

SSB 5910 - H COMM AMD

By Committee on Environment & Energy

NOT ADOPTED 03/07/2022

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

3 "NEW SECTION. **Sec. 1.** INTENT AND FINDINGS. (1) The legislature
4 finds that while hydrogen fuel has been used in a variety of
5 applications in the state, the source of hydrogen has been derived
6 from fossil fuel feedstocks, such as natural gas. Hydrogen is an
7 essential building block and energy carrier molecule that is
8 necessary in the production of conventional and renewable fuels and a
9 valuable decarbonization tool when used in sectors such as marine,
10 aviation, steel, aluminum, and cement, as well as surface
11 transportation including light to heavy-duty vehicles, such as
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.

19 (2) The legislature further finds that the use of renewable
20 hydrogen and hydrogen produced from carbon-free feedstocks through
21 electrolysis is an essential tool to a clean energy ecosystem and
22 emissions reduction for challenging infrastructure needs. Clean
23 hydrogen fuel can be produced or "charged" closer to the generation
24 of the electricity when the electrical supply grid has surplus
25 energy, at times of low electricity use, such as evenings, then made
26 available at times of higher need and convenient locations, such as
27 fueling stations, avoiding the need to build or upgrade larger
28 electrical infrastructure, including distribution systems, to meet
29 higher peak demand for electricity.

30 (3) Therefore, the legislature intends by this act to establish
31 policies and a framework for the state to become a national and

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**

15 NEW SECTION. **Sec. 101.** A new section is added to chapter 43.330
16 RCW to read as follows:

17 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 NEW SECTION. **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.

6 (2) The purpose of the office is to leverage, support, and
7 integrate with other state agencies to:

8 (a) Accelerate comprehensive market development with assistance
9 along the entire life cycle of renewable fuel projects;

10 (b) Support research into and development and deployment of
11 renewable fuel and the production, distribution, and use of renewable
12 and green electrolytic hydrogen and their derivatives, as well as
13 product engineering and manufacturing relating to the production and
14 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.

22 NEW SECTION. **Sec. 103.** A new section is added to chapter 43.330
23 RCW to read as follows:

24 (1) The office shall:

25 (a) Coordinate with federally recognized tribes, local
26 government, state agencies, federal agencies, private entities, the
27 state's public four-year institutions of higher education, labor
28 unions, and others to facilitate and promote multi-institution
29 collaborations to drive research, development, and deployment efforts
30 in the production, distribution, and use of renewable fuels
31 including, but not limited to, green electrolytic hydrogen;

32 (b) Review existing renewable fuels and green electrolytic
33 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;

4 (e) Request recommendations from the Washington state association
5 of fire marshals regarding fire and other safety standards adopted by
6 the United States department of energy and recognized national and
7 international fire and safety code development authorities regarding
8 renewable fuels and green electrolytic hydrogen;

9 (f) By December 1, 2023, develop a plan and recommendations for
10 consideration by the legislature and governor on renewable fuels and
11 green electrolytic hydrogen policy and public funding including, but
12 not limited to, project permitting, state procurement, and pilot
13 projects; and

14 (g) Encourage new and support existing public-private
15 partnerships to increase coordinated planning and deployment of
16 renewable fuels and green electrolytic hydrogen.

17 (2) The office may take all appropriate steps to seek and apply
18 for federal funds for which the office is eligible, and other grants,
19 and accept donations, and must deposit these funds in the renewable
20 fuels accelerator account created in section 104 of this act.

21 (3) In carrying out its duties, the office must collaborate with
22 the department, the department of ecology, the department of
23 transportation, the utilities and transportation commission, electric
24 utilities in Washington state, the Washington State University
25 extension energy program, and all other relevant state agencies. The
26 office must also consult with and seek to involve federally
27 recognized tribes, project developers, labor and industry trade
28 groups, and other interested parties, in the development of policy
29 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.

34 NEW SECTION. **Sec. 104.** A new section is added to chapter 43.330
35 RCW to read as follows:

36 The renewable fuels accelerator account is created in the state
37 treasury. Revenues to the account consist of appropriations made by
38 the legislature, federal funds, gifts or grants from the private
39 sector or foundations, and other sources deposited in the account.

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.

6 **Part 2**

7 **FEDERAL FUNDING**

8 NEW SECTION. **Sec. 201.** (1)(a) The legislature finds that the
9 federal infrastructure investment and jobs act, P.L. 117-58, provides
10 \$8,000,000,000 over five years to support the development of regional
11 clean hydrogen hubs. The federal infrastructure investment and jobs
12 act requires the United States secretary of energy to establish a
13 program to fund at least four regional hubs to aid in achieving a
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
18 infrastructure investment and jobs act requires the secretary of
19 energy to select regional hubs that demonstrate a diversity of
20 feedstocks, a diversity of end uses, and a diversity of geographic
21 regions of the country. The federal infrastructure investment and
22 jobs act requires the secretary of energy to solicit proposals for
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.

25 (b) The legislature further finds that Washington state is
26 strongly positioned to develop a regional clean energy hub meeting
27 the criteria of the federal infrastructure investment and jobs act
28 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;

31 (ii) Has an abundance of low cost, low carbon, reliable
32 electricity as the primary energy resource for production of clean
33 hydrogen;

34 (iii) Already has under construction the nation's first renewable
35 hydrogen electrolyzer and has several hydrogen fueling facilities as
36 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;

4 (v) Has numerous industrial, maritime, and freight shipping
5 concerns that are moving toward cleaner fuels and that would help
6 provide demand for hydrogen, as well as state and local governments
7 currently considering hydrogen uses;

8 (vi) Has a demonstrated track record of building partnerships
9 across the public and private sector to advance clean energy
10 technologies;

11 (vii) Has policies in place supporting and engaging overburdened
12 communities, including the healthy environment for all act, which
13 will facilitate alignment with the justice40 initiative; and

14 (viii) Has policies, including tax incentives, that support high
15 labor standards in clean energy production.

16 (c) The legislature further finds that the state may help to
17 promote and strengthen applications for regional hydrogen hub federal
18 funding through state funding assistance to support a timely and
19 competitive application to the United States department of energy by
20 a public-private partnership entity that leverages private sector
21 leadership and is composed of multiple interests, including public
22 and private project developers, manufacturers and end users, research
23 institutions, academia, government, and communities around the state.

24 (2) Subject to amounts appropriated for this specific purpose,
25 the director of the department of commerce must provide support to a
26 public-private partnership entity as described in subsection (1)(c)
27 of this section, which may include department staff support and
28 direct funding. The entity should:

29 (a) Agree to prepare a timely and responsive application for
30 federal funding to develop a regional clean hydrogen hub in
31 Washington state, consistent with the requirements of the federal
32 application process and the policies and strategy of the state of
33 Washington;

34 (b) Demonstrate meaningful engagement with a range of entities
35 across the state, including federally recognized tribes, labor
36 unions, and communities around the state including overburdened
37 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

1 organizations, institutions of higher education, community and
2 technical colleges, and vocational institutions; and

3 (d) Include specific commitments, as required by the federal
4 application, from industries, transportation agencies, utilities, and
5 other public and private sector entities to assist in funding the
6 application and to develop plans to either construct infrastructure
7 for or to incorporate, or both, the production, distribution, and end
8 use of renewable hydrogen and green electrolytic hydrogen fuels into
9 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

17 UTILITIES AND TRANSPORTATION COMMISSION REPORT

18 NEW SECTION. **Sec. 301.** (1) By December 1, 2024, the utilities
19 and transportation commission must submit to the appropriate
20 committees of the senate and house of representatives a report
21 addressing the following regarding advancing the production and use
22 of hydrogen by private companies as an energy storage resource or
23 fuel in the state:

24 (a) Whether the rates and services of hydrogen fuels distributed
25 through natural gas distribution infrastructure is within the
26 regulation of the utilities and transportation commission, or whether
27 such jurisdiction should be assigned by the legislature as such
28 regulation is provided for other public service companies, such as
29 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,

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

4 (2) This section expires June 30, 2025.

5 **Part 4**

6 **MISCELLANEOUS**

7 NEW SECTION. **Sec. 401.** Sections 104 and 201 of this act are
8 necessary for the immediate preservation of the public peace, health,
9 or safety, or support of the state government and its existing public
10 institutions, and take effect immediately.

11 NEW SECTION. **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.

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