SENATE BILL REPORT SB 5237

As Reported By Senate Committee On: Water, Energy & Telecommunications, February 23, 2007

Title: An act relating to the purchase of carbon credits from entities that remove methane from the environment by the generation of electricity from the anaerobic decomposition of organic matter derived from dairy cows in the state.

Brief Description: Regarding the purchase of carbon credits from entities that remove methane from the environment by the generation of electricity from the anaerobic decomposition of organic matter derived from dairy cows in the state.

Sponsors: Senators Poulsen, Honeyford, Kohl-Welles and Keiser.

Brief History:

Committee Activity: Water, Energy & Telecommunications: 2/14/07, 2/23/07 [DPS, DNP].

SENATE COMMITTEE ON WATER, ENERGY & TELECOMMUNICATIONS

Majority Report: That Substitute Senate Bill No. 5237 be substituted therefor, and the substitute bill do pass.

Signed by Senators Poulsen, Chair; Rockefeller, Vice Chair; Honeyford, Ranking Minority Member; Fraser, Holmquist, Marr, Morton, Oemig, Pridemore and Regala.

Minority Report: Do not pass. Signed by Senator Delvin.

Staff: William Bridges (786-7424)

Background: Climate Change and Greenhouse Gases: The term "climate change" refers to any significant change in measures of climate, such as temperature, which last for decades or longer. Climate change may result from natural causes or human activities.

The National Academy of Sciences, The Inter-Governmental Panel on Climate Change, and The United States' Climate Change Science Program have concluded that human activities, such as the production of greenhouse gases, are the likely cause of climate change during the last several decades.

Carbon dioxide and methane are greenhouse gases, with methane being 20 times more effective in trapping heat in the atmosphere than carbon dioxide. One source of methane is the decomposition of dairy nutrients.

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Anaerobic Digestion: Anaerobic digestion is the bacterial breakdown of organic materials in the absence of oxygen. This biological process produces biogas, which is principally composed of methane and carbon dioxide. Biogas is typically produced from feedstocks such as sewage sludge, livestock manure, and wet organic materials. Anaerobic digesters are devices that use the natural process of anaerobic digestion to treat waste, produce energy, or both.

Renewable Energy Credit (REC): To promote the use of renewable energy, such as wind and solar power, markets for tradable RECs have been created. Sometimes called "green tags," these credits are sold in the marketplace and represent the environmental attributes of the energy. Under Initiative 937, a REC represents all the "nonpower attributes associated" with a tradable certificate of proof of one megawatt-hour of an eligible renewable resource.

<u>Carbon Credits:</u> Reductions in greenhouse gas emissions can be traded in the market place. When doing so, greenhouse gases are traded according to their "carbon dioxide equivalent," which is a measure of a gas's global warming potential compared to carbon dioxide. Carbon benefits that come from displacing other potential fossil fuel resources through electricity generation are included in a REC; however, carbon credits related to the removal of methane from the atmosphere can be sold separately from a REC.

Summary of Bill: The bill as referred to committee not considered.

SUMMARY OF RECOMMENDED SUBSTITUTE AS PASSED COMMITTEE (Water, Energy & Telecommunications): From appropriated amounts, the Department of General Administration must purchase at a negotiated price eligible carbon credits from entities that remove methane from the environment by the generation of electricity from biogas. The department may not resell the credits.

Terms are defined, including "biogas," which means the gas primarily composed of methane that is produced in the state from the anaerobic decomposition of organic matter derived from dairy cows in the state. "Eligible carbon credit" means a credit for the verified reduction in the carbon dioxide equivalent of methane that is registered with a state, national, or international trading authority or exchange selected by the Department of Community, Trade, and Economic Development or the Washington Climate and Rural Energy Development Center. An eligible carbon credit is only related to the removal of methane from the atmosphere, and is not related to the carbon benefits that come from displacing other potential fossil fuel resources through electricity generation, which are included in a renewable energy credit as defined in Initiative 937.

Appropriation: None.

Fiscal Note: Requested on February 11, 2007.

Committee/Commission/Task Force Created: No.

Effective Date: Ninety days after adjournment of session in which bill is passed.

Staff Summary of Public Testimony: PRO: Dairy biodigesters produce clean, renewable energy, and also remove methane from the atmosphere, which is about 21 times the potency of carbon dioxide as a greenhouse gas. They also help protect fish by controlling nutrient

runoffs. As a distributed energy resource, they can help reduce pressure on constrained electricity transmission and distribution. Dairy digesters often produce electricity that is too expensive for local utilities to purchase. This bill will give dairy farmers a stream of income to help finance their projects, while the state benefits from mitigating the effects of methane. SSB 5237 and SSB 5238 appropriately distinguish between the two unique benefits that dairy biodigesters provide: removing methane that otherwise would be released into the atmosphere and generating renewable electricity that displaces the use of fossil fuels.

CON: Carbon credits should not be separated from renewable energy credits.

Persons Testifying: CON: Kathleen Collins, PacifiCorp.

Signed In, Unable To Testify & Submitted Written Testimony:

PRO: Miguel Perez-Gibson, Northwest Energy Coalition and Climate Solutions; Jay Gordon, Washington State Dairy Federation; Dale Riner, Sno/Sky Agricultural Alliance; Collins Sprague, Avista; Marian Wineman, League of Women Voters of Washington.

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