

SB 167-FN-LOCAL - AS AMENDED BY THE SENATE

02/09/2023 0407s

2023 SESSION

23-1050

10/05

SENATE BILL ***167-FN-LOCAL***

AN ACT relative to green hydrogen energy and infrastructure.

SPONSORS: Sen. Watters, Dist 4; Sen. Perkins Kwoka, Dist 21; Sen. Soucy, Dist 18; Sen. Fenton, Dist 10; Sen. Rosenwald, Dist 13; Sen. Altschiller, Dist 24; Rep. McGhee, Hills. 35

COMMITTEE: Energy and Natural Resources

ANALYSIS

This bill adds green hydrogen facilities and infrastructure to renewable electric generation which provides fuel diversity, establishes green hydrogen business tax and property tax reduction programs, and establishes a green hydrogen advisory committee established in the department of energy.

Explanation: Matter added to current law appears in ***bold italics***.
Matter removed from current law appears ~~[in brackets and struckthrough.]~~
Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Twenty Three

AN ACT relative to green hydrogen energy and infrastructure.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 1 Legislative Findings.

2 I. The use of hydrogen derived from a clean energy resource, or green hydrogen, has the
3 potential to be a zero- or very low-carbon source of energy for use in a variety of sectors, including
4 high-heat industrial applications, zero-carbon electricity generation, and the gas distribution system.
5 Green hydrogen will contribute to clean energy jobs in the solar energy, wind energy, energy
6 efficiency, energy storage, electric vehicle industries, and other renewable energy industries.

7 II. Green hydrogen has the potential to serve as a storage fuel, especially for offshore wind
8 energy, to increase reliability in electricity generation, and to promote the transition of other forms
9 of power generation to a zero-or very low-carbon source of energy. Green hydrogen can play a
10 substantial role as a transportation fuel and as an industrial fuel.

11 III. Green hydrogen infrastructure will enable New Hampshire businesses to develop
12 generation and manufacturing facilities and take advantage of federal funding and investments from
13 the offshore wind industry.

14 2 New Paragraphs; The Preservation and Use of Renewable Generation to Provide Fuel
15 Diversity; Definitions Added. Amend RSA 362-H:1 by inserting after paragraph VI the following
16 new paragraphs:

17 VII. "Green hydrogen" means hydrogen derived from a clean energy resource that uses water as
18 the source of the hydrogen. For purposes of green hydrogen electricity generation and hydrogen
19 transmission, a green hydrogen project may include associated clean energy generation, including
20 regenerative fuel cells, transmission, and other infrastructure. "Green hydrogen" electricity
21 generation means a power plant technology in which an electrical generating unit creates electric
22 power exclusively from electrolytic hydrogen, in a manner that produces zero carbon and co-
23 pollutant emissions, using hydrogen fuel that is electrolyzed using a 100 percent zero carbon
24 emission energy source. The term does not include hydrogen produced using steam reforming or any
25 other conversion technology that produces hydrogen from fossil fuel feedstock.

26 VIII. "Green hydrogen facility" means any combination of a physically connected generator
27 or generators, associated prime movers, and other associated property, including appurtenant land
28 and improvements and personal property, that are normally operated together to produce 20 average
29 megawatts or more of electric power, in order to:

- 30 (a) Produce green hydrogen through electrolysis technology;

SB 167-FN-LOCAL - AS AMENDED BY THE SENATE

- Page 2 -

1 (b) Store or transport green hydrogen by means of a green hydrogen pipeline for the
2 transport or storage of green hydrogen or a green hydrogen storage system for the temporary storage
3 of green hydrogen in a vessel, pipeline, or geologic formation; or

4 (c) Convert green hydrogen back to electricity through a hydrogen-capable power
5 generation source.

6 IX. "Regenerative fuel cell" means a device that produces hydrogen and oxygen from
7 electricity and water and alternately produces electrical energy and water from stored hydrogen and
8 oxygen.

9 3 New Sections; Green Hydrogen Production and Infrastructure. Amend RSA 362-H by
10 inserting after section 2 the following new sections:

11 362-H:3 Green Hydrogen Production and Infrastructure.

12 I. The production of green hydrogen by a green hydrogen facility shall be eligible for a credit
13 against the business profits tax. A credit of not more than 10 percent of the qualifying costs or
14 \$500,000, whichever is the lesser value, for investments in green hydrogen facilities and
15 regenerative fuel cells brought into service after December 31, 2023, shall be applied against the
16 business profits tax under RSA 77-A for a taxable period ending on or after December 31, 2024. No
17 taxpayer may qualify for more than \$500,000 in any single taxable period. The aggregate total for
18 this tax credit is \$5,000,000. If the total of applicants exceeds the cap, the funds shall be allocated
19 proportionally.

20 II. The owner of a green hydrogen facility brought into service after December 31, 2023 shall
21 be eligible under RSA 72:74 for the property tax reduction provided as a payment in lieu of taxes as
22 a renewable generation facility, for a period of 5 years.

23 III. Green hydrogen energy and infrastructure projects with a capacity to generate over 20
24 MW of energy shall be evaluated and approved by the site evaluation committee under RSA 162-H,
25 which shall have authority over siting, transportation, and storage.

26 362-H:4 Advisory Committee Established. There is a green hydrogen advisory committee
27 established in the department of energy.

28 I. The advisory committee shall consist of:

29 (a) The commissioner of the department of energy, or designee.

30 (b) The commissioner of the department of business and economic affairs, or designee.

31 (c) The commissioner of the department of environmental services, or designee.

32 (d) The chair of the site evaluation committee.

33 (e) The chair of the public utilities commission, or designee.

34 (f) The chair of the New Hampshire port authority.

35 II. The advisory committee shall have the following duties:

36 (a) Examine the production of green hydrogen from any renewable energy source.

1 (b) Investigate and evaluate existing state and federal laws, regulations and funding
2 sources and recommend legislation related to the production, use, distribution and storage of green
3 hydrogen.

4 (c) Identify opportunities to integrate green hydrogen in the transportation, energy,
5 industrial, and other sectors.

6 (d) Identify barriers to the widespread development of hydrogen and recommend
7 government policies to catalyze the deployment of hydrogen in the state economy.

8 (e) Consider a plan to create, support, develop, or partner with a Hydrogen Hub in this
9 state, under federal funding provisions, and determine, how to maximize federal financial incentives
10 to support Hub development.

11 (f) Consider the construction of a dedicated hydrogen pipeline or network of pipelines to
12 serve users of hydrogen in this state, including power generation, transportation, manufacturing,
13 and energy storage facilities.

14 (g) Consider facilities that result in the blending of hydrogen into existing natural gas
15 transmission and distribution systems that serve residential, commercial, transportation, and
16 industrial uses, and consider policy recommendations for inclusion of hydrogen production from
17 fossil fuel feedstock.

18 (h) Streamline the permitting processes for hydrogen facilities and infrastructure,
19 including other carbon use applications and any other issues that the committee deems necessary.

20 (i) Examine cost-effective industrial rates for hydrogen production and flexible energy
21 generation configurations to maximize federal funding for hydrogen facilities, and serves the long-
22 term interests of ratepayers, and cost-effectively avoids or defers distribution system costs.

23 (j) Review the safety standards regarding the production, use, distribution and storage
24 of hydrogen by state agencies.

25 (k) Consider regenerative fuel cell generation by utilities or private entities that
26 provides distribution system benefits, including, but not limited to, avoiding or deferring distribution
27 capacity upgrades, and enhancing distribution system reliability, including, but not limited to,
28 voltage or frequency improvements.

29 III. The advisory committee shall report to the governor, the president of the senate, the
30 speaker of the house of representatives, the chair of senate energy and natural resources committee,
31 the chair of house science, technology, and energy committee on December 1 of each year on its
32 activities, findings, and recommendations.

33 4 New Paragraph; Division of Fire Safety; Green Hydrogen Facilities. Amend RSA 21-P:12 by
34 inserting after paragraph VIII the following new paragraph:

35 IX. Participation in an advisory capacity in state agency siting of green hydrogen facilities,
36 transportation, and storage, and in the permitting and coordination of state agency response to
37 accidents at facilities that produce more than 20 MW of electricity, and associated transportation

SB 167-FN-LOCAL - AS AMENDED BY THE SENATE

- Page 4 -

1 and storage involving green hydrogen as defined in RSA 362-H, and green hydrogen gas safety,
2 unless pipelines are regulated by the public utilities commission pursuant to RSA 362.

3 5 New Paragraph; Business Profits Tax; Credit for Green Hydrogen Infrastructure. Amend RSA
4 77-A:5 by inserting after paragraph XVI the following new paragraph:

5 XVII. The tax credit computed under RSA 362-H:3, I for green hydrogen production and
6 infrastructure.

7 6 Repeal; 2029; Business Profits Tax Credit. The following are repealed:

8 I. RSA 362-H:3, I, relative to the business profits tax credit for investments in green
9 hydrogen facilities and regenerative fuel cells.

10 II. RSA 77-A:5, XVII, relative to the use of the green hydrogen business profits tax credit.

11 7 Effective Date.

12 I. Section 6 of this act shall take effect January 1, 2029.

13 II. The remainder of this act shall take effect July 1, 2023.

SB 167-FN-LOCAL- FISCAL NOTE
AS AMENDED BY THE SENATE (AMENDMENT #2023-0407s)

AN ACT relative to green hydrogen energy and infrastructure.

FISCAL IMPACT: State County Local None

| STATE: | Estimated Increase / (Decrease) | | | |
|------------------------|---|---|----------------------------------|--------------------------------|
| | FY 2023 | FY 2024 | FY 2025 | FY 2026 |
| Appropriation | \$0 | \$0 | \$0 | \$0 |
| Revenue | \$0 | Indeterminable | Indeterminable | Indeterminable |
| Expenditures | \$0 | \$0 | \$0 | \$0 |
| Funding Source: | <input checked="" type="checkbox"/> General | <input checked="" type="checkbox"/> Education | <input type="checkbox"/> Highway | <input type="checkbox"/> Other |

LOCAL:

| | | | | |
|---------------------|-----|----------------|----------------|----------------|
| Revenue | \$0 | Indeterminable | Indeterminable | Indeterminable |
| Expenditures | \$0 | \$0 | \$0 | \$0 |

METHODOLOGY:

This bill adds green hydrogen facilities and infrastructure to renewable electric generation which provides fuel diversity, establishes green hydrogen business tax and property tax reduction programs, and establishes a green hydrogen advisory committee established in the Department of Energy.

The Department of Revenue Administration is unable to determine the fiscal impact of this proposed legislation because it does not have information on the number of green hydrogen facilities, green hydrogen pipelines, or hydrogen storage systems that would be built after June 30, 2023 or the qualifying costs for each. The Department provided the following assumptions concerning the impact of the bill on state revenues:

- There would be an indeterminable increase in Business Profits Tax (BPT) to the extent the proposed BPT credit attracts new or existing business organizations into the green hydrogen industry. The timing of the revenue increase would depend on when the business organization is profitable after June 30, 2023.
- Relative to business organizations qualifying for the BPT credit based on plans to acquire new regenerative fuel cell electricity generation that began operation on or after July 1, 2023, BPT revenue from such business organizations could also be reduced by the amount of credit claimed. Any impact would depend on when such regenerative fuel cell electricity generation come online and becomes profitable.

- Any increase to the BPT results in an increase to the General Fund and Education Trust Fund starting in FY 2024.
- The Department is unable to determine the fiscal impact of the bill on utility property tax revenue because it does not have information on the value of additional utility property that will be installed as a result of this bill. To the extent there are new utility properties installed, there would be an increase in utility property tax revenue and an associated increase to the Education Trust Fund starting in FY 2024.
- The provision to allow for five years of payments in lieu of taxes as a renewable generation facility, to the owner of a green hydrogen facility, a green hydrogen pipeline, or a green hydrogen storage system, would result in an indeterminable impact on municipal revenue.

The Department of Energy states this bill would have no fiscal impact on the Department. The Department assumes that the members of the advisory committee would be responsible for undertaking their duties, including writing the annual report, without regular support from staff from the Department of Energy.

AGENCIES CONTACTED:

Departments of Energy and Revenue Administration

REGULAR CALENDAR

April 18, 2023

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

The Majority of the Committee on Science, Technology and Energy to which was referred SB 167-FN-LOCAL,

AN ACT relative to green hydrogen energy and infrastructure. Having considered the same, report the same with the following resolution: RESOLVED, that it is INEXPEDIENT TO LEGISLATE.

Rep. Douglas Thomas

FOR THE MAJORITY OF THE COMMITTEE

MAJORITY COMMITTEE REPORT

| | |
|-------------------|--|
| Committee: | Science, Technology and Energy |
| Bill Number: | SB 167-FN-LOCAL |
| Title: | relative to green hydrogen energy and infrastructure. |
| Date: | April 18, 2023 |
| Consent Calendar: | REGULAR |
| Recommendation: | INEXPEDIENT TO LEGISLATE |

STATEMENT OF INTENT

The majority has no major issues with green hydrogen (hydrogen produced by using non-fossil fuels) and looks forward to its eventual addition to the fuel mix. However, some concerns on this bill were prevalent. This bill is believed to be premature since we have no green hydrogen hub or manufacturing in state that would facilitate its use or production, nor do we have any significant use of it currently. Thus, it seems to seek a solution looking for a problem. Additionally, it forms a study group to focus on potential areas not yet realized, but more importantly, authorizes consideration of certain taxes to be discussed as one way to accommodate presumptions of need. This is a major source of concern that could open the door to additional costs. Finally, there was some concern about the environmental effects of hydrogen leaking into the atmosphere, its effects not fully understood on the extent of harm it could cause. For a hydrogen energy market to emerge in our state, government needs to stay out of the way.

Vote 11-9.

Rep. Douglas Thomas
FOR THE MAJORITY

Original: House Clerk
Cc: Committee Bill File

REGULAR CALENDAR

Science, Technology and Energy

SB 167-FN-LOCAL, relative to green hydrogen energy and infrastructure. **MAJORITY: INEXPEDIENT TO LEGISLATE. MINORITY: OUGHT TO PASS.**

Rep. Douglas Thomas for the **Majority** of Science, Technology and Energy. The majority has no major issues with green hydrogen (hydrogen produced by using non-fossil fuels) and looks forward to its eventual addition to the fuel mix. However, some concerns on this bill were prevalent. This bill is believed to be premature since we have no green hydrogen hub or manufacturing in state that would facilitate its use or production, nor do we have any significant use of it currently. Thus, it seems to seek a solution looking for a problem. Additionally, it forms a study group to focus on potential areas not yet realized, but more importantly, authorizes consideration of certain taxes to be discussed as one way to accommodate presumptions of need. This is a major source of concern that could open the door to additional costs. Finally, there was some concern about the environmental effects of hydrogen leaking into the atmosphere, its effects not fully understood on the extent of harm it could cause. For a hydrogen energy market to emerge in our state, government needs to stay out of the way. **Vote 11-9.**

Original: House Clerk

Cc: Committee Bill File

REGULAR CALENDAR

April 18, 2023

HOUSE OF REPRESENTATIVES

REPORT OF COMMITTEE

The Minority of the Committee on Science, Technology and Energy to which was referred SB 167-FN-LOCAL,

AN ACT relative to green hydrogen energy and infrastructure. Having considered the same, and being unable to agree with the Majority, report with the recommendation that the bill OUGHT TO PASS.

Rep. Tony Caplan

FOR THE MINORITY OF THE COMMITTEE

**MINORITY
COMMITTEE REPORT**

| | |
|-------------------|--|
| Committee: | Science, Technology and Energy |
| Bill Number: | SB 167-FN-LOCAL |
| Title: | relative to green hydrogen energy and infrastructure. |
| Date: | April 18, 2023 |
| Consent Calendar: | REGULAR |
| Recommendation: | OUGHT TO PASS |

STATEMENT OF INTENT

This bill is intended to incentivize the construction and implementation of facilities for green hydrogen produced from zero-carbon energy, a strategic and crucial component of the energy mix for our state in coming years, especially important in energy intensive industries and in heavy transportation. Green hydrogen can also function as an effective way to store renewable wind and solar for instant and reliable grid-ready electricity. The bill would establish tax credits to enhance the state's competitive edge in attracting green hydrogen projects and federal money available for those projects. Given the strategic boost to the state's economy, the minority believe the tax credits available in the bill would be a sound investment in infrastructure and jobs. The bill would also establish an advisory committee to guide the establishment of hydrogen production in New Hampshire.

Rep. Tony Caplan
FOR THE MINORITY

Original: House Clerk
Cc: Committee Bill File

REGULAR CALENDAR

Science, Technology and Energy

SB 167-FN-LOCAL, relative to green hydrogen energy and infrastructure. **OUGHT TO PASS.**

Rep. Tony Caplan for the **Minority** of Science, Technology and Energy. This bill is intended to incentivize the construction and implementation of facilities for green hydrogen produced from zero-carbon energy, a strategic and crucial component of the energy mix for our state in coming years, especially important in energy intensive industries and in heavy transportation. Green hydrogen can also function as an effective way to store renewable wind and solar for instant and reliable grid-ready electricity. The bill would establish tax credits to enhance the state's competitive edge in attracting green hydrogen projects and federal money available for those projects. Given the strategic boost to the state's economy, the minority believe the tax credits available in the bill would be a sound investment in infrastructure and jobs. The bill would also establish an advisory committee to guide the establishment of hydrogen production in New Hampshire.

Original: House Clerk

Cc: Committee Bill File

HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

PUBLIC HEARING ON SB 167-FN-LOCAL

BILL TITLE: relative to green hydrogen energy and infrastructure.

DATE: April 10, 2023

LOB ROOM: 302-304 **Time Public Hearing Called to Order:** 1:35 p.m.

Time Adjourned: 2:33 p.m.

Committee Members: Reps. Vose, D. Thomas, Bernardy, Notter, Harrington, Merner, Lewicke, Berezhny, Ploszaj, Summers, McGhee, McWilliams, Chretien, Parshall, Caplan, Muns, Noel, W. Thomas, Cormen and Reynolds

Bill Sponsors:

Sen. Watters
Sen. Fenton
Rep. McGhee

Sen. Perkins Kwoka
Sen. Rosenwald

Sen. Soucy
Sen. Altschiller

TESTIMONY

* Use asterisk if written testimony and/or amendments are submitted.

Senator David Watters introduced

- Building this could be at a cost that is substantial.
- FN is not determined

Question - **Rep Corman** - on video re "green hydrogen"

Question - **Rep Doug Thomas** - Has a question about an amendment but it has not been introduced yet.

Question - **Rep Muns** - "Hydrogen concern"

Answer - **Senator Watters** - Describes what they are doing in Europe

Question - **Rep Doug Thomas** - Advisory group - One of the proposal asks for a pipeline for the hydrogen, isn't it flammable?

Question - **Rep Wendy Thomas** - Does the bill address energy from garbage?

Answer - No

Question - **Rep Lewicke** - Hydrolysis - Is the price going to drop for hydrogen production?

Question - **Rep Vose** - Tax credit. Why do we need NH BPT when we have Federal? Are you concerned about these becoming permanent?

Answer - Its up to the Legislation.

Rep McGhee

- Amendment 2023-1345 Amends RSA362-H:4, II
- Section 3 of the bill - Delete subparagraph and renumber. It would delete section that uses fossil fuels to produce the hydrogen.

Rep Caplan

- Amendment 1343h - Amend RSA362-H:2,VII and replace

Rep Vose

- Asked Senator Waters for his opinion on the two Amendments.

Rep Doug Thomas

- Asked about the politics in getting this going

Keen Meng Wong and Lauren Sullivan - Self

- Wants to add language to "on or after December 31, 2029" regarding BPT tax credit.

Griffin Roberge - DOE

- Neutral
- SB167 is a policy bill.
- Section 3 Advisory Committee Dept suggest a legislative study committee rather than an advisory committee.

***Joseph Kwamsmic** - Self

Question - **Rep Wendy Thomas** - Pipeline question - What does hydrogen leak look like

Answer - No smell

Rep Reynolds

- Questioned past opposition to pipelines

Rep Lewicke

- Hydrogen is less likely to explode than methane.

House Remote Testify

Science, Technology and Energy Committee Testify List for Bill SB167 on 2023-04-10

Support: 12 Oppose: 12 Neutral: 2 Total to Testify: 0

[Export to Excel](#)

| <u>Name</u> | <u>City, State</u> <u>Email Address</u> | <u>Title</u> | <u>Representing</u> | <u>Position</u> | <u>Testifying</u> | <u>Non-Germane</u> | <u>Signed Up</u> |
|------------------------|--|------------------------|----------------------------------|-----------------|-------------------|--------------------|-------------------|
| Rosenwald, Cindy | Nashua, NH cindy.rosenwald@leg.state.nh.us | An Elected Official | SD 13 | Support | No | No | 3/30/2023 1:02 PM |
| Smith, Julie | Nashua, NH cantdog@comcast.net | A Member of the Public | Myself | Oppose | No | No | 3/30/2023 1:47 PM |
| soucy, donna | manchester, NH donna.soucy@leg.state.nh.us | An Elected Official | SD 18 | Support | No | No | 4/4/2023 10:51 AM |
| Perkins Kwoka, Rebecca | Portsmouth, NH rebecca.perkinskwoka@leg.state.nh.us | An Elected Official | Myself | Support | No | No | 4/4/2023 1:21 PM |
| Pauer, Eric | Brookline, NH secretary@BrooklineGOP.org | A Member of the Public | Myself | Oppose | No | No | 4/4/2023 4:29 PM |
| Foss, Carol | Concord, NH cfoss@nhaudubon.org | A Lobbyist | New Hampshire Audubon | Support | No | No | 4/7/2023 10:01 AM |
| Richardson, Daniel | Nashua, NH daniel6_22@comcast.net | A Member of the Public | Myself | Oppose | No | No | 4/8/2023 2:29 PM |
| Liebowitz, Susan | Plainfield, NH supawali@hotmail.com | A Member of the Public | Myself | Support | No | No | 4/9/2023 11:38 AM |
| Kennedy, Stephen | HUDSON, NH stephen.kennedy@leg.state.nh.us | An Elected Official | Hudson, Hillsborough District 13 | Oppose | No | No | 4/9/2023 3:43 PM |
| Beauchain, Brenda | Fremont, NH bbfly728@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 4/9/2023 7:10 PM |
| Beauchain, Edward | Fremont, NH ed@forwater.com | A Member of the Public | Myself | Oppose | No | No | 4/9/2023 7:34 PM |
| Longley, Margaret | sandwich, NH peggylongley@sbcglobal.net | A Member of the Public | Myself | Support | No | No | 4/9/2023 8:34 PM |
| Longley, Mark | sandwich, NH peggylongley@sbcglobal.net | A Member of the Public | Myself | Oppose | No | No | 4/9/2023 8:37 PM |

| | | | | | | | |
|---------------------------------------|---|------------------------|----------------|---------|----|-----|--------------------|
| kwasnik, joseph | concord, NH jkwasnik25@gmail.com | A Member of the Public | Myself | Support | No | Yes | 4/9/2023 9:02 PM |
| Richman, Susan | Durham, NH susan7richman@gmail.com | A Member of the Public | Myself | Neutral | No | No | 4/9/2023 9:30 PM |
| berk, bruce | Pittsfield, NH bruce.berk.nh@gmail.com | A Member of the Public | Myself | Oppose | No | No | 4/9/2023 9:31 PM |
| Reardon, Donna | Concord, NH Bugs42953@gmail.com | A Member of the Public | Myself | Support | No | No | 4/9/2023 10:16 PM |
| Bushueff, Catherine | Sunapee, NH agawamdesigns@gmail.com | A Member of the Public | Myself | Oppose | No | No | 4/10/2023 7:08 AM |
| Russman, Rick | Kingston, NH richardrussman@gmail.com | An Elected Official | Myself | Support | No | No | 4/10/2023 8:00 AM |
| Perkins Kwoka, Senator Rebecca | Portsmouth, NH david.watters@leg.state.nh.us | An Elected Official | Myself | Support | No | No | 4/10/2023 8:12 AM |
| Beffa-Negrini, Patricia | Nelson, NH pbeffa@me.com | A Member of the Public | Myself | Support | No | No | 4/10/2023 9:46 AM |
| Robinson, Steven | Northwood, NH Nikkiandme@yahoo.com | A Member of the Public | Myself | Oppose | No | No | 4/10/2023 10:23 AM |
| Robinson, Karen | Northwood, NH KarenRobinson578@gmail.com | A Member of the Public | Myself | Oppose | No | No | 4/10/2023 10:38 AM |
| Altschiller, Senator Debra | SD24, NH kevin.condict@leg.state.nh.us | An Elected Official | Myself | Support | No | No | 4/10/2023 2:07 PM |
| Corkery NHSierraClub, Catherine | Concord, NH catherine.corkery@sierraclub.org | A Lobbyist | NH Sierra Club | Oppose | No | No | 4/10/2023 3:27 PM |
| Cote, Lois | Manchester, NH lcote06@outlook.com | A Member of the Public | Myself | Neutral | No | No | 4/10/2023 8:50 PM |

HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

SUBCOMMITTEE WORK SESSION on SB 167-FN-LOCAL

BILL TITLE: relative to green hydrogen energy and infrastructure.

DATE: April 17, 2023

Subcommittee Members: Reps. Vose, D. Thomas, Bernardy, Notter, Harrington, Merner, Lewicke, Berezny, Ploszaj, Summers, McGhee, McWilliams, Chretien, Parshall, Caplan, Muns, Noel, W. Thomas, Cormen and Reynolds

Comments and Recommendations: No significant opposition to amendment. No substantial support or opposition

Respectfully submitted,

Rep. JD Bernardy
Subcommittee Clerk

April 9, 2023

NH House of Representatives Science, Technology and Energy Committee

Submitted Testimony of Joseph Kwasnik regarding SB167-AN ACT relative to green hydrogen energy and infrastructure

Chairman Vose and Members of the House Science, Technology and Energy Committee

I am today submitting this testimony as a private citizen in SUPPORT of SB167 subject to Amendment.

I have worked in the area of energy and environment for over 40 years as the Vice President of Environment and Head of Climate Change for National Grid, 9 years on the Board of Directors of the New Hampshire Electric Cooperative with 3 years as Chairman and 5 years as a Senior Energy Advisor at CERES, Inc. in Boston. Currently, I am a member of the Management Committee of the NH Network for Climate, Energy and Environment.

I support this bill with amendment because:

1. This bill provides an excellent basis for adding green hydrogen facilities and infrastructure to enable renewable electric generation in New Hampshire
2. It provides a much needed definition of green hydrogen and its production from clean energy resources
3. Green hydrogen has the potential to serve as a storage fuel from offshore wind energy thus solving the intermittency issue of offshore wind, increase the reliability of electric generation and offer further conversion of green hydrogen to ammonia feedstocks which can be used for transportation and production of agricultural fertilizer.

My suggested amendment is to remove the following language from RSA 362-H:4 Advisory Committee:

Section II(g) Remove and do not replace the following language "...and consider policy recommendations for inclusion of hydrogen production from fossil fuel feedstock."

This recommendation is consistent with the intent of the bill to focus on green hydrogen energy and infrastructure and not on hydrogen production from fossil fuel feedstock. Hydrogen production from fossil fuel feedstock will result in increased carbon emissions during the production process and is a highly inefficient and uneconomic process.

Thank you for this opportunity to submit testimony on this bill.

Regards,

Joseph Kwasnik
54 Pleasant Street, Unit 8
Concord, NH 03301
Jkwasnik25@gmail.com

HOUSE COMMITTEE ON SCIENCE, TECHNOLOGY AND ENERGY

EXECUTIVE SESSION on SB 167-FN-LOCAL

BILL TITLE: relative to green hydrogen energy and infrastructure.

DATE: April 18, 2023

LOB ROOM: 302-304

MOTIONS: **INEXPEDIENT TO LEGISLATE**

Moved by Rep. D. Thomas

Seconded by Rep. Bernardy

Vote: 11-9

CONSENT CALENDAR: NO

Statement of Intent: Refer to Committee Report

Respectfully submitted,

Rep JD Bernardy, Clerk



1/31/2023 2:59:26 PM
Roll Call Committee Register
Report

2023 SESSION

Science, Technology and Energy

Bill #: SB 167 Motion: ITL AM #: _____ Exec Session Date: 18 Apr 2023

| <u>Members</u> | <u>YEAS</u> | <u>Nays</u> | <u>NV</u> |
|----------------------------------|-------------|-------------|-----------|
| Vose, Michael Chairman | X | | |
| Thomas, Douglas W. Vice Chairman | X | | |
| Notter, Jeanine M. | X | | |
| Harrington, Michael D. | X | | |
| Merner, Troy E. | X | | |
| Lewicke, John | X | | |
| Berezhny, Lex | X | | |
| Bernardy, JD Clerk | X | | |
| Ploszaj, Tom | X | | |
| Summers, James | X | | |
| McGhee, Kat | | X | |
| McWilliams, Rebecca J. | | X | |
| Chretien, Jacqueline H. | | X | |
| Parshall, Lucius | X | | |
| Caplan, Tony | | X | |
| Muns, Chris | | X | |
| Noël, Henry W. | | X | |
| Thomas, Wendy E.N. | | X | |
| Cormen, Thomas H | | X | |
| Raynolds, Ned | | X | |
| TOTAL VOTE: | 11 | 9 | |