HB 2530 -1, -3 STAFF MEASURE SUMMARY

House Committee On Climate, Energy, and Environment

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Meeting Dates: 2/6, 3/8

WHAT THE MEASURE DOES:

Directs Oregon Department of Energy (ODOE) to convene work group to examine, evaluate, and develop statewide strategies to accelerate development of state renewable hydrogen industry and related infrastructure, technologies, and end uses. Establishes work group membership criteria. Requires work group, at a minimum, in developing strategies for renewable hydrogen, to examine and evaluate the following: 1) appropriate end-use cases; 2) barriers and pathways to industry and market development; 3) development, regulatory, and siting standards for production, transmission, and distribution; 4) infrastructure needed to accelerate and sustain development; 5) methods and mechanisms for facilitating coordination that will accelerate development; 6) potential partnerships between business, industry, transportation, workforce and labor, universities and community colleges, public agencies, and environmental justice communities; 7) economic, environmental, and social impacts from development; 8) environmental and health improvements, particularly for environmental justice communities; and 9) workforce development and support. Directs ODOE to submit report on work group's findings and recommendations to interim committees of Legislative Assembly related to energy and economic development no later than September 15, 2024. Repeals work group and reporting requirements on January 2, 2025. Takes effect on 91st day following adjournment sine die.

- *REVENUE: No revenue impact*
- *FISCAL: Minimal fiscal impact*

ISSUES DISCUSSED:

- Workgroup membership
- Production of renewable hydrogen in Oregon
- Uptake of renewable hydrogen for farm uses

EFFECT OF AMENDMENT:

-1 *Replaces the measure.*

Defines "green electrolytic hydrogen" as hydrogen produced through electrolysis using: a renewable energy source; nonemitting electricity that is not derived from a fossil fuel; or electricity that has a carbon intensity that is equal to or less than the average carbon intensity of the electricity served in this state in the calendar year in which construction or expansion of the facility that produces the green electrolytic hydrogen began, as determined by the Oregon Department of Environmental Quality (DEQ). Prohibits green electrolytic hydrogen from including hydrogen manufactured using any conversion technology or steam reforming that produces hydrogen from a fossil fuel feedstock. Establishes "nonemitting electricity" has the meaning given that term in ORS 469A.400. Defines "renewable hydrogen" as hydrogen produced using: a renewable energy source; nonemitting electricity; or electricity that has a carbon intensity that is equal to or less than the average carbon intensity of the electricity served in this state in the calendar year in which construction or expansion of the facility that produces the renewable hydrogen began, as determined by DEQ. Requires Oregon Department of Energy to study green electrolytic hydrogen and renewable hydrogen and submit a report that may include recommendations for legislation to the interim committees of the Legislative Assembly related to energy no later than September 15, 2024. Repeals sections 1 and 2 of the Act on January 2, 2025.

-3 *Replaces the measure.*

Defines “green electrolytic hydrogen” as hydrogen produced through electrolysis using: a renewable energy source; nonemitting electricity that is not derived from a fossil fuel; or electricity that has a carbon intensity that is equal to or less than the average carbon intensity of the electricity served in this state in the calendar year in which construction or expansion of the facility that produces the green electrolytic hydrogen began. Prohibits green electrolytic hydrogen from including hydrogen manufactured using any conversion technology or steam reforming that produces hydrogen from a fossil fuel feedstock. Establishes that “nonemitting electricity” has the meaning given that term in ORS 469A.400. Defines “renewable hydrogen” as hydrogen produced using: a renewable energy source; non-emitting electricity that is not derived from a fossil fuel; or electricity that has a carbon intensity that is equal to or less than the average carbon intensity of the electricity served in this state in the calendar year in which construction or expansion of the facility that produces the renewable hydrogen began. Requires ODOE to support the state’s transition to clean energy by accelerating the production, distribution, and end use of renewable hydrogen and green electrolytic hydrogen fuels by 1) seeking and applying for federal funds for which the state is eligible, and supporting other applications for federal funds, that may be used to support the development and deployment of renewable hydrogen and green electrolytic hydrogen in this state; and 2) providing education and increasing awareness regarding renewable hydrogen and green electrolytic hydrogen for federally recognized Indian tribes, local governments, other state agencies, federal agencies, private entities, this state’s four-year public institutions of higher education, labor unions, environmental justice communities, and other relevant entities.

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.

A 2022 study conducted by the Oregon Department of Energy on the benefits and barriers to renewable hydrogen production and use in Oregon “recommends development of a **renewable hydrogen roadmap** as part of a larger state energy strategy formation.”

House Bill 2530 would direct the Oregon Department of Energy to convene a work group to examine, evaluate, and develop statewide strategies to accelerate development of state’s renewable hydrogen industry.