By Representative Ramel

## SSB 5910 - H COMM AMD By Committee on Environment & Energy

1 Strike everything after the enacting clause and insert the 2 following:

- 3 "NEW SECTION. Sec. 1. INTENT AND FINDINGS. (1) The legislature finds that while hydrogen fuel has been used in a variety of 4 applications in the state, the source of hydrogen has been derived 5 6 from fossil fuel feedstocks, such as natural gas. Hydrogen is an essential building block and energy carrier molecule that 7 necessary in the production of conventional and renewable fuels and a 8 valuable decarbonization tool when used in sectors such as marine, 9 aluminum, and cement, 10 steel, as well as 11 transportation including light to heavy-duty vehicles, such 12 transit, trucking, and drayage equipment. Hydrogen can be a carbon-13 free fuel with an energy per unit mass that is three to four times 14 greater than jet fuel, whose energy can be extracted either through 15 thermochemical (combustion) or electrochemical (fuel cell) processes. 16 In both cases, the only by-product is water, instead of the 17 greenhouse gases and other conventional and toxic pollutants that are 18 emitted from using fossil fuels.
  - (2) The legislature further finds that the use of renewable hydrogen and hydrogen produced from carbon-free feedstocks through electrolysis is an essential tool to a clean energy ecosystem and emissions reduction for challenging infrastructure needs. Clean hydrogen fuel can be produced or "charged" closer to the generation of the electricity when the electrical supply grid has surplus energy, at times of low electricity use, such as evenings, then made available at times of higher need and convenient locations, such as fueling stations, avoiding the need to build or upgrade larger electrical infrastructure, including distribution systems, to meet higher peak demand for electricity.
  - (3) Therefore, the legislature intends by this act to establish policies and a framework for the state to become a national and

19

2021

22

23

2425

26

27

2829

30

- 1 global leader in the production and use of these hydrogen fuels. This
- 2 act will create an office of renewable fuels to: Promote partnerships
- 3 among industrial, transportation, agriculture, and commercial
- 4 interests as well as fuel producers, the technology research sector,
- 5 and public sector agencies; identify barriers to and opportunities
- 6 for market development; provide greater clarity and certainty in
- 7 regulatory and siting standards; provide incentives and financial
- 8 assistance in the deployment of hydrogen fuel infrastructure; support
- 9 a clean and just energy transition; help create good quality, clean
- 10 energy jobs; and improve air quality in degraded areas, particularly
- 11 in communities that have borne disproportionate levels of air
- 12 pollution from the combustion of fossil fuels.

13 Part 1

## 14 OFFICE OF RENEWABLE FUELS

- NEW SECTION. Sec. 101. A new section is added to chapter 43.330
- 16 RCW to read as follows:
- The definitions in this section apply throughout sections 102,
- 18 103, and 104 of this act unless the context clearly requires
- 19 otherwise.
- 20 (1) "Department" means the department of commerce.
- 21 (2) "Green electrolytic hydrogen" means hydrogen produced through
- 22 electrolysis and does not include hydrogen manufactured using steam
- 23 reforming or any other conversion technology that produces hydrogen
- 24 from a fossil fuel feedstock.
- 25 (3) "Office" means the statewide office of renewable fuels
- 26 established in section 102 of this act.
- 27 (4) "Overburdened communities" has the same meaning as defined in
- 28 RCW 70A.02.010.
- 29 (5) "Renewable fuel" means fuel produced using renewable
- 30 resources and includes renewable hydrogen.
- 31 (6) "Renewable hydrogen" has the same meaning as defined in RCW
- 32 54.04.190.
- 33 (7) "Renewable resource" has the same meaning as defined in RCW
- 34 19.405.020.
- 35 <u>NEW SECTION.</u> **Sec. 102.** A new section is added to chapter 43.330
- 36 RCW to read as follows:

- 1 (1) The statewide office of renewable fuels is established within 2 the department. The office shall report to the director of the 3 department. The office may employ staff as necessary to carry out the 4 office's duties as prescribed by this act, subject to the 5 availability of amounts appropriated for this specific purpose.
  - (2) The purpose of the office is to leverage, support, and integrate with other state agencies to:
  - (a) Accelerate comprehensive market development with assistance along the entire life cycle of renewable fuel projects;
  - (b) Support research into and development and deployment of renewable fuel and the production, distribution, and use of renewable and green electrolytic hydrogen and their derivatives, as well as product engineering and manufacturing relating to the production and use of such hydrogen and its derivatives;
- 15 (c) Drive job creation, improve economic vitality, and support 16 the transition to clean energy;
- 17 (d) Enhance resiliency by using renewable fuels and green 18 electrolytic hydrogen to support climate change mitigation and 19 adaptations; and
- 20 (e) Partner with overburdened communities to ensure communities 21 equitably benefit from renewable and clean fuels efforts.
- NEW SECTION. Sec. 103. A new section is added to chapter 43.330 RCW to read as follows:
  - (1) The office shall:

7

8

9

10

1112

1314

24

25

2627

28

2930

3132

- (a) Coordinate with federally recognized tribes, local government, state agencies, federal agencies, private entities, the state's public four-year institutions of higher education, labor unions, and others to facilitate and promote multi-institution collaborations to drive research, development, and deployment efforts in the production, distribution, and use of renewable fuels including, but not limited to, green electrolytic hydrogen;
- (b) Review existing renewable fuels and green electrolytic hydrogen initiatives, policies, and public and private investments;
- 34 (c) Consider funding opportunities that provide for the 35 coordination of public and private funds for the purposes of 36 developing and deploying renewable fuels and green electrolytic 37 hydrogen;

- 1 (d) Assess opportunities for and barriers to deployment of 2 renewable fuels and green electrolytic hydrogen in hard to 3 decarbonize sectors of the state economy;
  - (e) Request recommendations from the Washington state association of fire marshals regarding fire and other safety standards adopted by the United States department of energy and recognized national and international fire and safety code development authorities regarding renewable fuels and green electrolytic hydrogen;
  - (f) By December 1, 2023, develop a plan and recommendations for consideration by the legislature and governor on renewable fuels and green electrolytic hydrogen policy and public funding including, but not limited to, project permitting, state procurement, and pilot projects; and
  - (g) Encourage new and support existing public-private partnerships to increase coordinated planning and deployment of renewable fuels and green electrolytic hydrogen.
  - (2) The office may take all appropriate steps to seek and apply for federal funds for which the office is eligible, and other grants, and accept donations, and must deposit these funds in the renewable fuels accelerator account created in section 104 of this act.
  - (3) In carrying out its duties, the office must collaborate with the department, the department of ecology, the department of transportation, the utilities and transportation commission, electric utilities in Washington state, the Washington State University extension energy program, and all other relevant state agencies. The office must also consult with and seek to involve federally recognized tribes, project developers, labor and industry trade groups, and other interested parties, in the development of policy analysis and recommended programs or projects.
- 30 (4) The office may cooperate with other state agencies in 31 compiling data regarding the use of renewable fuels and green 32 electrolytic hydrogen in state operations, including motor vehicle 33 fleets, the state ferry system, and nonroad equipment.
- NEW SECTION. Sec. 104. A new section is added to chapter 43.330 RCW to read as follows:
- The renewable fuels accelerator account is created in the state treasury. Revenues to the account consist of appropriations made by the legislature, federal funds, gifts or grants from the private sector or foundations, and other sources deposited in the account.

5

7

8

9

10

1112

1314

1516

17

18

19

2021

22

23

2425

26

27

- 1 Moneys in the account may be spent only after appropriation.
- 2 Expenditures from the account may be used only for purposes
- 3 designated in sections 102, 103, and 201 of this act. Only the
- 4 director or the director's designee may authorize expenditures from
- 5 the account.

2526

27

28

31

3233

6 Part 2

## FEDERAL FUNDING

- Sec. 201. (1)(a) The legislature finds that the 8 NEW SECTION. 9 federal infrastructure investment and jobs act, P.L. 117-58, provides \$8,000,000,000 over five years to support the development of regional 10 clean hydrogen hubs. The federal infrastructure investment and jobs 11 12 act requires the United States secretary of energy to establish a program to fund at least four regional hubs to aid in achieving a 13 14 hydrogen fuel production carbon intensity standard provided in that 15 legislation; to demonstrate the production, processing, delivery, 16 storage, and end use of hydrogen; and that can be developed into a 17 national network to facilitate a clean hydrogen economy. The federal infrastructure investment and jobs act requires the secretary of 18 19 energy to select regional hubs that demonstrate a diversity of feedstocks, a diversity of end uses, and a diversity of geographic 20 regions of the country. The federal infrastructure investment and 21 jobs act requires the secretary of energy to solicit proposals for 22 23 regional hubs by May 15, 2022, and to make selections of the hubs 24 within one year after the deadline for submission of proposals.
  - (b) The legislature further finds that Washington state is strongly positioned to develop a regional clean energy hub meeting the criteria of the federal infrastructure investment and jobs act because the state:
- 29 (i) Has adopted a state energy strategy that recognizes hydrogen 30 as an integral part of the state's decarbonization pathway;
  - (ii) Has an abundance of low cost, low carbon, reliable electricity as the primary energy resource for production of clean hydrogen;
- (iii) Already has under construction the nation's first renewable hydrogen electrolyzer and has several hydrogen fueling facilities as well as production facilities in planning and design phases;

- 1 (iv) Has multiple manufacturers designing, engineering, and 2 manufacturing fuel cell electric engines and zero-emission vehicles, 3 vessels, and airplanes;
  - (v) Has numerous industrial, maritime, and freight shipping concerns that are moving toward cleaner fuels and that would help provide demand for hydrogen, as well as state and local governments currently considering hydrogen uses;
  - (vi) Has a demonstrated track record of building partnerships across the public and private sector to advance clean energy technologies;
  - (vii) Has policies in place supporting and engaging overburdened communities, including the healthy environment for all act, which will facilitate alignment with the justice 40 initiative; and
  - (viii) Has policies, including tax incentives, that support high labor standards in clean energy production.
    - (c) The legislature further finds that the state may help to promote and strengthen applications for regional hydrogen hub federal funding through state funding assistance to support a timely and competitive application to the United States department of energy by a public-private partnership entity that leverages private sector leadership and is composed of multiple interests, including public and private project developers, manufacturers and end users, research institutions, academia, government, and communities around the state.
    - (2) Subject to amounts appropriated for this specific purpose, the director of the department of commerce must provide support to a public-private partnership entity as described in subsection (1)(c) of this section, which may include department staff support and direct funding. The entity should:
    - (a) Agree to prepare a timely and responsive application for federal funding to develop a regional clean hydrogen hub in Washington state, consistent with the requirements of the federal application process and the policies and strategy of the state of Washington;
    - (b) Demonstrate meaningful engagement with a range of entities across the state, including federally recognized tribes, labor unions, and communities around the state including overburdened communities, in the development of a hydrogen hub;
- 38 (c) Include entities that provide training and expand employment 39 opportunities for the hydrogen workforce, including labor

- organizations, institutions of higher education, community and technical colleges, and vocational institutions; and
- (d) Include specific commitments, as required by the federal application, from industries, transportation agencies, utilities, and other public and private sector entities to assist in funding the application and to develop plans to either construct infrastructure for or to incorporate, or both, the production, distribution, and end use of renewable hydrogen and green electrolytic hydrogen fuels into their transition to cleaner energy.
- 10 (3) In addition to the assistance in applying for federal funding 11 provided through subsection (2) of this section, the legislature 12 intends that the state fully support a regional clean energy hub in 13 the state, including further direct financial assistance in 14 developing the hub and the acquisition of hydrogen fuels for state 15 agency and local government uses.

16 Part 3

1

2

3

4

5

7

8

9

17

18

19

2021

22

24

2526

27

2829

## UTILITIES AND TRANSPORTATION COMMISSION REPORT

- NEW SECTION. Sec. 301. (1) By December 1, 2024, the utilities and transportation commission must submit to the appropriate committees of the senate and house of representatives a report addressing the following regarding advancing the production and use of hydrogen by private companies as an energy storage resource or fuel in the state:
  - (a) Whether the rates and services of hydrogen fuels distributed through natural gas distribution infrastructure is within the regulation of the utilities and transportation commission, or whether such jurisdiction should be assigned by the legislature as such regulation is provided for other public service companies, such as natural gas companies;
- 30 (b) Whether electric utilities regulated by the commission should 31 analyze the costs and benefits of adopting special tariffs for the 32 production of green electrolytic hydrogen and renewable hydrogen 33 fuels;
- 34 (c) Recommended standards, including safety standards, for 35 blending of nonfossil feedstock hydrogen into natural gas 36 distribution infrastructure; and
- 37 (d) The role that nonfossil feedstock hydrogen may serve as the 38 state reduces greenhouse gas emissions from fossil natural gas, Code Rev/ML:lel 7 H-2834.2/22 2nd draft

- 1 including findings and recommendations included in the commission's
- 2 decarbonization inquiry required under section 143, chapter 334, Laws
- 3 of 2021.

(2) This section expires June 30, 2025.

5 Part 4

6 MISCELLANEOUS

- NEW SECTION. Sec. 401. Sections 104 and 201 of this act are necessary for the immediate preservation of the public peace, health, or safety, or support of the state government and its existing public
- 10 institutions, and take effect immediately.
- 11 <u>NEW SECTION.</u> **Sec. 402.** If any provision of this act or its
- 12 application to any person or circumstance is held invalid, the
- 13 remainder of the act or the application of the provision to other
- 14 persons or circumstances is not affected."
- 15 Correct the title.

EFFECT: Changes the use of the term "electrolytic hydrogen" to instead refer to "green electrolytic hydrogen."

States that one of the purposes of the Office of Renewable Fuels is to support research into and development and deployment of renewable fuel and the production, distribution, and use of renewable and green electrolytic hydrogen and their derivatives, as well as product engineering and manufacturing relating to the production and use of such hydrogen and its derivatives.

Adds federally recognized tribes and labor unions to the list of entities with whom the Office of Renewable Fuels is directed to coordinate.

Provides additional detail for the reasons the Legislature states its finding in the bill that Washington is positioned to develop a regional clean energy hub.

States the Legislature's finding that the state may help to promote and strengthen applications for regional hydrogen hub federal funding through state funding assistance to support a timely and competitive application to the United States Department of Energy by a public-private partnership entity that leverages private sector leadership and is composed of multiple interests, including public and private project developers, manufacturers and end users, research institutions, academia, government, and communities around the state.

Provides additional criteria for an entity to receive funding from the Department of Commerce for the purpose of preparing an application for regional hydrogen hub funding from the Department of Energy, including that the entity should, among other things, include specific commitments, as required by the federal application, from industries, transportation agencies, utilities, and other public and private sector entities to assist in funding the application and to develop plans to construct infrastructure for, or to incorporate, or

both, the production, distribution, and end use of hydrogen fuels into their transition to cleaner energy.

Removes a section that would have amended the scope of projects eligible for review and certification from the Energy Facility Site Evaluation Council.

Removes a section that would have authorized municipal utilities to produce, use, sell, and distribute renewable hydrogen and green electrolytic hydrogen.

Removes a section that would have authorized public utility districts to produce, use, sell, and distribute green electrolytic hydrogen.

--- END ---