



February 16, 2023

Senate Committee on Energy and Environment
Oregon State Capitol
900 Court St. NE
Salem Oregon 97301

Re: SB 124 - neutral requesting amendments

Dear Chair Sollman, Vice-Chair Findley, and Members of the Committee,

Climate Solutions is a regional non-profit working to accelerate clean energy solutions to the climate crisis. **We are testifying as neutral because we conditionally support SB 124 if it can be amended in some ways that we believe are necessary.**

We agree with the aim of the bill. It is important for Oregon to begin to shift away from the use of diesel fuel for back-up generation. However, there are some common-sense protections needed to ensure this bill supports continued use of renewable hydrogen after the initial subsidies are received. With changes, we would support the bill concept to incentivize the shift from diesel backup generation to green electrolytic hydrogen backup generation.

Background context: Renewable hydrogen, specifically green electrolytic hydrogen, will play an important and increasing role in sectors of Oregon's economy that are hard-to-decarbonize over the coming decades. The climate crisis requires an all-hands-on-deck effort. It means every sector of the economy will need to adopt cleaner technologies & be more resilient to the impacts of climate change. We need to act with urgency to figure out how and where new emerging technologies like green electrolytic hydrogen can be deployed to best help us achieve our climate and economic goals while respecting serious environmental justice and community considerations. Oregon has the opportunity now at the outset to get it right and support the burgeoning production and deployment of green electrolytic hydrogen into our economy where we need it most.

Large-scale federal dollars will soon become available to help our state grow its renewable hydrogen sector. The new production tax credits in the Inflation Reduction Act of 2022, among other federal boosts like the hydrogen hubs, are frankly game changers for making green electrolytic hydrogen a cost-effective technology solution that is now on the near-term horizon. However, in preparing for this emerging clean energy sector, it is imperative that Oregon focus on truly zero-carbon hydrogen and channel its use toward the sectors of our economy hardest to electrify and decarbonize. This focus matters for the climate, equitable community outcomes, and regionally-aligned strategic decarbonization efforts.



Like most climate policy, there is some nuance required to maximize the benefits and minimize potential harms. To this end, from a climate and equity perspective, the two factors that matter most when it comes to deploying hydrogen are:

1. how it is made (i.e., produced), and
2. how it is used (i.e., what applications).

The following requested amendments would help ensure renewable hydrogen and/or green electrolytic hydrogen are used in planning and projects.

Consistent definitions and terms:

First, we ask that the definitions of “green electrolytic hydrogen” and “renewable hydrogen” match the definition agreed upon between Climate Solutions, Renewable Hydrogen Alliance, Sustainable NW and others in an amendment to HB 2530, which has recently been heard in the House Committee on Climate, Energy and Environment. HB 2530 focused on how these forms of hydrogen are produced. As always, it is important to be consistent in definitions, and the definitions agreed to help bring regional alignment and clarity about how Oregon defines these forms of hydrogen. We believe RHA intends to make this change in this legislation, which is appreciated. Please see my testimony about these definitions in HB 2530 for more context.¹

Second, we ask that Section 3 be amended to replace “hydrogen production” with “green electrolytic and renewable hydrogen production.” In our view, the Oregon Department of Energy (ODOE) should focus on those forms of hydrogen production for its planning goals. To meet Oregon’s climate goals, it is imperative that Oregon not include hydrogen derived from fossil fuels in its planning for the clean energy economy. The unfortunate reality is that over 95% of the hydrogen produced in the US every year currently derives from fossil fuels. That dynamic needs to rapidly shift to hydrogen derived from renewable energy and green electrolytic hydrogen.

Confirming continued use of renewable hydrogen in subsidized fuel cells:

Third, we ask that any recipients of grants under this bill be required to demonstrate that they continue to use only green electrolytic or renewable hydrogen in the fuel cells. The bill defines the backup generator as "a backup electrical system that uses renewable hydrogen to generate electric power" but there is nothing in the bill to prevent a user from installing the backup system with incentives and then using hydrogen derived from fossil fuels (or potentially other fossil fuels). Once a fuel cell is paid for and installed, its owner could simply resort to the least-cost hydrogen available on the market, which, as noted, currently derives from fossil fuels. Similar report back provisions are found in other state programs, like DEQ’s program that funds electric and hydrogen vehicles with VW funds.

¹ Meredith Connolly, Climate Solutions testimony submitted for HB 2530 (2/6/2023): <https://olis.oregonlegislature.gov/liz/2023R1/Downloads/PublicTestimonyDocument/45197>



To avoid that outcome, we ask that the bill be amended to require that a grant recipient must file an annual report to ODOE for at least five years after receipt of the grant funding, attesting to the fact that the grant recipient continues to only use green electrolytic or renewable hydrogen to power its backup fuel cells. In the event of failure to do so, ODOE should have the authority to claw back the grant funds.

Conditioned on the proposed amendments detailed above, Climate Solutions supports SB 124. Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Meredith Connolly". The signature is fluid and cursive, with a large initial "M" and a long, sweeping underline.

Meredith Connolly
Oregon State Director