SB 333 A STAFF MEASURE SUMMARY

House Committee On Energy and Environment

Prepared By:Erin Pischke, LPRO AnalystMeeting Dates:4/26, 5/5

WHAT THE MEASURE DOES:

Directs Oregon Department of Energy (ODOE) to conduct a study of the benefits and barriers to renewable hydrogen production and use in Oregon. Stipulates study must include: identification of the total hydrogen volume currently used annually in certain industries; identification of potential applications in Oregon by 2030 in certain sectors; assessment of the potential for coupling renewable electricity generation and renewable hydrogen production; discussion of forecasted costs; and identification of certain barriers. Requires ODOE to submit report to the interim committees of the Legislative Assembly related to revenue no later than September 15, 2022.

Senate vote: Ayes, 28; Nays, 1-Heard; Excused, 1-Thatcher

Has minimal fiscal impact; no revenue impact

ISSUES DISCUSSED:

- Using hydrogen as backup energy source to other renewable energy resources
- Existing infrastructure to store and transmit hydrogen
- Decarbonization of energy system via hydrogen

EFFECT OF AMENDMENT:

No amendment.

BACKGROUND:

Hydrogen is the most abundant element in the universe, but on earth it rarely occurs naturally in its pure state. Instead, hydrogen is usually combined with other elements such as oxygen or carbon. When produced from wind or other renewable resources, hydrogen can store carbon-free energy that can later be used to generate electricity or power vehicles. Currently, most hydrogen is produced from fossil fuels, specifically natural gas. Electricity—from the grid or from renewable sources such as wind, solar, geothermal, or biomass—is also currently used to produce hydrogen. According to the United States Department of Energy's Office of Energy Efficiency and Renewable Energy, in the longer term, solar energy and biomass can be used more directly to generate hydrogen.

Senate Bill 333 A directs the Department of Energy to conduct a study on the benefits and barriers to renewable hydrogen production and use in Oregon and report the results to the interim committees of the Legislative Assembly related to revenue no later than September 15, 2022.