

SB 333 -4 STAFF MEASURE SUMMARY

Senate Committee On Energy and Environment

Prepared By: Beth Reiley, LPRO Analyst

Sub-Referral To: Senate Committee On Finance and Revenue

Meeting Dates: 2/9, 3/23

WHAT THE MEASURE DOES:

Directs Legislative Revenue Officer, in consultation with Oregon Department of Energy, to conduct study of renewable hydrogen benefits in Oregon. Requires study to include: identification of the total renewable hydrogen volume used annually among certain industries; assessment of the benefits of accelerating decarbonization of economy and advancing this state's greenhouse gas emissions reduction goals using renewable hydrogen produced in Oregon; assessment of the potential for jobs to be created related to renewable hydrogen; estimate of the value to Oregon's economy of replacing fossil fuel imports with renewable hydrogen; assessment of the benefits of coupling renewable electricity generation and renewable hydrogen production to increase grid resiliency and enhance utility load balancing; assessment of the potential for large, rapid growth in renewable hydrogen demand; and estimate of the cost of renewable hydrogen using projected power rates. Requires report be submitted to interim committees of Legislative Assembly related to revenue no later than September 15, 2022. Sunsets January 2, 2023. Takes effect on 91st day following adjournment sine die.

ISSUES DISCUSSED:

EFFECT OF AMENDMENT:

-4 Replaces measure. Directs 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.

No Revenue Impact

Minimal Fiscal Impact

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 directs the Legislative Revenue Officer to conduct a study related to renewable hydrogen and report the results to the interim committees of Legislative Assembly related to revenue no later than September 15, 2022.