

**[DISCUSSION DRAFT]**110<sup>TH</sup> CONGRESS  
1<sup>ST</sup> SESSION**H. R.** \_\_\_\_\_

To establish a grant program to assist residential electricity providers with the establishment and operation of targeted residential tree-planting programs, 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 \_\_\_\_\_

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**A BILL**

To establish a grant program to assist residential electricity providers with the establishment and operation of targeted residential tree-planting programs, 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 Efficiency  
5 Through Trees Act” .

6 **SEC. 2. FINDINGS.**

7 The Congress finds that:

1           (1) The utility sector is the largest single  
2 source of greenhouse gas emissions in the United  
3 States today, producing approximately one-third of  
4 the 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: every 100 large trees re-  
13 moves about 200 pounds of particulate matter, 300  
14 pounds of ozone, and five tons of carbon dioxide  
15 from the air each year.

16          (5) Tree cover on private property and on  
17 newly-developed land has declined since the 1970s,  
18 even while emissions from transportation and indus-  
19 try have been rising.

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

24          (7) The Sacramento Municipal Utility District  
25 has partnered with the Sacramento Tree Foundation

1 to plant over 400,000 free shade trees since 1990,  
2 resulting in an estimated savings of enough electrical  
3 capacity to power 9,000 residential homes.

4 **SEC. 3. DEFINITIONS.**

5 As used in this Act:

6 (1) The term “Secretary” refers to the Sec-  
7 retary of the Department of Energy.

8 (2) The term “retail power” means any entity  
9 authorized under applicable State or Federal law to  
10 generate, distribute, and provide retail electricity,  
11 natural gas, or fuel oil service.

12 (3) The term “tree-planting organization”  
13 means any not-for-profit group which exists, in  
14 whole or in part, to:

15 (A) expand urban and residential tree  
16 cover;

17 (B) distribute young trees for planting;

18 (C) increase awareness of the environ-  
19 mental and energy-related benefits of trees; or

20 (D) educate the public about proper tree  
21 planting, care, and maintenance strategies.

22 **SEC. 4. PURPOSES.**

23 The purpose of this Act is to establish a grant pro-  
24 gram to assist residential energy providers with the estab-

1 lishment and operation of targeted residential tree-plant-  
2 ing programs, for the following purposes:

3 (1) Reducing the peak-load demand for elec-  
4 tricity in residential areas during the summer  
5 months by:

6 (A) limiting the extent to which sunlight  
7 radiates onto residential homes; and

8 (B) increasing the natural cooling effect of  
9 shade cover provided by strategically-planted  
10 trees.

11 (2) Reducing the demand for energy in residen-  
12 tial areas during the winter months by blocking cold  
13 winds from reaching residential homes and lowering  
14 interior temperatures.

15 (3) Protecting public health by removing harm-  
16 ful particulate matter pollution from the air.

17 (4) Utilizing the natural photosynthetic process  
18 of leaves to absorb carbon dioxide in the ambient air  
19 and thus help forestall climate change.

20 (5) Lowering electric bills for residential rate-  
21 payers by limiting consumption without reducing  
22 benefits.

23 (6) Relieving financial and demand pressure on  
24 residential power providers that stems from large  
25 peak-load ratepayer demand.

1 **SEC. 5. GENERAL AUTHORITY.**

2 The Secretary is authorized to provide financial, tech-  
3 nical, and related assistance to residential power providers  
4 to assist with the establishment of new, or continued oper-  
5 ation of existing, targeted residential tree-planting pro-  
6 grams. Only those programs which utilize targeted, stra-  
7 tegic tree-siting guidelines to plant trees in relation to res-  
8 idence location, sunlight, and prevailing wind direction  
9 shall be eligible for assistance under this Act. In order  
10 to qualify for assistance under this Act, a tree-planting  
11 program shall meet each of the following requirements:

12 (1) Provide free or discounted shade-providing  
13 or wind-reducing trees to residential consumers in-  
14 terested in lowering their home energy costs.

15 (2) Optimize the electricity-consumption reduc-  
16 tion benefit of each tree by planting in strategic lo-  
17 cations around a given residence.

18 (3) Provide maximum amounts of shade during  
19 summer intervals when residences are exposed to the  
20 most sun intensity.

21 (4) Utilize the wind-reducing capabilities of  
22 trees to shield homes from prevailing winter winds.

23 (5) Use the best available science to create tree-  
24 siting guidelines which dictate where particular tree  
25 species are best planted in order to achieve max-  
26 imum reductions in consumer energy demand.

1           (6) Receive certification from the Secretary that  
2           tree-planting programs in question are designed to  
3           achieve the above goals.

4   **SEC. 6. AGREEMENTS BETWEEN ELECTRICITY PROVIDERS**  
5                           **AND TREE-PLANTING ORGANIZATIONS.**

6           In providing assistance under this Act, the Secretary  
7           is authorized to award grants only to residential power  
8           providers that have entered into binding legal agreements  
9           with nonprofit tree-planting organizations. When award-  
10          ing grants under this Act, the Secretary shall give pref-  
11          erence to utilities that partner with local tree-planting or-  
12          ganizations. Legal agreements between power providers  
13          and tree-planting organizations shall set forth conditions  
14          under which nonprofit tree-planting organizations shall—

15                   (1) provide technical assistance drafting general  
16                   tree-siting guidelines and choosing the most effective  
17                   species of tree to plant in a given location;

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) provide periodic tree-maintenance services  
25                   to residential participants;

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

5           (6) require tree recipients to sign agreements  
6           committing to no less than three years of voluntary  
7           stewardship and care of provided trees; and

8           (7) regularly monitor and report on the sur-  
9           vival, growth, and overall health of provided trees.

10 **SEC. 7. COST-SHARE PROGRAM.**

11           The Federal share of support for projects funded  
12           under this Act shall not exceed 50 percent of the cost of  
13           such project and shall be provided on a matching basis.  
14           The nonFederal share of such costs may be paid or con-  
15           tributed by any governmental or nongovernmental entity  
16           other than from funds derived directly or indirectly from  
17           an agency or instrumentality of the United States.

18 **SEC. 8. RULEMAKING.**

19           The Secretary shall be authorized to solicit comments  
20           and initiate a rulemaking period that shall last no more  
21           than nine months after the date of enactment of this Act.  
22           At the conclusion of this period, the Secretary shall pro-  
23           mulgate a rule which shall regulate the process by which  
24           local power providers may apply for Federal support under  
25           this Act.

1 **SEC. 9. NONDUPLICITY.**

2       Nothing in this Act shall be construed to supersede,  
3 duplicate, cancel, or negate the programs or authorities  
4 provided under section 9 of the Cooperative Forestry As-  
5 sistance Act of 1978 (92 Stat. 369; Public Law 95-313;  
6 16 U.S.C. § 2105).

7 **SEC. 10. AUTHORIZATION OF APPROPRIATIONS.**

8       There are hereby authorized to be appropriated such  
9 sums as may be necessary for the implementation of this  
10 Act.