



Analysis of Original Bill

Author: Rodriguez, et al.

Sponsor:

Bill Number: AB 1312

Related Bills: See Legislative
History

Introduced: February 19, 2021

SUBJECT

Green Hydrogen Production Facility and Distribution Credit and Hydrogen Infrastructure Credit

SUMMARY

This bill would do the following:

Provision No.1: Credit for Green Hydrogen Production Facilities and Distributions

This provision, under the Personal Income Tax Law (PITL) and the Corporation Tax Law (CTL), would authorize a ten year declining tax credit for green hydrogen production facilities and distribution.

Provision No.2: Credit for Hydrogen Infrastructure Creation

This provision, under the PITL and the CTL, would authorize a ten year declining tax credit for hydrogen infrastructure creation.

This analysis only addresses the provisions of the bill that impact the department's programs and operations.

RECOMMENDATION

No position

REASON FOR THE BILL

The author's reasons for this bill are to make hydrogen mobility self-sufficient by 2030 as well as to meet the goals set by Governor Newsom's Executive Order N-79-20 to reduce the emissions of greenhouse gases by requiring all new passenger vehicle sales to be zero emission by 2035 and all new medium and heavy duty vehicle sales to be zero emission by 2045.

ANALYSIS (All Provisions)

Economic Impact

Fiscal Year	2021-2022	2022-2023	2023-2024
Provision 1: Credit for Green Hydrogen Production Facilities and Distributions	N/A	N/A	\$0
Provision 2: Credit for Hydrogen Infrastructure Creation	N/A	N/A	\$0
Total	N/A	N/A	\$0

Effective/Operative Date (All Provisions)

This bill would become effective January 1, 2022, with the credit provisions specifically operative for taxable years beginning on or after January 1, 2023, and before January 1, 2033.

Analysis Provision 1: Credit for Green Hydrogen Production Facilities and Distributions

This Provision would, under the PITL and the CTL, for taxable years beginning on or after on or after January 1, 2023, and before January 1, 2033, create a green hydrogen production facility and distribution credit for qualified taxpayers for qualified building costs or qualified distribution costs, or both, in an amount based on green hydrogen production in the state. The credit amount is determined as follows:

- Thirty percent of qualified building or qualified distribution, or both, costs if less than 300,000 kilograms of green hydrogen are produced on average per day in the state in the prior calendar year.
- Twenty-five percent of qualified building or qualified distribution, or both, costs if 300,000 to 500,000 kilograms of green hydrogen are produced on average per day in the state in the prior calendar year.
- Twenty percent of qualified building or qualified distribution, or both, costs if 500,001 to 700,000 kilograms of green hydrogen are produced on average per day in the state in the prior calendar year.

This provision would require the State Air Resources Board on or before January 1, 2022, and on or before January 1 of each year thereafter until the section's repeal date of December 1, 2033, to provide the Franchise Tax Board (FTB) certification of the average amount of green hydrogen produced in the state, in kilograms, each day in the prior calendar year. The certification requirement becomes inoperative when the state board certifies that an average of 700,000 or more kilograms of green hydrogen are produced each day in the prior calendar year.

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The total amount of the green hydrogen production facility and distribution credit available across all taxable years are:

- Nine hundred million (\$900,000,000) for “qualified building costs,” which is defined as moneys paid or incurred by a taxpayer in the taxable year in which the credit is claimed for costs associated with construction of a green hydrogen production facility in the state before the facility is in operation and distribution; and
- One hundred million (\$100,000,000) for qualified distribution costs," which is defined as moneys paid or incurred by a taxpayer in the taxable year in which the credit is claimed for costs associated with assets that enable the movement of hydrogen fuel from the point of production to the point of dispensing that fuel into a vehicle.
- The amount of both PITL and CTL credits is to be allocated to qualified taxpayers in the order original returns are received by the FTB.

This bill would, for purposes related to Revenue and Taxation Code (RTC) section 41, state that the purpose of the credit is to reduce emissions of greenhouse gases, including carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons to 40 percent below the 1990 levels by 2030, and for California to be carbon neutral by 2045.

The unused credits could be carried over for eight years or until exhausted.

This credit would be reduced by the amount of any deduction otherwise allowed under this part for qualified building and distribution costs.

This credit would remain in effect until December 1, 2033, and would be repealed as of that date.

This bill would require the FTB to report to the Legislature by April 1, 2024, and annually thereafter the number of credits claimed and the average credit amount claimed under this provision and provision two, as discussed below.

Federal Law

Federal law provides the Alternative Fuel Vehicle Refueling Property Credit and the Advanced Energy Project Credit.

The Alternative Fuel Vehicle Refueling Property Credit is generally equal to 30 percent of the cost of any qualified alternative fuel vehicle refueling property placed in service by the taxpayer during the taxable year. The credit amount is limited to \$30,000 for specified depreciable property and \$1,000 for property placed in service at the taxpayer's main home.

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Qualified alternative fuel vehicle refueling property is property other than a building or its structural components used for either of the following:

- To store or dispense an alternative fuel
- To recharge an electric vehicle.

The Advanced Energy Project Credit is a tax credit equal to 30 percent of qualified investment to any qualifying advanced energy project of the taxpayer.

“Qualified advanced energy project” means a project that re-equips, expands, or establishes a manufacturing facility for the production of the following:

- Property designed to be used to produce energy from the sun, wind, geothermal deposits.
- Fuels cells, microturbines, or any energy storage system for electric or hybrid-electric motor vehicles.
- Electric grids to support the transmission of intermittent sources of renewable energy.
- Property designed to refine or blend renewable fuels or to produce energy conservation technologies.
- New qualified plug-in electric drive motor vehicles or components.
- Other advanced energy property designed to reduce greenhouse gas emissions.

State Law

Existing state and federal laws provide various tax credits designed to provide tax relief for taxpayers who incur certain expenses (e.g., child adoption) or to influence behavior, including business practices and decisions (e.g., research credits or hiring credits). These credits generally are designed to provide incentives for taxpayers to perform various actions or activities that they may not otherwise undertake.

Under RTC section 41, legislation that would create a new tax credit is required to include specific goals, purposes, objectives, and performance measures to allow the Legislature to evaluate the effectiveness of the credit.

Implementation Considerations

Department staff has identified the following implementation considerations for purposes of a high-level discussion; additional considerations may be identified as the bill moves through the legislative process. Department staff is available to work with the author’s office to resolve these and other considerations that may be identified.

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The provision requires the FTB to use the certifications provided by the State Air Resources Board to determine the credit amount; however, the certifications report on state averages, not on an individual taxpayer's green hydrogen production in the state. It is unclear how FTB would use the certifications to determine the credit amount for an individual taxpayer.

"Green hydrogen" would be defined by reference to Health & Safety Code Section 43018.10. However, that definition uses the undefined phrase "fossil fuel feedstock sources." The absence of definitions to clarify this phrase could lead to disputes with taxpayers and would complicate the administration of this bill. The author may want to amend the bill to clearly define this phrase.

The definitions for "qualified building costs" and "qualified distribution costs" could be broadly interpreted due to use of the phrase "costs associated with." The absence of a definition to clarify the phrase "costs associated with" could lead to disputes with taxpayers and would complicate the administration of this bill. For clarity, it is recommended that the bill be amended.

Typically, credits involving areas for which the FTB does not have the expertise are certified by another agency or agencies that possess the relevant expertise. While the bill states that the Air Resource Board would certify the amount of green hydrogen produced in the state along with the number of publicly available hydrogen fueling stations in operation, the language does not certify that the taxpayer qualifies for this credit or the amount of the credit. The certification language would specify the responsibilities of both the certifying agency and the taxpayer. The certificate would identify the qualifying taxpayer's relevant information including the amount of the credit. It is recommended that this bill be amended to include a certifying agency.

This bill would require the FTB to provide a report on the utilization of this credit by April 1, 2024. However, the first year this credit would be available is taxable year 2023. Returns for tax year 2023 would be received and processed by the FTB in 2024. Therefore, FTB would not have complete information on tax year 2023 by the time the first report would be due on April 1, 2024. The author may wish to amend the bill to change the due date of the report to allow the department to collect the necessary data.

The proposed credits would require that the credit amount be reduced by any deduction otherwise allowed for the creditable costs. This language could result in the credit amount being reduced below zero. If the author's intent is to ensure that multiple tax benefits would not be received for the same costs, it is recommended that the bill be amended.

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Technical Considerations

None noted.

Policy Considerations

The proposed credit could be claimed for amounts paid or incurred before the hydrogen production facilities are completed; however, the bill would not actually require that the facilities be completed or placed into service or include a requirement that the credits be recaptured if not placed into service. It is possible that a taxpayer could begin to build the hydrogen facility, claim the credit, and then never actually finish the building of the hydrogen facility. If this bill were to require that the facilities be completed, with an appropriate recapture provision to ensure that the facilities be completed along with continued operation in California for a specified (recapture) period, this potential problem would be avoided. The recapture provision would require the taxpayer to finish production of the hydrogen facility and to operate the facility for a certain length of time in this state or add all or some portion of the credit amount back to the tax liability.

LEGISLATIVE HISTORY

AB 2673 (Harper, (2015/2016) would have created an income tax credit for sales and use taxes previously paid on hydrogen refueling station equipment. AB 2673 did not pass out of the Assembly Revenue and Taxation committee.

PROGRAM BACKGROUND

None noted.

FISCAL IMPACT

The department's costs to implement this bill have yet to be determined. As the bill moves through the legislative process, costs will be identified.

ECONOMIC IMPACT

Provision No. 1: Credit for Green Hydrogen Production Facilities and Distributions

Revenue Estimate

This provision would result in the following revenue impact:

Estimated Revenue Impact of AB1312 as Introduced February 19, 2021
Assumed Enactment after June 30, 2021

(\$ in Millions)

Fiscal Year	Revenue
2021-2022	N/A
2022-2023	N/A
2023-2024	\$0

This analysis does not account for changes in employment, personal income, or gross state product that could result from this bill or for the net final payment method of accrual.

Revenue Discussion

Based on data from the California Air Resources Board, the California Energy Commission, and other public sources, it is estimated that 75,000 kg/day of additional hydrogen fueling capacity would be added in 2023 and would increase in each year thereafter. In taxable year 2023 total capital expenditures of \$410 million are expected to be spent building additional production and distribution facilities as a result of this increase. Applying an average credit rate of 30 percent results in approximately \$120 million of credits generated in taxable year 2023.

The credits allowed under this provision would be reduced by the amount of qualified building cost deductions otherwise allowed under current law. It is assumed the credit would be reduced on a dollar for dollar basis. Because the credit is calculated as a percentage of qualifying costs, the amount of credits generated would be phased out to zero.

LEGAL IMPACT

None noted.

APPOINTMENTS

None noted.

SUPPORT/OIPPOSITION

To be determined.

ARGUMENTS

To be determined.

Analysis Provision 2: Credit for Hydrogen Infrastructure Creation

This Provision would, under the PITL and the CTL, for taxable years beginning on or after January 1, 2023, and before January 1, 2033, would create a hydrogen infrastructure tax credit. This credit is for qualified taxpayers for qualified building costs in an amount dependent upon the number of hydrogen fueling stations in operation in the state. The credit amount is determined by:

- Thirty percent of building costs if less than 400 public hydrogen fueling stations are in operation in the state in the prior calendar year.
- Twenty-five percent of building costs if 400 to 599 public hydrogen fueling stations are in operation in the state in the prior calendar year.
- Twenty percent of building costs if 600 to 799 public hydrogen fueling stations are in operation in the state in the prior calendar year.
- Fifteen percent of building costs if 800 to 999 public hydrogen fueling stations are in operation in the state in the prior calendar year.

The credit would be for qualified building costs up to 700 retail hydrogen fueling stations, 200 heavy-duty hydrogen fueling stations and 100 transit district hydrogen fueling stations. This bill would define the three fueling stations as follows:

- "Retail hydrogen fueling station" means a station with a minimum of two fueling positions capable of dispensing at least 800 kilograms of hydrogen per day.
- "Transit district fueling station" means a station with a minimum of two fueling positions capable of dispensing at least 1,250 kilograms of hydrogen per day.
- "Heavy-duty hydrogen fueling station" means a station with a minimum of two fueling positions capable of dispensing at least 2,500 kilograms of hydrogen per day.

Introduced February 19, 2021

This provision would require the State Air Resources Board, on or before January 1, 2022, and on or before January 1 of each year thereafter until the section repeal date of December 1, 2033, to provide the FTB certification of the number of publicly available hydrogen fueling stations in operation in the state in the prior calendar year. This certification requirement becomes inoperative when the state board certifies that 1,000 or more publicly available hydrogen fueling stations are in operation in the state in the prior calendar year.

The amount of both PITL and CTL credits may not exceed \$500,000,000 per taxable year and would be allocated to qualified taxpayers in the order original returns are received by the FTB.

Unused credits could be carried over for 8 years or until exhausted.

This credit would be reduced by the amount of any deduction otherwise allowed under this part for qualified building and distribution costs.

This credit will only remain in effect until December 1, 2033.

As discussed under Provision 1, this bill would require the FTB to report to the Legislature by April 1, 2024, and annually thereafter the number of credits claimed and the average credit amount claimed under this provision.

Federal Law

Refer to Provision 1 for discussion of the federal Alternative Fuel Vehicle Refueling Property Credit and the Advanced Energy Project Credit. State Law.

Existing state and federal laws provide various tax credits designed to provide tax relief for taxpayers who incur certain expenses (e.g., child adoption) or to influence behavior, including business practices and decisions (e.g., research credits or hiring credits). These credits generally are designed to provide incentives for taxpayers to perform various actions or activities that they may not otherwise undertake.

Under RTC section 41, legislation that would create a new tax credit is required to include specific goals, purposes, objectives, and performance measures to allow the Legislature to evaluate the effectiveness of the credit.

Implementation Considerations

Department staff has identified the following implementation considerations for purposes of a high-level discussion; additional considerations may be identified as the bill moves through the legislative process. Department staff is available to work with the author's office to resolve these and other considerations that may be identified.

Introduced February 19, 2021

In defining hydrogen fueling station for the hydrogen infrastructure credit, this provision would establish thresholds to be met to be qualified as a hydrogen fueling station to receive this credit. However, this provision as written would allow the higher tier stations to compound the definitions of the lower stations. For example, this provision, in establishing the definition for a "Heavy-duty hydrogen fueling station", requires that it must be "capable of dispensing at least 2,500 kilograms of hydrogen per day." However, use of the term "at least", rather than "at minimum," makes this a compounding definition as it can also include the two lower dispensing hydrogen station tiers. Due to the compounding nature of the definition of the three different fueling stations, a "Heavy-duty hydrogen fueling station" could qualify for all three definitions. This could make the distribution of this credit unbalanced across the three tiers. If this was not the author's intention this should be amended.

The definition for "qualified building costs" could be broadly interpreted due to use of the phrase "costs associated with." The absence of a definition to clarify the phrase "costs associated with" could lead to disputes with taxpayers and would complicate the administration of this bill. Also, qualified building costs is defined as moneys paid or incurred for the costs associated with construction of a hydrogen fueling station. It is unclear if the hydrogen fueling station needs to be public. For clarity, it is recommended that the bill be amended.

This bill would require the FTB to provide a report on the utilization of this credit by April 1, 2024. However, the first year this credit would be available is taxable year 2023. Returns for this tax year would be received and processed by the FTB in 2024. Therefore, FTB would not have complete information on tax year 2023 by the time the first report would be due on April 1, 2024. The author may wish to amend the bill to change the due date of the report to allow the department to collect the necessary data.

The provision requires the FTB to use the certifications provided by the State Air Resources Board to determine the credit amount; however, the certifications report on state averages, not on an individual taxpayer's number of hydrogen fueling stations in operation in the state. It is unclear how FTB would use the certifications to determine the credit amount for an individual taxpayer.

The proposed credits would require that the credit amount be reduced by any deduction otherwise allowed for the creditable costs. This language could result in the credit amount being reduced below zero. If the author's intent is to ensure that multiple tax benefits would not be received for the same costs, it is recommended that the bill be amended.

Introduced February 19, 2021

The credit lists the total number of hydrogen fueling stations that can receive the credit allowed in this section. However it is unclear if this credit is for each taxpayer, per taxable year, or if this is an aggregate amount for all taxable years per taxpayer. This section should be amended to clarify this.

Technical Considerations

On page 13, line 14, and page 16, line 30, insert "public" after "of"

The author may want to define public hydrogen fueling station to include the 3 types of hydrogen fueling stations listed in the bill.

Policy Considerations

None noted.

LEGISLATIVE HISTORY

AB 2673 (Harper, (2015/2016)) would have created an income tax credit for sales and use taxes previously paid on hydrogen refueling station equipment. AB 2673 did not pass out of the Assembly Revenue and Taxation committee.

PROGRAM BACKGROUND

None found.

FISCAL IMPACT

The department's costs to implement this bill have yet to be determined. As the bill moves through the legislative process, costs will be identified.

ECONOMIC IMPACT

Provision No. 2: Credit for Hydrogen Infrastructure Creation

Revenue Estimate

This provision would result in the following revenue impact:

Estimated Revenue Impact of AB1312 as Introduced February 19, 2021
Assumed Enactment after June 30, 2021

(\$ in Millions)

Fiscal Year	Revenue
2021-2022	N/A
2022-2023	N/A
2023-2024	\$0

This analysis does not account for changes in employment, personal income, or gross state product that could result from this bill or for the net final payment method of accrual.

Revenue Discussion

Based on data from the California Air Resources Board, the California Energy Commission, and other public sources, it is estimated that 30 new hydrogen fueling stations would be constructed in 2023. At an average of \$10,000 (kg/day) per station, total taxable year 2023 qualified costs of construction are estimated to be \$300 million. Applying an average credit rate of 30 percent results in total credits generated of \$90 million in the 2023 taxable year.

The credits allowed under this provision would be reduced by the amount of qualified building costs deductions otherwise allowed under current law. It is assumed the credit would be reduced on a dollar for dollar basis. Because the credit is calculated as a percentage of qualifying costs, the amount of credits generated would be phased out to zero.

LEGAL IMPACT

None noted.

APPOINTMENTS

None Noted.

SUPPORT/OPPOSITION

To be determined.

ARGUMENTS

To be determined.

LEGISLATIVE CONTACT

FTBLegislativeServices@ftb.ca.gov