

REVENUE: No revenue impact

FISCAL: No fiscal impact

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Action: Be Adopted  
Vote: 5 - 0 - 1 - 1  
Yeas: Beyer, Burley, Cannon, Jenson, Dingfelder  
Nays: 0  
Exc.: Macpherson  
Abs.: Smith G.  
Prepared By: Cat McGinnis, Administrator  
Meeting Dates: 3/19

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**WHAT THE MEASURE DOES:** Recommends that hydrogen be a top priority of any current or future renewable energy research, policy and programmatic initiatives by the State of Oregon and encourages creative partnerships with cities and counties, venture capitalists, energy entrepreneurs and organizations such as the Northwest Hydrogen Alliance.

**ISSUES DISCUSSED:**

- Status of hydrogen power nationally—how long until commercially viable
- Other policy initiatives of interest to hydrogen energy industry

**EFFECT OF COMMITTEE AMENDMENT:** No amendment.

**BACKGROUND:** Hydrogen, the most abundant element on earth, produces electricity when combined with oxygen in a process that creates no pollution and no by-products, except water vapor. The chemical bond between hydrogen and oxygen in water can be broken by an electric current to allow storage of hydrogen as a gas or liquid for use in powering a modified combustion turbine, fuel cell or internal combustion engine, generating pollution-free power on-demand. Challenges to development of hydrogen power applications include the cost of separating hydrogen from its chemical bonds and the cost of storing hydrogen. New hydropower technology uses hydrogen-rich ammonia as a fuel source. Ammonia is easier to store and transport than hydrogen gas and can be produced from renewable wind and hydropower sources. The Northwest Hydrogen Alliance is a non-profit organization, founded in 2003 and chaired by Jack Robertson, former deputy and acting chief executive officer of the Bonneville Power Administration. The mission of the Northwest Hydrogen Alliance is to expand the hydrogen economy in the Pacific Northwest and Alaska.