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HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION  
TESTIMONY REGARDING HB 2005  
RELATING TO RENEWABLE ENERGY TECHNOLOGIES

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This bill would replace the photovoltaic energy system category of § 235-12.5, HRS with a newly defined category of solar electric energy systems.

The Department of Taxation (Department) **provides comments** on this legislation.

**I. EXPANSION OF RENEWABLE ENERGY TECHNOLOGIES TAX CREDIT.**

This bill addresses a distinction made in the current law, the distinction between solar thermal energy systems and photovoltaic energy systems. Under the current law, more income tax credits are available to photovoltaic energy systems.

The Department currently analyzes the distinction using the type of solar energy inputted into the system – solar thermal energy systems convert solar heat into useful heat or electricity and photovoltaic energy systems convert solar light into useful heat or electricity.

This bill expands the category of photovoltaic energy systems by replacing it with a new category that would include energy systems that convert solar heat into electricity, which would currently be classified as solar thermal energy systems eligible for less credits than photovoltaic systems. In other words, instead of focusing on the solar energy input, the new category focuses on the type of energy output.

**II. CONSISTENCY SHOULD BE INTRODUCED FOR ADMINISTRATIVE EASE**

If a distinction between renewable energy systems using solar heat and systems using solar light is to be meaningfully maintained, section 235-12.5, HRS should either focus on the input or the output when defining the systems. This bill would introduce input analysis in some cases and output analysis in other cases and the analysis to be employed by an auditor would require intimate knowledge of the technical features of the system. It would be far easier for an auditor if they only needed to examine the energy inputted or the energy outputted.

The Department has no preference as to whether input or output should be used to make the distinction, however, in order to make the proposed output-based policy scheme consistent, any renewable energy system that uses solar energy as its source and converts that energy into useful

heat, whether the energy from the sun be solar heat or solar light, should be given the treatment currently given to solar thermal energy systems. In other words, a photovoltaic system that converts solar light into useful heat should be treated as a solar thermal energy system, not as a solar electrical system.

Although it is possible to maintain the scheme suggested in this bill, for administrative ease purposes, the Department would prefer that either input analysis continue to be used or that output analysis be adopted in its entirety.

Because this amendment addresses technology innovation and related incentives, the Department defers to the Department of Business, Economic Development and Tourism on the impact of this amendment on the systems currently available.

### **III. REVENUE ESTIMATE.**

Assuming that this bill would ultimately not combine an input and output analysis, a shift to analyzing systems based upon the output of the system bill would simply reshuffle some systems from the solar thermal category to the photovoltaic category and vice versa; and, therefore, the Department would not expect this bill to have a significant revenue impact.

However, if a scheme presented in the current bill is adopted, then some systems currently falling under the solar thermal energy system category would instead fall within the more generous photovoltaic energy system category. Without information regarding the number of systems affected by the current bill, the Department cannot provide a revenue impact.

Thank you for the opportunity to testify.

Respectfully submitted,

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