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(Original Signature of Member)

112TH CONGRESS  
1ST SESSION

**H. R.** \_\_\_\_\_

To establish a grant program to assist retail power providers with the establishment and operation of energy conservation programs using targeted residential tree-planting, and for other purposes.

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IN THE HOUSE OF REPRESENTATIVES

Ms. MATSUI introduced the following bill; which was referred to the  
Committee on \_\_\_\_\_

\_\_\_\_\_  
**A BILL**

To establish a grant program to assist retail power providers with the establishment and operation of energy conservation programs using targeted residential tree-planting, and for other purposes.

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 “Energy Conservation  
5       Through Trees Act”.

6       **SEC. 2. FINDINGS.**

7       The Congress finds that—

1           (1) the utility sector is the largest single source  
2 of greenhouse gas emissions in the United States  
3 today, producing approximately one-third of the  
4 country's emissions;

5           (2) heating and cooling homes accounts for  
6 nearly 60 percent of residential electricity usage in  
7 the United States;

8           (3) shade trees planted in strategic locations  
9 can reduce residential cooling costs by as much as  
10 30 percent;

11          (4) shade trees have significant clean-air bene-  
12 fits associated with them;

13          (5) every 100 healthy large trees removes about  
14 300 pounds of air pollution (including particulate  
15 matter and ozone) and about 15 tons of carbon diox-  
16 ide from the air each year;

17          (6) tree cover on private property and on newly-  
18 developed land has declined since the 1970s, even  
19 while emissions from transportation and industry  
20 have been rising; and

21          (7) in over a dozen test cities across the United  
22 States, increasing urban tree cover has generated  
23 between two and five dollars in savings for every dol-  
24 lar invested in such tree planting.

1 **SEC. 3. DEFINITIONS.**

2 As used in this Act:

3 (1) The term “Secretary” refers to the Sec-  
4 retary of Energy.

5 (2) The term “retail power provider” means  
6 any entity authorized under applicable State or Fed-  
7 eral law to generate, distribute, or provide retail  
8 electricity, natural gas, or fuel oil service.

9 (3) The term “tree-planting organization”  
10 means any nonprofit or not-for-profit group which  
11 exists, in whole or in part, to—

12 (A) expand urban and residential tree  
13 cover;

14 (B) distribute young trees for planting;

15 (C) increase awareness of the environ-  
16 mental and energy-related benefits of trees;

17 (D) educate the public about proper tree  
18 planting, care, and maintenance strategies; or

19 (E) carry out any combination of the fore-  
20 going activities.

21 (4) The term “tree-siting guidelines” means a  
22 comprehensive list of science-based measurements  
23 outlining the species and minimum distance required  
24 between trees planted pursuant to this Act, in addi-  
25 tion to the minimum required distance to be main-  
26 tained between such trees and—

- 1 (A) building foundations;
- 2 (B) air conditioning units;
- 3 (C) driveways and walkways;
- 4 (D) property fences;
- 5 (E) preexisting utility infrastructure;
- 6 (F) septic systems;
- 7 (G) swimming pools; and
- 8 (H) other infrastructure as deemed appro-  
9 priate.

10 **SEC. 4. PURPOSES.**

11 The purpose of this Act is to establish a grant pro-  
12 gram to assist retail power providers with the establish-  
13 ment and operation of targeted residential tree-planting  
14 programs, for the following purposes:

15 (1) Reducing the peak-load demand for elec-  
16 tricity in residential areas during the summer  
17 months through direct shading of buildings provided  
18 by strategically-planted trees.

19 (2) Reducing wintertime demand for energy in  
20 residential areas by blocking cold winds from reach-  
21 ing homes, which lowers interior temperatures and  
22 drives heating demand.

23 (3) Protecting public health by removing harm-  
24 ful pollution from the air.

1           (4) Utilizing the natural photosynthetic and  
2           transpiration process of trees to lower ambient tem-  
3           peratures and absorb carbon dioxide, thus mitigating  
4           the effects of climate change.

5           (5) Lowering electric bills for residential rate-  
6           payers by limiting electricity consumption without  
7           reducing benefits.

8           (6) Relieving financial and demand pressure on  
9           retail power providers that stems from large peak-  
10          load energy demand.

11          (7) Protecting water quality and public health  
12          by reducing stormwater runoff and keeping harmful  
13          pollutants from entering waterways.

14          (8) Ensuring that trees are planted in locations  
15          that limit the amount of public money needed to  
16          maintain public and electric infrastructure.

17 **SEC. 5. GENERAL AUTHORITY.**

18          (a) ASSISTANCE.—The Secretary is authorized to  
19          provide financial, technical, and related assistance to retail  
20          power providers to assist with the establishment of new,  
21          or continued operation of existing, targeted residential  
22          tree-planting programs.

23          (b) PUBLIC RECOGNITION INITIATIVE.— In carrying  
24          out the authority provided under this Act, the Secretary  
25          shall also create a national public recognition initiative to

1 encourage participation in tree-planting programs by re-  
2 tail power providers.

3 (c) ELIGIBILITY.—Only those programs which utilize  
4 targeted, strategic tree-siting guidelines to plant trees in  
5 relation to residence location, sunlight, and prevailing  
6 wind direction shall be eligible for assistance under this  
7 Act.

8 (d) REQUIREMENTS.—In order to qualify for assist-  
9 ance under this Act, a tree-planting program shall meet  
10 each of the following requirements:

11 (1) The program shall provide free or dis-  
12 counted shade-providing or wind-reducing trees to  
13 residential consumers interested in lowering their  
14 home energy costs.

15 (2) The program shall optimize the electricity-  
16 consumption reduction benefit of each tree by plant-  
17 ing in strategic locations around a given residence.

18 (3) The program shall either—

19 (A) provide maximum amounts of shade  
20 during summer intervals when residences are  
21 exposed to the most sun intensity; or

22 (B) provide maximum amounts of wind  
23 protection during fall and winter intervals when  
24 residences are exposed to the most wind inten-  
25 sity.

1           (4) The program shall use the best available  
2           science to create tree siting guidelines which dictate  
3           where the optimum tree species are best planted in  
4           locations that achieve maximum reductions in con-  
5           sumer energy demand while causing the least disrup-  
6           tion to public infrastructure, considering overhead  
7           and underground facilities.

8           (5) The program shall receive certification from  
9           the Secretary that it is designed to achieve the goals  
10          set forth in paragraphs (1) through (4). In desig-  
11          nating criteria for such certification, the Secretary  
12          shall collaborate with the United States Forest Serv-  
13          ice's Urban and Community Forestry Program to  
14          ensure that certification requirements are consistent  
15          with such above goals.

16          (e) NEW PROGRAM FUNDING SHARE.—The Sec-  
17          retary shall ensure that no less than 30 percent of the  
18          funds made available under this Act are distributed to re-  
19          tail power providers which—

20                 (1) have not previously established or operated  
21                 qualified tree-planting programs;

22                 (2) are operating qualified tree-planting pro-  
23                 grams which were established no more than three  
24                 years prior to the date of enactment of this Act.

1 **SEC. 6. AGREEMENTS BETWEEN ELECTRICITY PROVIDERS**  
2 **AND TREE-PLANTING ORGANIZATIONS.**

3 (a) GRANT AUTHORIZATION.—In providing assist-  
4 ance under this Act, the Secretary is authorized to award  
5 grants only to retail power providers that have entered  
6 into binding legal agreements with nonprofit tree-planting  
7 organizations.

8 (b) CONDITIONS OF AGREEMENT.—Those agree-  
9 ments between retail power providers and tree-planting or-  
10 ganizations shall set forth conditions under which non-  
11 profit tree-planting organizations shall provide targeted  
12 residential tree-planting programs which may require  
13 these organizations to—

14 (1) participate in local technical advisory com-  
15 mittees responsible for drafting general tree-siting  
16 guidelines and choosing the most effective species of  
17 trees to plant in given locations;

18 (2) coordinate volunteer recruitment to assist  
19 with the physical act of planting trees in residential  
20 locations;

21 (3) undertake public awareness campaigns to  
22 educate local residents about the benefits, cost sav-  
23 ings, and availability of free shade trees;

24 (4) establish education and information cam-  
25 paigns to encourage recipients to maintain their  
26 shade trees over the long term;

1           (5) serve as the point of contact for existing  
2           and potential residential participants who have ques-  
3           tions or concerns regarding the tree-planting pro-  
4           gram;

5           (6) require tree recipients to sign agreements  
6           committing to voluntary stewardship and care of  
7           provided trees;

8           (7) monitor and report on the survival, growth,  
9           overall health, and estimated energy savings of pro-  
10          vided trees up until the end of their establishment  
11          period which shall be no less than five years; and

12          (8) ensure that trees planted near existing  
13          power lines will not interfere with energized elec-  
14          tricity distribution lines when mature, and that no  
15          new trees will be planted under or adjacent to high-  
16          voltage electric transmission lines without prior con-  
17          sultation with the applicable retail power provider  
18          receiving assistance under this Act.

19          (c) LACK OF NONPROFIT ORGANIZATION.—If quali-  
20          fied nonprofit or not-for-profit tree planting organizations  
21          do not exist or operate within areas served by retail power  
22          providers applying for assistance under this Act, the re-  
23          quirements of this section shall apply to binding legal  
24          agreements entered into by such retail power providers  
25          and one of the following entities—

1           (1) local municipal governments with jurisdic-  
2           tion over the urban or suburban forest;

3           (2) the State Forester for the State in which  
4           the tree planting program will operate; or

5           (3) the United States Forest Service's Urban  
6           and Community Forestry representative for the  
7           State in which the tree-planting program will oper-  
8           ate.

9   **SEC. 7. TECHNICAL ADVISORY COMMITTEES.**

10          (a) DESCRIPTION.—In order to qualify for assistance  
11          under this Act, the retail power provider shall establish  
12          and consult with a local technical advisory committee  
13          which shall provide advice and consultation to the pro-  
14          gram, and may—

15                (1) design and adopt an approved plant list  
16                that emphasizes the use of hardy, noninvasive tree  
17                species and, where geographically appropriate, the  
18                use of native or low water-use shade trees or both;

19                (2) design and adopt planting, installation, and  
20                maintenance specifications and create a process for  
21                inspection and quality control;

22                (3) ensure that tree recipients are educated to  
23                care for and maintain their trees over the long term;

24                (4) help the public become more engaged and  
25                educated in the planting and care of shade trees;

1           (5) prioritize which sites receive trees, giving  
2           preference to locations with the most potential for  
3           energy conservation and secondary preference to  
4           areas where the average annual income is below the  
5           regional median; and

6           (6) assist with monitoring and collection of data  
7           on tree health, tree survival, and energy conservation  
8           benefits generated under this Act.

9           (b) COMPENSATION.—Individuals serving on local  
10          technical advisory committees shall not receive compensa-  
11          tion for their service.

12          (c) COMPOSITION.—Local technical advisory commit-  
13          tees shall be composed of representatives from public, pri-  
14          vate, and nongovernmental agencies with expertise in de-  
15          mand-side energy efficiency management, urban forestry,  
16          or arboriculture, and shall be composed of the following:

17                 (1) Up to 4 persons, but no less than one per-  
18                 son, representing the retail power provider receiving  
19                 assistance under this Act.

20                 (2) Up to 4 persons, but no less than one per-  
21                 son, representing the local tree-planting organization  
22                 which will partner with the retail power provider to  
23                 carry out this Act.

24                 (3) Up to 3 persons representing local nonprofit  
25                 conservation or environmental organizations. Pref-

1       erence shall be given to those entities which are or-  
2       ganized under section 501(c)(3) of the Internal Rev-  
3       enue Code of 1986, and which have demonstrated  
4       expertise engaging the public in energy conservation,  
5       energy efficiency, or green building practices or a  
6       combination thereof, such that no single organiza-  
7       tion is represented by more than one individual  
8       under this subsection.

9           (4) Up to 2 persons representing a local afford-  
10       able housing agency, affordable housing builder, or  
11       community development corporation.

12          (5) Up to 3, but no less than one, persons rep-  
13       resenting local city or county government for each  
14       municipality where a shade tree-planting program  
15       will take place; at least one of these representatives  
16       shall be the city or county forester, city or county  
17       arborist, or functional equivalent.

18          (6) Up to one person representing the local gov-  
19       ernment agency responsible for management of  
20       roads, sewers, and infrastructure, including but not  
21       limited to public works departments, transportation  
22       agencies, or equivalents.

23          (7) Up to 2 persons representing the nursery  
24       and landscaping industry.

1           (8) Up to 3 persons representing the research  
2           community or academia with expertise in natural re-  
3           sources or energy management issues.

4           (d) CHAIRPERSON.—Each local technical advisory  
5           committee shall elect a chairperson to preside over Com-  
6           mittee meetings, act as a liaison to governmental and  
7           other outside entities, and direct the general operation of  
8           the committee; only committee representatives from sub-  
9           section (c)(1) or subsection (c)(2) of this section shall be  
10          eligible to act as local technical advisory committee chair-  
11          persons.

12          (e) CREDENTIALS.—At least one of the members of  
13          each local technical advisory committee shall be certified  
14          with one or more of the following credentials: Inter-  
15          national Society of Arboriculture; Certified Arborist, ISA;  
16          Certified Arborist Municipal Specialist, ISA; Certified  
17          Arborist Utility Specialist, ISA; Board Certified Master  
18          Arborist; or Registered Landscape Architect recommended  
19          by the American Society of Landscape Architects.

20          **SEC. 8. COST-SHARE PROGRAM.**

21          (a) FEDERAL SHARE.—The Federal share of support  
22          for projects funded under this Act shall not exceed 50 per-  
23          cent of the cost of such project and shall be provided on  
24          a matching basis.

1 (b) NON-FEDERAL SHARE.—The non-Federal share  
2 of such costs may be paid or contributed by any govern-  
3 mental or nongovernmental entity other than from funds  
4 derived directly or indirectly from an agency or instrumen-  
5 tality of the United States.

6 **SEC. 9. RULEMAKING.**

7 (a) RULEMAKING PERIOD.—The Secretary shall be  
8 authorized to solicit comments and initiate a rulemaking  
9 period that shall last no more than 6 months after the  
10 date of enactment of this Act.

11 (b) COMPETITIVE GRANT RULE.—At the conclusion  
12 of the rulemaking period under subsection (a), the Sec-  
13 retary shall promulgate a rule governing a public, competi-  
14 tive grants process through which retail power providers  
15 may apply for Federal support under this Act.

16 **SEC. 10. NONDUPLICITY.**

17 Nothing in this Act shall be construed to supersede,  
18 duplicate, cancel, or negate the programs or authorities  
19 provided under section 9 of the Cooperative Forestry As-  
20 sistance Act of 1978 (92 Stat. 369; Public Law 95–313;  
21 16 U.S.C. 2105).

22 **SEC. 11. AUTHORIZATION OF APPROPRIATIONS.**

23 There are hereby authorized to be appropriated such  
24 sums as may be necessary for the implementation of this  
25 Act.