

SB 685 A STAFF MEASURE SUMMARY

House Committee On Climate, Energy, and Environment

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Meeting Dates: 5/6, 5/22

WHAT THE MEASURE DOES:

The measure requires a natural gas utility to provide notice to affected customers and the Public Utility Commission (PUC) if the utility plans to increase the amount of hydrogen that is blended with natural gas and the amount of hydrogen the utility is planning to blend results in the ratio of the volume of hydrogen to natural gas exceeding 2.5 percent. The Act specifies information required in the PUC notice and on utility websites.

Detailed Summary:

Requires a natural gas utility (utility) to provide notice to affected customers and the Oregon Public Utility Commission (PUC) if the utility plans to increase the amount of hydrogen that is blended with natural gas that the utility delivers through its distribution system and this is the first time that the amount of hydrogen the utility plans to blend results in a ratio of the volume of hydrogen gas to the volume of natural gas, expressed as a percentage, exceeding 2.5 percent. Requires utility, at least 60 days prior to beginning blending hydrogen at specified percentage, to:

- Provide notice to each customer affected by the planned action; and
- File notice with the PUC that includes the reason for the increased amount of hydrogen, required siting or permitting approvals, description of public outreach conducted by utility, and any other information requested by the PUC.

Requires a utility with hydrogen blending program to maintain information on its website regarding the program and on how a customer can communicate with the utility about the program. Requires a utility to provide notice to customers if, by June 30, 2030, the utility has a program for blending hydrogen with natural gas and has not provided notice as required in the Act.

FISCAL: *Minimal Fiscal Impact*

REVENUE: *No Revenue Impact*

SENATE VOTE: *Ayes, 20; Nays, 9*

ISSUES DISCUSSED:

- Public health and safety concerns of blending hydrogen with natural gas
- Current utility customer notice requirements
- Potential benefits and challenges to blending hydrogen with natural gas
- Variations between different “colors” of hydrogen

EFFECT OF AMENDMENT:

No amendment.

BACKGROUND:

Hydrogen can be produced using various fuels, including natural gas, nuclear power, biomass, and renewable energy sources like solar and wind. According to the Oregon Department of Energy's (ODOE) 2024 Oregon Biennial Energy Report (ODOE report), the vast majority of hydrogen production remains carbon intensive. According to the ODOE report, more than 99 percent of hydrogen is derived from fossil fuels, primarily through

steam methane reforming, and less than one percent is produced with low amounts of carbon emissions or none at all. Hydrogen produced through the use of renewable energy can be injected into natural gas pipelines, and the resulting blends can be used to generate heat and power with lower emissions than if natural gas alone was used.

In 2022, researchers at the National Renewable Energy Laboratory, Sandia National Laboratories, and Pacific Northwest National Laboratory co-authored a technical report—[Hydrogen Blending into Natural Gas Pipeline Infrastructure: Review of the State of Technology](#) (technical report). The technical report examined potential challenges related to hydrogen blending, including operational issues such as reduced energy transmission capacity due to hydrogen's lower energy density compared to natural gas.