Washington State House of Representatives Office of Program Research

BILL ANALYSIS

Environment & Energy Committee

HB 1114

Brief Description: Encouraging utility mitigation of urban heat island effects.

Sponsors: Representatives Dye and Ramel.

Brief Summary of Bill

- Provides Legislative intent encouraging municipal electric utilities and public utility districts (PUDs) to assist retail electric customers in the acquisition and installation of materials and equipment, for compensation or otherwise, for the conservation of energy including, but not limited to, appropriate tree plantings as well as materials and equipment installed as part of a utility cool roof program.
- Establishes certain goals that any tree planting program engaged in by a municipal electric utility, PUD, or investor-owned utility should accomplish.
- Allows municipal utilities, PUDs, and investor-owned utilities to use voluntary donations for urban forestry solicited from retail electric customers to fund a tree planting program that accomplishes the goals of the statewide policy.
- Authorizes the Utilities and Transportation Commission to adopt a policy allowing an incentive rate of return on investment in investor-owned utilities' tree planting programs and cool roof programs.

Hearing Date: 1/26/21

Staff: Nikkole Hughes (786-7156).

Background:

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This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.

Urban Heat Islands.

According to the U.S. Environmental Protection Agency, urban heat islands are zones of relative warmth created by air and surface temperatures that are higher than those of surrounding rural areas. In a large city, air temperatures can be 2 to 22 degrees Fahrenheit higher than its rural surroundings. As air temperature rises, so does demand for air-conditioning, leading to increased electric power demand.

The Evergreen Communities Recognition Program.

Under the 2008 Evergreen Communities Act (Act), every city and county in the state has the discretionary authority to pursue recognition as an Evergreen Community. There can be multiple gradations of Evergreen Communities, and the Department of Commerce is responsible for identifying the criteria necessary for each gradation. Criteria for becoming an Evergreen Community includes developing a community forestry program, recognizing Arbor Day, and completing a forest inventory. The application process for becoming an Evergreen Community is managed through the Department of Natural Resources' Tree City, U.S.A. recognition program.

Electric Utilities and Urban Forestry.

Municipal utilities, public utility districts (PUDs), and investor-owned utilities are encouraged to provide information to their customers regarding landscaping that includes tree planting for energy conservation. Electric utilities are encouraged to request voluntary donations from their retail electric customers for the purposes of urban forestry. The request may be in the form of a check-off on the billing statement or another form of request for a voluntary donation.

Voluntary donations collected by electric utilities may be used to:

- support the development and implementation of Evergreen Community ordinances for cities, towns, or counties within their service areas; or
- complete projects consistent with model Evergreen Community management plans and ordinances.

The use of appropriate tree plantings for energy conservation is encouraged as part of electric utilities' energy conservation programs.

Cool Roofs.

According to the U.S. Department of Energy, a cool roof is one that has been designed to reflect more sunlight and absorb less heat than a standard roof. Cool roofs can be made of a highly reflective type of paint, a sheet covering, or highly reflective tiles or shingles. Standard roofs can reach temperatures of 150 degrees Fahrenheit or more in the summer. Under the same conditions, a cool roof could stay more than 50 degrees Fahrenheit cooler and save energy by reducing demand for air-conditioning.

Summary of Bill:

Consumer-Owned Utilities.

The Legislature encourages any municipal electric utility or public utility district (PUD) to assist its customers in the acquisition and installation of materials and equipment, for compensation or otherwise, for the conservation or more efficient use of energy including, but not limited to, materials and equipment installed as part of a utility cool roof program. The use of appropriate tree plantings for energy conservation is highly encouraged as part of these programs.

It is the policy of the state that any tree planting program engaged in by a municipal electric utility or PUD as part of a broader energy conservation program should accomplish the following:

- reduce the peak-load demand for electricity in residential and commercial business areas during the summer months through direct shading of buildings provided by strategically planted trees;
- reduce wintertime demand for energy in residential areas by blocking cold winds from reaching homes, which lowers interior temperatures and drives heating demand;
- protect public health by removing harmful pollution from the air;
- utilize the natural photosynthetic and transpiration process of trees to lower ambient temperatures and absorb carbon dioxide;
- lower electric bills for residential and commercial business ratepayers by limiting electricity consumption without reducing benefits;
- relieve financial and demand pressure on the utility that stems from large peak-load electricity demand;
- protect water quality and public health by reducing and cooling stormwater runoff and keeping harmful pollutants from entering waterways, with special attention given to waterways vital for the preservation of threatened and endangered salmon;
- ensure that trees are planted in locations that limit the amount of public funding needed to maintain public and electric infrastructure; and
- measure program performance in terms of the estimated present value benefit per tree planted.

Municipal electric utilities and PUDs may use voluntary donations for urban forestry solicited from retail electric customers to fund a tree planting program for energy conservation that accomplishes the goals of the statewide policy.

Investor-Owned Utilities.

The Utilities and Transportation Commission shall consider and may adopt a policy allowing an incentive rate of return on investment in investor-owned utilities' tree planting programs and cool roof programs to improve the efficiency of energy end use. Any tree planting program for which an investor-owned utility seeks an incentive rate of return on investment should accomplish the same goals as provided for consumer-owned utilities.

Investor-owned utilities may use voluntary donations for urban forestry solicited from retail electric customers to fund a tree planting program for energy conservation that accomplishes the goals of the statewide policy.

Appropriation: None.

Fiscal Note: Available.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is

passed.