall, not later than 240 days after  
22           the date of the enactment of the Act, solicit propos-  
23           als to conduct the projects described in paragraph  
24           (1) and may, after such solicitation, enter into  
25           agreements to conduct such projects. As part of a

1 solicitation under this paragraph, the Secretary of  
2 Energy may propose specific joint and cooperative  
3 projects.

4 “(3) FEDERAL FUNDING.—The Secretary of  
5 Energy may provide financial assistance for a  
6 project conducted under this subsection in an  
7 amount that does not exceed 50 percent of the total  
8 cost of the project.

9 “(c) RECYCLING CENTERS.—

10 “(1) ESTABLISHMENT.—The Secretary of En-  
11 ergy shall establish 3 national recycling research and  
12 development centers at institutions of higher edu-  
13 cation to conduct research projects described in sub-  
14 section (b).

15 “(2) GRANTS.—The Secretary of Energy shall,  
16 subject to appropriations, provide a grant to each  
17 center established pursuant to paragraph (1) in the  
18 amount not to exceed 50 percent of the funds re-  
19 quired by the institution to conduct its assigned ac-  
20 tivities, with the remaining funds being provided by  
21 non-Federal sources (such as the State in which the  
22 center is located, the institution of higher education  
23 involved, and the private sector).

24 “(d) SUPPORT.—The Secretary of Energy shall con-  
25 duct evaluations and arrange for tests and demonstrations

1 to support the projects and other efforts conducted under  
2 this section.

3 “(e) CONSULTATION.—The Secretary of Energy shall  
4 consult with the Administrator, the Director of the Na-  
5 tional Institute for Standards and Technology, and the Di-  
6 rector of the National Science Foundation in carrying out  
7 this section.

8 “(f) AUTHORIZATION OF APPROPRIATIONS.—There  
9 are authorized to be appropriated to the Secretary of En-  
10 ergy to carry out this section \$10,000,000 for each of fis-  
11 cal years 1994 through 1999.

12 **“SEC. 4012. AUTOMOBILE RECYCLING.**

13 “(a) COMPREHENSIVE AUTOMOBILE RECYCLING  
14 PLAN.—

15 “(1) INITIAL PLAN.—Not later than 180 days  
16 after the date of the enactment of the Recycling Re-  
17 search and Development Act of 1993, the Secretary  
18 of Energy, acting through the Office of Conservation  
19 and Renewable Energy, shall prepare and transmit  
20 to the Congress a comprehensive automobile recy-  
21 cling plan that includes—

22 “(A) research priorities critical to im-  
23 proved automobile recycling;

24 “(B) identification of ongoing research in  
25 industry, academia, and the Federal Govern-

1           ment, including research efforts carried out at  
2           the National Laboratories;

3           “(C) strategies for the cooperative program  
4           established under subsection (b), including tech-  
5           nical milestones to be achieved toward specific  
6           goals during each fiscal year, for all major Fed-  
7           eral activities and projects under the program;

8           “(D) coordination by the Secretary of En-  
9           ergy of ongoing research projects under the  
10          program established under subsection (b), in-  
11          cluding associated or related activities such as  
12          materials research.

13          “(2) UPDATED PLANS.—The Secretary of En-  
14          ergy shall update and submit to the Congress the  
15          plan prepared under paragraph (1) whenever the  
16          Secretary proposes significant changes to the plan.

17          “(b) COOPERATIVE PROGRAM.—

18          “(1) ESTABLISHMENT.—The Secretary of En-  
19          ergy shall establish a cooperative program with the  
20          automobile and automobile parts manufacturing in-  
21          dustry, the automobile dismantling and recycling in-  
22          dustry, the plastics industry, and other appropriate  
23          persons and industries to conduct joint and coopera-  
24          tive automobile recycling technology research and  
25          development projects, including research—

1           “(A) to determine obstacles to increased  
2 recycling of automobile components and strate-  
3 gies to overcome those obstacles;

4           “(B) to determine methods for incorporat-  
5 ing recyclability into the planning, design, and  
6 manufacture of new automobiles and the effect  
7 of such methods on the volume and toxicity of  
8 manufacturing waste produced;

9           “(C) to develop methods for engineering  
10 more easily recyclable plastics for use in auto-  
11 mobiles;

12           “(D) to develop new technologies for the  
13 recycling of automotive shredder residue;

14           “(E) to develop environmentally preferable  
15 substitutes for toxic and nonrecyclable materials  
16 used in automobiles; and

17           “(F) to review automobile and automobile  
18 components and parts recycling efforts and pro-  
19 mote public awareness of these efforts.

20           “(2) REQUESTS FOR PROPOSALS.—The Sec-  
21 retary of Energy shall, not later than 240 days after  
22 the date of the enactment of the Recycling Research  
23 and Development Act of 1993, solicit proposals to  
24 conduct the projects described in paragraph (1) and  
25 may, after such solicitation, enter into agreements to

1       conduct such projects. As part of a solicitation under  
2       this paragraph, the Secretary of Energy may pro-  
3       pose specific joint and cooperative projects.

4           “(3) FEDERAL FUNDING.—The Secretary of  
5       Energy may provide financial assistance for a  
6       project conducted under this subsection in an  
7       amount that does not exceed 50 percent of the total  
8       cost of the project.

9           “(d) SUPPORT.—The Secretary of Energy shall con-  
10      duct evaluations and arrange for tests and demonstrations  
11      to support the projects and other efforts conducted under  
12      this subsection.

13          “(e) CONSULTATION.—The Secretary of Energy shall  
14      consult with the Administrator, the Director of the Na-  
15      tional Institute for Standards and Technology, and the Di-  
16      rector of the National Science Foundation in carrying out  
17      this section.

18          “(f) AUTHORIZATION OF APPROPRIATIONS.—There  
19      are authorized to be appropriated to the Secretary of En-  
20      ergy to carry out this section \$10,000,000 for each of fis-  
21      cal years 1994 through 1999.

22      **“SEC. 4013. APPLIANCE RECYCLING.**

23          “(a) COMPREHENSIVE APPLIANCE RECYCLING  
24      PLAN.—

1           “(1) INITIAL PLAN.—Not later than 180 days  
2 after the date of the enactment of the Recycling Re-  
3 search and Development Act of 1993, the Secretary  
4 of Energy, acting through the Office of Conservation  
5 and Renewable Energy, shall prepare and transmit  
6 to the Congress a comprehensive appliance recycling  
7 plan that includes—

8                   “(A) research priorities critical to im-  
9 proved appliance recycling;

10                   “(B) identification of ongoing research in  
11 industry, academia, and the Federal Govern-  
12 ment, including research efforts carried out at  
13 the National Laboratories;

14                   “(C) strategies for the cooperative program  
15 established under subsection (b), including tech-  
16 nical milestones to be achieved toward specific  
17 goals during each fiscal year, for all major Fed-  
18 eral activities and projects under the program;  
19 and

20                   “(D) coordination by the Secretary of En-  
21 ergy of ongoing research projects under the  
22 program established under subsection (b), in-  
23 cluding associated or related activities such as  
24 materials research.

1           “(2) UPDATED PLANS.—The Secretary of En-  
2           ergy shall update and submit to the Congress the  
3           plan prepared under paragraph (1) whenever the  
4           Secretary proposed significant changes to the plan.

5           “(b) COOPERATIVE PROGRAM.—

6           “(1) ESTABLISHMENT.—The Secretary of En-  
7           ergy shall establish a cooperative program with the  
8           appliance manufacturing industry, the appliance dis-  
9           mantling and recycling industry, the steel industry,  
10          the plastics industry, and other appropriate persons  
11          and industries to conduct joint and cooperative ap-  
12          pliance recycling technology research and develop-  
13          ment projects, including research—

14               “(A) to determine obstacles to increased  
15               recycling of appliances and strategies to over-  
16               come those obstacles;

17               “(B) to determine methods for incorporat-  
18               ing recyclability into the planning, design, and  
19               manufacture of new appliances and the effect of  
20               such methods on the volume and toxicity of  
21               manufacturing waste produced;

22               “(C) to develop methods for engineering  
23               more easily recyclable plastics for use in appli-  
24               ances;

1           “(D) to develop new technologies for the  
2 recycling of appliance shredder residue;

3           “(E) to develop environmentally preferable  
4 substitutes for toxic and nonrecyclable materials  
5 used in appliances; and

6           “(F) to review appliance recycling efforts  
7 and promote public awareness of these efforts.

8           “(2) REQUESTS FOR PROPOSALS.—The Sec-  
9 retary of Energy shall, not later than 240 days after  
10 the date of the enactment of the Recycling Research  
11 and Development Act of 1993, solicit proposals to  
12 conduct the projects described in paragraph (1) and  
13 may, after such solicitation, enter into agreements to  
14 conduct such projects. As part of a solicitation under  
15 this paragraph, the Secretary of Energy may pro-  
16 pose specific joint and cooperative projects.

17           “(3) FEDERAL FUNDING.—The Secretary of  
18 Energy may provide financial assistance for a  
19 project conducted under this subsection in an  
20 amount that does not exceed 50 percent of the total  
21 cost of the project.

22           “(d) SUPPORT.—The Secretary of Energy shall con-  
23 duct evaluations and arrange for tests and demonstrations  
24 to support the projects and other efforts conducted under  
25 this section.

1       “(e) CONSULTATION.—The Secretary of Energy shall  
2 consult with the Administrator, the Director of the Na-  
3 tional Institute for Standards and Technology, and the Di-  
4 rector of the National Science Foundation in carrying out  
5 this section.

6       “(f) AUTHORIZATION OF APPROPRIATIONS.—There  
7 are authorized to be appropriated to the Secretary of En-  
8 ergy to carry out this section \$10,000,000 for each of fis-  
9 cal years 1994 through 1999.”.

10       (b) TABLE OF CONTENTS AMENDMENT.—The table  
11 of contents for subtitle D of such Act (contained in section  
12 1001) is amended by adding at the end the following new  
13 items:

“Sec. 4011. Plastics recycling.

“Sec. 4012. Automobile recycling.

“Sec. 4013. Appliance recycling.”.

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