# California State Assembly

## NATURAL RESOURCES



**LUZ RIVAS**
CHAIR

## AGENDA

Monday, April 24, 2023
2:30 p.m. -- State Capitol, Room 447

## BILLS HEARD IN SIGN-IN ORDER

## ** = Bills Proposed for Consent

| | | | |
|---|---|---|---|
| 1. | AB 2 | Ward | Recycling: solar photovoltaic modules. |
| 2. | **AB 3 | Zbur | Offshore wind energy: reports. |
| 3. | AB 6 | Friedman | Transportation planning: regional transportation plans: Solutions for Congested Corridors Program: reduction of greenhouse gas emissions. |
| 4. | AB 9 | Muratsuchi | Greenhouse gases: market-based compliance mechanism. |
| 5. | AB 241 | Reyes | Clean Transportation Program: Air Quality Improvement Program: funding. |
| 6. | AB 324 | Pacheco | Gas corporations: renewable gas procurement. |
| 7. | AB 678 | Alvarez | Biomethane procurement targets or goals: core transport agents. |
| 8. | **AB 841 | Berman | State Energy Resources Conservation and Development Commission: Industrial Heat Electrification Roadmap. |
| 9. | AB 985 | Arambula | San Joaquin Valley Unified Air Pollution Control District: emission reduction credit system. |
| 10. | AB 1216 | Muratsuchi | Wastewater treatment plants: monitoring of air pollutants. |
| 11. | AB 1287 | Alvarez | Density Bonus Law: additional density bonus and incentives or concessions: California Coastal Act of 1976. |
| 12. | AB 1319 | Wicks | Bay Area Housing Finance Authority: housing revenue. |
| 13. | AB 1489 | Wood | Solid waste: compostable polymers. |
| 14. | **AB 1526 | Natural Resources | Public resources. |
| 15. | AB 1550 | Bennett | Green hydrogen. |
| 16. | AB 1554 | Joe Patterson | California Environmental Quality Act: exemption: wildfire fuels reduction projects. |
| 17. | AB 1567 | Garcia | Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2024. |
| 18. | AB 1591 | Wallis | Energy: petroleum pricing. |
| 19. | AB 1633 | Ting | Housing Accountability Act: disapprovals: California Environmental Quality Act. |
| 20. | **AB 1711 | Juan Carrillo | Energy: hydrogen: Clean Energy Equity Act. |
| 21. | AB 1743 | Bennett | Lower Emissions Transition Program. |

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 2 (Ward) – As Amended March 16, 2023

**SUBJECT**: Recycling: solar photovoltaic modules

**SUMMARY**: Requires a manufacturer of solar photovoltaic panels (solar panels) to develop and implement an end-of-life management plan (plan) for the safe, convenient, and environmentally sound management and recycling of the solar panels.

**EXISTING LAW**:

1) Requires 60% of total retail sales of electricity in California to be generated from eligible renewable energy resources, including solar, by December 31, 2030, and creates the policy of planning to meet all of the state's retail electricity supply with a mix of renewable and zero-carbon resources, as specified, by December 31, 2045. (Public Utilities Code 399.11 et seq.)

2) Establishes the California Integrated Waste Management Act of 1989 (IWMA), administered by the Department of Resources Recycling and Recovery (CalRecycle), to generally regulate the disposal, management, and recycling of solid waste. Requires each city, county, and regional agency, if any, to divert 50% of all solid waste from landfill disposal or transformation by January 1, 2000, through source reduction, recycling, and composting activities. (Public Resources Code (PRC) 40000 et seq.)

3) Declares that it is the policy goal of the state that, annually, not less than 75% of solid waste generated be source reduced, recycled, or composted. (PRC 41780.01)

4) Establishes an expanded producer responsibility (EPR) program for pharmaceutical and sharps waste for the collection and proper disposal of home-generated drug and sharps waste. (PRC 42030 et seq.)

5) Establishes an EPR program for packaging and foodware, including minimum recycling requirements, source reduction targets. (PRC 42040 et seq.)

6) Establishes an EPR program for the proper collection and recycling of batteries. (PRC 42451 et seq.)

7) Establishes an EPR program for the collection and recycling of carpet. (PRC 42970 et seq.)

8) Establishes the Hazardous Waste Control Law, administered by the Department of Toxic Substances Control (DTSC), to govern the management of hazardous waste in California. (Health and Safety Code 25100 et seq.)

**THIS BILL**:

1) Requires manufacturers of solar panels sold or offered for sale in the state to develop and plan for the safe, convenient, and environmentally sound management and recycling of the solar panels it manufactures and their component materials.

2) Authorizes a manufacturer to designate an agent to act on behalf of the manufacturer to develop the plan provided that the agent provides CalRecycle with written notice of the arrangement within 60 days of the start of the agency. Requires the written notice to identify the brand names and model numbers of the solar panels for which the agent is developing the plan. Requires the agent to provide CalRecycle with 60 days' written notice of the termination, expiration, or modification of its agency with a manufacturer.

3) Requires the plan to include:

   a) A plan to minimize the release of hazardous substances into the environment;

   b) A plan to maximize the recovery of components, including rare earth metals and other commercially valuable materials;

   c) A plan to disseminate to relevant stakeholders information necessary for the proper dismantling, transportation, and treatment of solar panels, as specified.

   d) Performance goals, including, but not limited to, a goal for the rate of combined reuse and recycling of collected solar panels as a percentage of the total weight of solar panels collected, which shall be no less than 85%.

4) Requires CalRecycle to develop guidelines for the development of the plans.

5) Requires a manufacturer or its agent to develop a plan for each model of solar panel it manufactures and sells or offers for sale in the state and submit it to CalRecycle for approval. The plan shall be submitted by July 1, 2026. For solar panels first sold on or after that date, requires the plan to be submitted no later than 30 days after the solar panel is first sold or offered for sale in the state.

6) Authorizes a manufacturer or its agent to amend the plan provided the amended plan is submitted to CalRecycle for approval.

7) Requires a manufacturer or agent to implement the plan, as approved by CalRecycle.

8) Requires a manufacturer or agent, beginning January 1, 2027, and annually thereafter, to submit a written report for the prior calendar year documenting the implementation of the plan and assessing the achievement of the performance goals.

9) Requires CalRecycle to adopt regulations to implement the bill no later than January 1, 2026.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

> In 2006, California launched the Million Solar Roofs Initiative to incentivize consumers and businesses to invest in solar. As of 2022, California has the largest solar market in the United States, supplying over 20% of its electricity. Unfortunately, given a 20-30 year life span, many of these panels are beginning to reach the end of their lifecycle. Assembly Bill (AB) 2 will establish the foundation for a convenient, safe, and environmentally sustainable system for the end-of-life management of solar photovoltaic (PV) panels. With the right conditions in place, end-of-life industries for PV panels can thrive as an important pillar of a sustainable solar industry in California.

2) **Solar panels**. California is the largest solar market in the United States. According to the Solar Energy Industries Association (SEIA), California has installed nearly 40,000 megawatts of solar, which is enough to power over 10 million homes. Currently, the state generates approximately 27% of its power from solar. SEIA also states that solar panels have a lifespan between 20-30 years. It is not clear how much solar panel waste is currently generated in California.

   The state's Renewables Portfolio Standard requires that 60% of California's energy be generated from eligible renewable energy, including solar, by 2030. Since 2020, California has required all new homes to have solar or be served by community solar projects, generating clean power for the state, but also ensuring that there will be a long-term need for end-of-life management for solar panels.

3) **Recycling**. According to the United States Environmental Protection agency, "waste from end-of-life solar panels presents opportunities to recover valuable materials and create jobs through recycling." The most common solar panel (crystalline-silicone) is constructed of an aluminum frame, glass, copper wire, polymer layers and backsheet, silicon solar cells, and a plastic junction box. Most solar panels that have been tested are not classified as hazardous waste; however, their production involves the use of toxic heavy metals, like cadmium, copper, lead, and selenium. Nearly all of these materials are recyclable. By 2030, the International Renewable Energy Agency estimates that the cumulative value of recoverable materials from solar panels globally will be approximately $450 million.

   While solar panels are recyclable, their long lifespan means that there are not enough of them in the market yet to support a robust recycling system. This results in too many being disposed in California's landfills. Experts estimate that only 1 in 10 solar panels is currently recycled in California. This lack of recycling capacity and increase in solar panel installation is going to result in a deluge of waste in coming years.

   SEIA established the National PV (solar panel) Recycling Program in 2016. SEIA states, "SEIA is working with its members to create a robust recycling network to ensure the clean energy economy remains sustainable for years to come." The program includes a network of recycling and refurbishment providers that provide end-of-life management services for solar and storage installers, project and system owners, developers, distributors, and other parties. These organizations are capable of repairing, refurbishing, reselling, and/or recycling solar

panels, inverters, and other solar equipment. The program's website currently lists five recycling and repair and resale facilities.

4) **Extended Producer Responsibility (EPR) Programs**. According to CalRecycle, EPR is a strategy that places shared responsibility for end-of-life product management on the producers, and all entities involved in the product chain, instead of on the general public and local governments, with oversight and enforcement provided by a governmental agency. This approach provides flexibility for manufacturers, based on their expertise in designing products and the systems that bring these products to market, to design systems to capture those products at the end-of-life to meet statutory goals. Currently there are four statewide EPR programs: paint, carpet, mattresses, and pharmaceutical and sharps waste. Additionally, last year the Legislature adopted an expansive EPR program for single-use packaging and food ware that will be implemented over the next several years.

5) **This bill**. This bill establishes a framework for the management of solar panel waste in California. While not a true EPR program, this bill begins the process of requiring solar panel manufacturers to plan for the end-of-life management for the materials they generate. The author indicates that he is working with stakeholders on a number of issues.

6) **Suggested amendments**.

   This bill requires CalRecycle to approve the plan, but does not establish specific requirements for approval. The *committee may wish to amend the bill* to clarify CalRecycle's authority to approve or disapprove a plan, based on the plan's compliance with the bill and related CalRecycle regulations and guidelines.

   This bill currently lacks enforcement provisions for violations. The committee may wish to amend the bill to establish administrative civil penalty authority in the amount of up to $1,000 for an initial violation and up to $5,000 for subsequent violations.

7) **Related legislation**.

   AB 1238 (Ward) requires DTSC to adopt, by January 1, 2026, alternative management standards for the management of solar panels. This bill has been referred to the Assembly Appropriations Committee.

8) **Double referred**. This bill was approved by the Environmental Safety and Toxic Materials Committee on March 28th 8-0.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

None on file

**Opposition**

None on file

**Analysis Prepared by**: Elizabeth MacMillan / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 3 (Zbur) – As Amended April 4, 2023

**SUBJECT**: Offshore wind energy: reports

**SUMMARY**: Establishes the California Offshore Wind Advancement Act to develop a strategy for seaport readiness for offshore wind energy developments, and to study the feasibility of achieving 70% and 85% in-state assembly and manufacturing of offshore wind energy projects, as provided.

**EXISTING LAW**:

1) Establishes that the policy goal of the state that eligible renewable energy resources and zero-carbon resources supply 100% of all retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045. (Public Utilities Code 454.53)

2) Requires the State Energy Resources Conservation and Development Commission (CEC), in coordination with relevant federal, state, and local agencies, to develop a strategic plan for offshore wind energy developments installed off the California coast in federal waters, and requires the CEC to submit the strategic plan to the Natural Resources Agency and the Legislature on or before June 30, 2023. (Public Resources Code (PRC) 25991)

3) Requires CEC to evaluate and quantify the maximum feasible capacity of offshore wind to achieve reliability, ratepayer, employment, and decarbonization benefits and to establish megawatt (MW) offshore wind planning goals for 2030 and 2045. (PRC 25991.1)

4) Requires CEC, in coordination with specified state entities, to work with stakeholders, other state, local, and federal agencies, and the offshore wind energy industry to identify suitable sea space for wind energy areas in federal waters sufficient to accommodate those offshore wind planning goals. (PRC 25991.2)

5) Requires CEC, in coordination with relevant state and local agencies, based on those identified sea spaces, to develop a plan to improve waterfront facilities that could support a range of floating offshore wind energy development activities. (PRC 25991.3)

6) Requires CEC, in consultation with specified state entities, to assess the transmission investments and upgrades necessary to support those offshore wind planning goals. (PRC 25991.4)

7) Requires CEC to develop and produce a permitting roadmap that describes timeframes and milestones for a coordinated, comprehensive, and efficient permitting process for offshore wind energy facilities and associated electricity and transmission infrastructure off the coast of California. (PRC 25991.5)

8) Sunsets the policies summarized in #2 - #7 on January 1, 2027. (PRC 25991.8)

**THIS BILL**:

1) Establishes the California Offshore Wind Advancement Act.

2) Extends the sunset date for existing offshore wind reporting requirements pursuant to AB 525 (Chiu, Chapter 231, Statutes of 2021) from January 1, 2027, to January 1, 2031.

3) Requires the CEC, in consultation with the State Lands Commission, to develop a second-phase plan and strategy for seaport readiness that further analyzes the recommendations and alternatives in the strategic plan for offshore wind energy developments, and additional potential alternatives identified as part of a public process.

4) Requires the CEC to make a draft report, with recommendations and an analysis of alternatives, available for public review and comment for at least 60 days and to submit a final report on their recommendations for a seaport readiness strategy to the Governor and the Legislature on or before January 1, 2026.

5) Requires the CEC, for purposes of the second-phase plan, to do all of the following:

    a) Consider alternatives that require retrofits to existing ports and the development of ports in new locations;

    b) Recommend and prioritize only port alternatives where site control can be obtained by a port authority or state agency within five years;

    c) Recommend and prioritize alternatives only with sufficient landside and water acreage or capacity to support maximum in-state assembly and manufacturing of offshore wind energy components;

    d) Recommend and prioritize port locations that minimize impacts to cultural and natural resources, including the marine and onshore environments, sensitive species, and habitats;

    e) Identify and prioritize ports that maximize in-state workforce opportunities, including workforce opportunities for low-income and environmental justice communities;

    f) Consider transportation and other infrastructure investments needed to develop the identified seaports and waterfront facilities needed for offshore wind energy activities;

    g) Collaborate with tribal governments to develop appropriate seaport siting criteria that minimize adverse impacts to natural and cultural resources and maximize economic and workforce benefits to the tribal governments;

    h) Consult with key stakeholders, including, but not limited to, environmental organizations, environmental justice organizations, fisheries groups, labor unions, ratepayer advocates, offshore wind energy developers and related industry stakeholders, local governments and port authorities, and other ocean users, to develop appropriate seaport siting criteria that minimize adverse impacts to cultural and natural resources, minimize adverse impacts to local communities, maximize local and in-state economic and workforce benefits, incorporate equity and environmental justice in seaport development, minimize impacts to California ratepayers, and avoid delays in the seaport entitlement process;

i) Develop recommendations for the ports best suited for supporting offshore wind energy developments, incorporating criteria developed from the public input; and,

j) Recommend an appropriate state agency or agencies to serve as the lead agency or agencies to undertake the entitlement and environmental review for the seaport developments required to support offshore wind energy developments.

6) Requires the CEC, in coordination with the Governor's Office of Business and Economic Development (GO-Biz), to conduct a study on the feasibility of achieving 70% and 85% in-state assembly and manufacturing of offshore wind energy projects. Requires the CEC to submit a report on the study to the Governor and the Legislature on or before July 1, 2027.

7) Requires the CEC, for purposes of the study, to do all of the following:

a) Identify gaps in the current supply chain and workforce for achieving 70% and 85% in-state manufacturing of offshore wind energy projects, including identifying the facilities and infrastructure required to meet these in-state manufacturing thresholds and estimating the number, geographic distribution, and types of jobs that will be created as a result of achieving 70% and 85% in-state manufacturing of offshore wind energy projects;

b) Identify gaps in the current supply chain and workforce for achieving 70% and 85% in-state assembly of offshore wind energy project components, including identifying the facilities and infrastructure required to meet these in-state assembly thresholds and the estimated geographic distribution of these facilities, and estimating the number, geographic distribution, and types of jobs that will be created as a result of achieving 70% and 85% in-state assembly of offshore wind energy project components;

c) When estimating the number and types of jobs required for achieving 70% and 85% in-state assembly and manufacturing of offshore wind energy projects, include roles in related and supporting activities, including, but not limited to, environmental monitoring, research and development, construction, engineering and design, and manufacturing, operations, and maintenance;

d) Identify supply chain and workforce investments needed by the state to support achieving 70% and 85% in-state assembly and manufacturing of offshore wind energy projects;

e) Identify available federal and state funds to support bringing or retaining jobs related to the manufacturing and assembly of offshore wind projects in the state;

f) Study and estimate the potential impacts on economic activity and job growth, and resulting state tax revenues, resulting from manufacturing and assembling 70% and 85% of offshore wind projects in the state;

g) Study and evaluate any potential impacts to project development timelines and costs as a result of manufacturing and assembling 70% and 85% of offshore wind projects in the state;

h) Study and estimate potential impacts to ratepayers as a result of manufacturing and assembling 70% and 85% of offshore wind projects in the state;

i) Develop recommendations for incorporating equity and environmental justice in economically and environmentally sustainable supply chain development;

j) Coordinate with tribal governments to develop recommendations for tribal workforce development opportunities;

k) Consult with environmental justice groups, fisheries groups, labor unions, and business groups to develop recommendations for workforce development opportunities; and,

l) Develop recommendations for workforce development investments at community colleges, at state universities, and in apprenticeship programs necessary to meet the workforce needs resulting from the in-state targets described in this section.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

> Offshore wind energy will play a crucial role in meeting California's goal of achieving 100% renewable energy by 2045 and has the potential to create a significant number of high-paying jobs in the state. AB 3 requires the California Energy Commission to study and recommend strategies for procuring energy, maximizing job opportunities for the state and creating pathways for developing port infrastructure to achieve our climate change goals through offshore wind energy.

2) **Clean energy goals.** The 100 Percent Clean Energy Act of 2018 (SB 100, De León, Chapter 321, Statutes of 2018) increased California's renewable portfolio standard (RPS) goal to 60% by 2030 and requires RPS-eligible resources and zero-carbon resources to supply 100% of California's electricity retail sales and electricity procured to serve state agencies by 2045.

   Based on a joint analysis by the CEC, the Public Utilities Commission, and the California Air Resources Board (ARB), an estimated six gigawatts (GW) of renewable energy and storage resources need to come online annually to meet the state's 2045 carbon neutrality goal. To meet these bold renewable energy targets, California's offshore waters are quickly emerging as a prime location for new floating offshore wind projects.

3) **Offshore wind**. The advantage of offshore wind over its land-based counterpart is that the offshore wind resource is far more consistent, reliable, and energetic, with little of the topographic and small-scale variability typically seen on land. Offshore wind is a clean energy source at night complementing solar energy by providing energy generation at the end of the day and into the evening as the sun sets.

   The National Renewable Energy Laboratory has identified 200 GW of offshore wind technical potential for California. However, approximately 96% of this potential is located in water deeper than 60 meters, where the mature, fixed-bottom turbine technology is not technically feasible. Off the coast of California, a steep continental shelf and increased wind speeds combine to make floating turbines the primary technically feasible option.

In California, the U.S. Department of the Interior's Bureau of Ocean Energy Management (BOEM) is moving forward with further environmental review for leasing two areas, one off the north coast and one off the central coast, for additional evaluation of floating offshore wind development. These areas, referred to as the Humboldt Wind Energy Area and the Morro Bay Wind Energy Area, have the combined potential to generate up to 4.6 GW of renewable energy.

In September 2021, the Legislature passed AB 525 (Chiu, Chapter 231, Statutes of 2021) requiring the CEC, in coordination with several state agencies, to develop a strategic plan for offshore wind energy developments installed off the California coast in federal waters. AB 525 requires the CEC to evaluate and quantify the maximum feasible offshore wind capacity to achieve reliability, ratepayer, employment, and decarbonization benefits and to establish offshore wind energy planning goals for 2030 and 2045, by no later than June 1, 2022. The range in the planning goals for 2030 reflects an understanding that achieving a 2030 online date for any proposed offshore wind project will take a significant mobilization of resources as well as timely infrastructure investments, while the planning goal for 2045 reflects anticipated technological developments and related cost reductions.

Last August, the CEC adopted the first AB 525 report, which included an evaluation of studies that have assessed nearly 21.8 GW of offshore wind technical potential in federal waters off the California coast. The assessments are based on wind speed, ocean depth, bottom slope, distance to grid interconnection, and distance to existing port infrastructure that are technically suitable for current floating technologies. The 21.8 GW number is a reference point for technically *feasible* capacity. In the report, the CEC established planning goals of 2,000-5,000 MWs of offshore wind by 2030 and, *aspirationally,* 25,000 MW by 2045, which would be enough electricity to power 3.75 million homes initially and 25 million homes by 2050.

The only remaining product required for the CEC by AB 525 is a strategic plan for offshore wind energy deployment off the California coast (due to the Legislature by June 2023). This plan is meant to incorporate the findings of the prior reports into a cohesive framework and expand on specific aspects of the development process, and include the following:

- An analysis of workforce development needs;
- An assessment of necessary investments and potential port retrofits in California seaports;
- An evaluation of the availability of land and water acreage at each seaport and the feasibility of developing infrastructure; and,
- An outline of the potential impacts of offshore wind support infrastructure development on coastal resources, fisheries, Native American and Indigenous peoples, and national defense, and strategies for addressing those potential impacts.

AB 3 will require to CEC to build on AB 525 and develop a second-phase plan and strategy for seaport readiness that further analyzes the recommendations and alternatives in the strategic plan for offshore wind energy developments, and additional potential alternatives identified as part of a public process.

The aspects of the anticipated AB 525 strategic plan may answer critical questions that this bill is also investigating, creating the potential for a degree of redundancy between the two reports. The author may wish to work with the CEC to refine, if needed, the statutory directions of the report pursuant to this bill.

4) **Wind turbines.** Wind turbines are made of the following parts: rotating turbine blades, the wind turbine tower or mast, and the nacelle (the 'head' of the wind turbine mounted on top of the support tower). Off California's coast, due to ocean floor depths, floating structure wind foundations will likely be used. Floating turbines employ mooring (cabling) and an anchored substructure underwater which steadies a platform holding the wind turbine above water. The use of cabling to anchor the turbine allows floating platforms to operate at depths between 60 and 1,300 meters.

   The CEC released a report assessing the potential economic benefits for offshore wind with specific focus on seaport investments and workforce development. It noted the largest economic benefits for California from an offshore wind industry would be realized with the development of a local supply chain where offshore wind components such as floating platforms, towers, mooring lines, and anchors could be manufactured in-state. To encourage development of a local supply chain, a sufficient offshore wind pipeline needs to be identified to provide confidence in the market and support early investment. According to a study conducted by the U.C. Berkeley Center for Labor Research and Education, industry has identified a minimum threshold of 8 GW over a 10-year period to support manufacturing and supply chain investments. Without a minimum threshold of 8 GW over a 10-year period, manufacturers would be less likely to invest in a local supply chain, and the economic benefits would be far less significant. The CEC acknowledges that California ports may not be able to handle all the required activities to support the wind turbine manufacturing industry initially, even with investments and significant upgrades. Until the state can build out the infrastructure responsibly, offshore wind components will have to be manufactured elsewhere and imported to California.

   Furthermore, any California offshore wind turbine development will have to comply with the 1920 Jones Act, which requires any ship delivering goods or people from one US site to another must be built, owned, and primarily crewed by American citizens. The issue that presents is that there are limited numbers of compliant ships that could tow out and plant the assembled floating turbines.

   MIT Technology Review reports that San Francisco startup Aikido Technologies is developing a way of shipping turbines horizontally and then upending them in the deep ocean, enabling the structures to duck under bridges en route. The company believes its designs provide enough clearance for developers to access any US port. Some 80% of these ports have height limits owing to bridges or airport restrictions.

   With the investments California will need to make developing its seaports, waterfronts, component manufacturing, and electrical engineering, to say the least, offshore wind development in California could spark tens of billions of dollars in investments over the next quarter-century.

   AB 525 is currently underway, but questions remain regarding what is needed to realize the full economic benefit of offshore wind energy. According to the author, it is unclear what investments and supply chain developments are needed to manufacture offshore wind

components in the state, and how that might impact ratepayers. Clear procurement strategies are also needed for signaling early investments in the development of a local supply chain. Beyond the preliminary GW goals adopted by the CEC, it's unclear what the state's strategy may be for procuring this resource and providing the certainty to finance and build these projects.

Last month, Lieutenant Governor Eleni Kounalakis and GO-Biz Director Dee Dee Myers went to Japan with 100 California business executives and signed an agreement between California-headquartered Principle Power and Tokyo Gas to supply technology and engineering to the Fukushima Floating Offshore Wind Project, which will feature two modern 15 MW wind turbines on Principle Power's WindFloat® foundations. Companies like Principal Power could potentially contribute to California's instate offshore wind manufacturing and development.

AB 3 requires the CEC, in coordination with GO-Biz, to study the feasibility of achieving 70% and 85% in-state assembly and manufacturing of offshore wind energy projects.

5) **Committee amendments.** *The Committee may wish to consider* including the maritime shipping industry as a consulted stakeholder in the bill.

6) **Related legislation**.

AB 80 (Addis) requires the Ocean Protection Council to establish and oversee, in coordination with other state agencies, a West Coast Offshore Wind Science Entity. This bill scheduled to be heard in the Assembly Appropriations Committee.

SB 286 (McGuire) would establish the California Offshore Wind Energy Fisheries Working Group composed of state agencies and industry stakeholders to develop a statewide strategy for ensuring that offshore wind energy projects avoid and minimize impacts to ocean fisheries to the maximum extent possible, fully mitigate unavoidable impacts, and fairly compensate persons engaged in commercial and recreational fishing for economic impacts to ocean fisheries resulting from offshore wind energy projects. This bill is scheduled to be heard in the Senate Energy, Utilities and Communications Committee on April 24.

SB 413 (McGuire, 2021) would have required the CEC, in consultation with the Offshore Wind Project Certification, Fisheries, Community, and Indigenous Peoples Advisory Committee, which the bill would create, to establish a process for the certification of offshore wind generation facilities that is analogous to the existing requirements for certification of thermal powerplants. This bill was referred to, but never heard in, the Senate Energy, Utilities and Communications Committee.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

1000 Grandmothers for Future Generations
350 Conejo / San Fernando Valley
Active San Gabriel Valley
Brightline Defense
California Association of Port Authorities

California Association of Professional Scientists
California Catholic Conference
California Environmental Voters
California State Association of Electrical Workers
California State Pipe Trades Council
CEERT
Climate Action California
Coalition of California Utility Employees
Environment California
Environmental Working Group
Los Angeles County
NRDC
Pacific Environment
Peninsula Interfaith Climate Action
Santa Cruz Climate Action Network
Secure the Future 2100
Sierra Club California
The Climate Center

**Opposition**

None on file

**Analysis Prepared by**: Paige Brokaw / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 6 (Friedman) – As Amended March 16, 2023

**SUBJECT**: Transportation planning: regional transportation plans: Solutions for Congested Corridors Program: reduction of greenhouse gas emissions

**SUMMARY**: Requires the Air Resources Board (ARB) to provide each region of the state with greenhouse gas (GHG) emission reduction targets for the automobile and light truck sector for 2035 and 2045, respectively, and makes related changes to ARB's oversight of sustainable communities strategies (SCS).

**EXISTING LAW**:

1) Requires ARB, pursuant to California Global Warming Solutions Act of 2006 [AB 32 (Núñez), Chapter 488, Statutes of 2006], to adopt a statewide GHG emissions limit equivalent to 1990 levels by 2020 and adopt regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorizes ARB to permit the use of market-based compliance mechanisms to comply with GHG reduction regulations once specified conditions are met. Requires ARB to approve a statewide GHG emissions limit equivalent to 85% below the 1990 level by 2045. (Health and Safety Code (HSC) 38500-38599.11)

2) Requires each Metropolitan Planning Organization (MPO) to adopt a regional transportation plan (RTP) directed at achieving a coordinated and balanced regional transportation system, including, but not limited to, mass transportation, highway, railroad, maritime, bicycle, pedestrian, goods movement, and aviation facilities and services. (Government Code (GC) 65080)

3) Requires ARB, no later than September 30, 2010, to provide each affected region with GHG emission reduction targets for the automobile and light truck sector for 2020 and 2035, respectively. Requires ARB to update the regional GHG emission reduction targets every eight years and authorizes ARB to revise the targets every four years. (GC 65080)

4) Requires the RTP to include an SCS prepared by each MPO, as specified, containing land use, housing, and transportation strategies that, if implemented, would allow the region to meet ARB's regional GHG emission reduction targets. (GC 65080)

5) Requires an MPO to prepare an Alternative Planning Scenario (APS) to the SCS, showing how GHG emission targets would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies, if the SCS is unable to reduce GHG emissions to achieve the GHG emission reduction targets established by ARB. (GC 65080)

6) Requires an MPO, after adoption, to submit an SCS to ARB for review, including the quantification of the GHG emission reductions the strategy would achieve and a description of the technical methodology used to obtain that result. Encourages the MPO to work with ARB until ARB concludes that the technical methodology operates accurately. Limits ARB's

review of the SCS to acceptance or rejection of the MPO's determination that the strategy would, if implemented, achieve the GHG emission reduction targets established by ARB. (GC 65080)

7) Creates the Solutions for Congested Corridors Program to fund projects that make specific performance improvements and are part of a comprehensive corridor plan designed to reduce congestion in highly traveled corridors. (Streets and Highways Code 2390)

**THIS BILL**:

1) Requires ARB, after January 1, 2024 and before September 30, 2026, to provide regional GHG emissions reduction targets for the automobile and light truck sector for 2035 and 2045, respectively, which shall be updated every eight years, as specified.

2) Establishes a 60 day timeline prior to starting the public participation process by which an MPO must submit a description of the technical methodology it intends to use to estimate the GHG emissions from its SCS to ARB.

3) Requires, rather than encourages, the MPO to work with ARB until ARB concludes that the technical methodology operates accurately. Requires ARB to approve the use of the methodology.

4) Establishes a timeline of 120 business days after adoption for an MPO to submit a SCS for ARB to review and requires ARB to approve the SCS. Requires ARB to include, rather than be limited to, acceptance or rejection of the MPO's determination that the strategy submitted would achieve the GHG emissions reduction targets established by ARB. Requires ARB to complete its review within 180, rather than 60, days.

5) Requires project nominations for the Solutions for Congested Corridors Program to demonstrate how the project would contribute to achieving the state's GHG emissions reduction targets.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

> California can longer wait to take bold action to reduce GHG's from the single largest sector of emissions, cars and light trucks. With emissions from the transportation sector continuing to rise despite increases in fuel efficiency and decreases in the carbon content of fuel, California will not achieve the necessary GHG emissions reductions without significant changes to how communities and transportation systems are planned, funded, and built. AB 6 makes technical good governance changes in the SB 375 process to help our regions and the state meet GHG reduction targets.

2) **Emissions**. Nearly 40% of California's GHG emissions are generated by the transportation sector, which includes both the light-duty (passenger) and medium- and heavy-duty fleets. Heavy-duty diesel trucks also contribute to unhealthy levels of ozone, inhalable particulate

matter, carbon monoxide, nitrous oxides, and sulfur dioxide, affecting local air quality. In the transportation sector, measures to reduce GHG emissions include requiring the use of low carbon fuels, cleaner vehicles, and strategies to promote sustainable communities and improved transportation choices that reduce vehicle miles traveled (VMT).

3) **Sustainable communities**. The Sustainable Communities and Climate Protection Act, enacted by SB 375 (Steinberg), Chapter 728, Statutes of 2008, requires MPOs to develop long-range plans – the SCS – to move transportation, housing, and land use decisions toward achieving GHG emissions reduction targets. Under the SB 375 process, ARB establishes regional GHG emissions reduction targets for each jurisdiction. MPOs must produce a SCS that accomplishes the following:

   - Identifies the general location of uses, residential densities, and building intensities within the region;
   - Identifies areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the RTP;
   - Identifies areas within the region sufficient to house an eight-year projection of the regional housing need for the region;
   - Identifies a transportation network to service the transportation needs of the region;
   - Gathers and considers the best practically available scientific information regarding resource areas and farmland in the region;
   - Considers the state housing goals, as specified; and,
   - Sets forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce GHG emissions from automobiles and light trucks to achieve the GHG emission reduction targets approved by ARB.

   Effective land use planning promotes an efficient use of land and other resources, as well as to achieve desirable outcomes such as the reduction of GHG emissions. More efficient land use presents the opportunity to help the state achieve its climate goals. How regions plan sustainable communities and promote improved transportation choices can reduce the increase in VMT in a region and, ideally, reduce VMT from current levels. ARB's 2022 Scoping Plan scenario for achieving 85% GHG emission reductions by 2045 calls for a 25% reduction in VMT by 2030 and a 30% reduction in VMT by 2045. This bill require improvements in land use planning because ARB estimates that continuing with current policies would lead to only a 4% reduction in VMT by 2045.

   The draft 2022 SCS progress report demonstrates the urgent need for land use planning improvements. The report states:

   > Unfortunately, since the first report, most trends demonstrate limited progress in meeting the [GHG emission reduction] targets through 2019. While some limited progress on VMT reduction has been observed within the largest MPO regions

where most Californians live, it has not been enough. There is an urgent need to build on the good work that has produced some positive change in these regions in light of the overall trajectory. Many trends moved in the wrong direction, away from advancing climate goals and showing worsening inequality.

4) **This bill**. Current law requires ARB to update regional GHG emissions targets every eight years, and allows ARB to update regional targets every four years. ARB last updated the GHG regional targets in 2018, adopting more aggressive SB 375 targets to support progress towards achieving the 2017 Scoping Plan goals. The targets direct SCSs to achieve, in aggregate, a 19% reduction in statewide per capita GHG emissions reductions by 2035, compared to 2005 levels, from passenger vehicles. This bill requires ARB to update regional GHG emission reduction targets no later than September 30, 2026, which will allow ARB to consider its recently adopted 2022 Scoping Plan. The Scoping Plan assumes a 25% reduction in VMTs in order to achieve the state's climate goals, which may result in more aggressive regional GHG emission reduction targets.

   Current law requires ARB, no later than September 30, 2010, to provide each affected region with GHG emission reduction targets for the automobile and light truck sector for 2020 and 2035, respectively. This bill extends the timeline for which ARB must set regional GHG emission reduction targets for the automobile and light truck sector to 2030 and 2045, respectively. This longer-term outlook aligns with recently passed climate goals that aim to achieve carbon neutrality by 2045.

5) **Double referral**. This bill was approved by the Assembly Transportation Committee on March 27th with a vote of 11-4.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

350 Bay Area Action
350 Humboldt Grass Roots Climate Action
California Environmental Voters
Center for Biological Diversity
Citizens Climate Lobby San Fernando Valley
CivicWell
Silicon Valley Youth Climate Action
Streets for All

**Opposition**

None on file

**Analysis Prepared by**: Elizabeth MacMillan / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 9 (Muratsuchi) – As Amended April 17, 2023

**SUBJECT**: Greenhouse gases: market-based compliance mechanism

**SUMMARY**: Requires the Air Resources Board (ARB) to initiate a regulatory process to evaluate potential updates to the market-based compliance mechanism (i.e., cap-and-trade regulation), as specified.

**EXISTING LAW**:

1) Requires ARB to adopt a statewide greenhouse gas (GHG) emissions limit equivalent to 1990 levels by 2020, to ensure that statewide GHG emissions are reduced to at least 40% below the 2020 statewide limit no later than December 31, 2030, and to adopt rules and regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. (Health and Safety Code (HSC) 38500, et seq.)

2) Declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. (HSC 38562.2)

3) Requires ARB to prepare and approve a scoping plan every five years for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs. (HSC 38561)

4) Requires any direct regulation or market-based compliance mechanism to achieve GHG reductions that are real, permanent, quantifiable, verifiable, and enforceable by ARB. (HSC 38562)

5) Authorizes ARB, in furtherance of achieving the 2020 statewide limit, to adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit GHG emissions, applicable from January 1, 2012, to December 31, 2020, to comply with GHG reduction regulations, once specified conditions are met. Under this authority, ARB adopted a cap-and-trade regulation which applies to large industrial facilities and electricity generators emitting more than 25,000 metric tons of carbon dioxide equivalent per year, as well as distributors of fuels, including gasoline, diesel, and natural gas. In 2017, AB 398 (E. Garcia), Chapter 135, Statutes of 2017, extended ARB's cap-and-trade authority to 2030, required ARB to establish a price ceiling on GHG emission allowances in consideration of specified factors, added several new conditions governing the management and allocation of allowances, and reduced limits on compliance offsets. (HSC 38562)

   Specifically, AB 398 requires ARB to:

   a) Evaluate and address concerns related to over-allocation of the number of available allowances;

b) Establish allowance banking rules that discourage speculation, avoid financial windfalls, and consider the impact on complying entities and volatility in the market;

c) Limit the use of offsets to 4% of a covered entity's compliance obligation from 2021 to 2025 and 6% from 2026 to 2030, of which no more than one-half may be sourced from projects that do not provide direct environmental benefits in state;

d) Report to the Legislature, in consultation with the Independent Emissions Market Advisory Committee (IEMAC), if two consecutive auctions exceed specified allowance price limits; and,

e) Report to the relevant fiscal and policy committees of the Legislature, including the Joint Committee on Climate Change Policies (JLCCCP), with updates on scoping plan adoption and implementation, as well as implementation of the cap-and-trade regulation.

6) Establishes the IEMAC within the California Environmental Protection Agency, and requires the IEMAC to hold a public meeting at least annually and report to both ARB and the JLCCCP on the environmental and economic performance of the cap and trade regulation and other relevant climate policies. (HSC 38591.2)

   Requires the IEMAC to be composed of at least five experts on emissions trading market design appointed according to the following:

   a) Three members appointed by the Governor;

   b) One member appointed by the Senate Committee on Rules;

   c) One member appointed by the Speaker of the Assembly; and,

   d) Requires IEMAC to include a representative from the Legislative Analyst's Office (LAO), and requires members to meet all of the following requirements:

      i) Have academic, nonprofit, and other relevant backgrounds; and,

      ii) Lack financial conflicts of interest with entities subject to the cap and trade regulation.

7) Requires the LAO to annually report to the Legislature on the economic impacts and benefits of the 2030 GHG emissions targets. (HSC 38592.6)

**THIS BILL**:

1) Requires ARB to initiate a regulatory process to evaluate potential updates to the cap-and-trade regulation, and requires regulatory changes to take effect no later than January 1, 2025.

2) Requires ARB's evaluation to focus on all of the following:

   a) Whether the supply of emission allowances and carbon offsets are consistent with a linear trajectory toward the statewide GHG emissions reduction goal as established in the most recent scoping plan;

b) Methods to automatically adjust emission allowance supply to reflect allowance auction clearance price;

c) The use of carbon offsets;

d) Emissions levels of locally harmful non-GHG gas air pollution from facilities subject to the program and methods to address this air pollution;

e) Rules for banking allowances to use for future compliance;

f) The cost-effectiveness and incentive for innovation relative to other GHG emission abatement strategies; and,

g) Recommendations made by the IEMAC, the environmental justice advisory committee (EJAC), and other recommendations as considered relevant by ARB.

3) Requires ARB, beginning January 1, 2028, and subsequently on a triennial basis aligned with compliance periods, and in consultation with the IEMAC and the EJAC, to conduct an evaluation of the cap-and-trade regulation.

4) Requires ARB, following an evaluation to present the results and any proposed revisions to the regulations at the ARB chairperson's annual appearance before the JLCCCP, and provide evaluation results and proposed revisions to the appropriate policy and fiscal committees of the Legislature.

5) Authorizes ARB, following the appearance of the chairperson before the JLCCCP, to revise the regulations implementing the cap-and-trade regulation.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Background**. Beginning on January 1, 2013, the cap-and-trade regulation set a firm, declining cap on total GHG emissions from sources that make up approximately 80% of all statewide GHG emissions. Sources included under the cap are termed "covered entities." The cap is enforced by requiring each covered entity to surrender one "compliance instrument" for every emissions unit (i.e., metric ton of carbon dioxide equivalent or $MTCO_2e$) that it emits at the end of a compliance period.

   Two main forms of compliance instruments are used: allowances and offsets. Allowances are generated by the state in an amount equal to the cap and may be "banked" (i.e., allowing current allowances to be used for future compliance). An offset is a credit intended to represent a real, verified, permanent, and enforceable emission reduction project from a source outside a capped sector (e.g., a certified carbon-storing forestry project). Allowances and offsets both have some controversy surrounding their design and implementation in California's cap-and-trade program.

   The oversupply and banking of allowances has been an ongoing debate for years. The banking of past years' allowances to fulfill future compliance obligations can become

problematic. According to the IEMAC, there are roughly 321 million allowances currently banked.

Offsets are widely used by individuals, corporations, and governments to mitigate their GHG emissions on the assumption that offsets reflect equivalent climate benefits achieved elsewhere. These climate-equivalence claims depend on offsets providing real and additional climate benefits beyond what would have happened, counterfactually, without the offsets project. In California, offsets constitute a significant source (6.3%) of the supply of compliance instruments in the market, with forest offsets producing about 80% of offset supply to date.

As noted above, AB 398 includes several provisions, including LAO reporting and the IEMAC, to address issues similar to the issues addressed by this bill. While the provisions of AB 398, IEMAC, LAO, and academic critiques may not be adequate to address the issue of over-allocation of allowances, the integrity of offsets, and the risk that cap-and-trade may not deliver GHG emissions reductions as promised, that is largely due to resistance within ARB.

The 2022 Scoping Plan Update dedicated only six pages to discussion of cap-and-trade, largely deferring discussions of cap-and trade's programmatic design and role in achieving the state's climate goals until the end of 2023 at the earliest, rather than addressing them as part of the broader Scoping Plan Update.

The issues raised by the LAO in its report *Assessing California's Climate Policies: The 2022 Scoping Plan Update* include (1) that the Scoping Plan Update lacks a clear strategy for meeting the 2030 GHG goal, (2) that the state's cap-and-trade program is not currently positioned to close the emission gap in 2030, and (3) recommending the Legislature require ARB to clarify the 2030 plan and consider cap-and-trade's role. According to LAO, the Scoping Plan fails to specify the mix of regulations and investments that will be necessary to achieve the stated emissions reductions. Regarding cap-and-trade, the LAO found that the program is not currently positioned to make up for any significant shortfall in emissions reductions from other programs. In California's complex climate policy landscape, cap-and-trade has historically played a role as a "backstop" to ensure emission reduction targets would be met, even as other more targeted policies reduce emissions to varying degrees. However, the LAO raises concerns that given a number of factors (the number of banked allowances in circulation, the increasing ambition of the 48% 2030 target, and greater-than-predicted emissions reductions across covered sectors, to name a few), the program is not sufficiently stringent to drive real emissions reductions. This raises important questions about the role cap-and-trade is expected to play in reaching the state's climate goals. Unfortunately, the 2022 Scoping Plan Update did not specify that role, instead opting to provide a "status update" to the Legislature by the end of 2023.

2) **Author's statement**:

AB 9 seeks to improve the cap-and-trade program by requiring ARB to conduct a review of the program to ensure that it is tailored to meet its objectives to take effect no later than January 1, 2025. AB 9 would also require ARB to evaluate the use of offsets, adopt public banking metrics, and track the number of unused compliance instruments.

Numerous stakeholders and studies have raised questions about cap-and-trade's ability to deliver its planned emission reductions, primarily citing a supply-demand imbalance with

its compliance instruments or allowances. Given the central role that cap-and-trade plays in helping California meet its GHG emission reduction goal of 85% below 1990 levels by 2045, it is imperative to ensure ARB is regularly measuring the performance of the cap-and-trade program against the objective and recalibrating accordingly.

In a recent Joint Hearing of the JLCCCP, Assembly Natural Resources, and Senate Environmental Quality, ARB announced they have begun the informal regulatory review process to review the cap-and-trade program. AB 9 ensures legislative oversight of this process and accountability that a timeline is met to ensure the program is tailored to meet its objectives.

3) **Prior legislation**:

AB 2793 (Muratsuchi, 2022) required ARB to evaluate the cap-and-trade program every three years, as specified, to determine the program's effectiveness in meeting GHG emission reduction goals. AB 2793 passed this committee, but later failed passage on the Assembly Floor.

SB 1391 (Kamlager, 2022) required ARB to review the cap-and-trade program every three years, as specified. SB 1391 passed this committee, but later failed passage on the Assembly Floor.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

Environmental Defense Fund

**Opposition**

None on file

**Analysis Prepared by**: Lawrence Lingbloom / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 241 (Reyes) – As Amended March 23, 2023

**SUBJECT**: Clean Transportation Program: Air Quality Improvement Program: funding

**SUMMARY**: Reauthorizes various fees that fund the Air Quality Improvement Program (AQIP), the Clean Transportation Program (CTP), and the Enhanced Fleet Modernization Program (EFMP). Makes various revisions to AQIP and CTP, including requiring that 50% of moneys appropriated to the CTP be expended for programs and projects that directly benefit or serve residents of disadvantaged and low-income communities and low-income Californians, and at least 50% of the funds for tangible location-based investments to be expended in disadvantaged and low-income communities.

**EXISTING LAW**:

1) Requires the Air Resources Board (ARB), pursuant to California Global Warming Solutions Act of 2006 [AB 32 (Núñez), Chapter 488, Statutes of 2006], to adopt a statewide greenhouse gas (GHG) emissions limit equivalent to 1990 levels by 2020 and adopt regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorizes ARB to permit the use of market-based compliance mechanisms to comply with GHG reduction regulations once specified conditions are met. Requires ARB to approve a statewide GHG emissions limit equivalent to 85% below the 1990 level by 2045. (Health and Safety Code (HSC) 38500-38599.11)

2) Establishes the CTP, administered by the California Energy Commission (CEC), to provide competitive grants, revolving loans, loan guarantees, loans, or other appropriate funding measures to specified entities to develop and deploy innovative technologies that transform California's fuel and vehicle types to attain the state's climate change policies. States that the program emphasizes developing and deploying technologies and alternative and renewable fuels in the marketplace, without adopting any one preferred fuel or technology. Sunsets CTP on January 1, 2024. (HSC 44272)

3) Establishes the Air Quality Improvement Fund in the State Treasury, to be administered by ARB, upon appropriation, to administer the AQIP. (HSC 44274.5)

4) Establishes the Alternative and Renewable Fuel and Vehicle Technology (ARFVT) Fund in the State Treasury, to be administered by CEC, to administer the CTP. (HSC 44215-44216)

5) Requires ARB to adopt a program (the EMFP) in consultation with the Bureau of Automotive Repair, that allows for the voluntary retirement of passenger vehicles and light-duty and medium-duty trucks that are high polluters with sufficient remaining life, with guidelines ensuring compensation of at least $1,500 for low-income motor vehicle owners and not more than $1,000 for all other motor vehicle owners. (HSC 44125)

6) Establishes the AQIP, administered by ARB in consultation with local air districts, to fund projects to reduce criteria air pollutants and provide funding for research to determine and improve the air quality impacts of alternative transportation fuels and vehicles, vessels, and

equipment technologies. Allows ARB to give funding preference to projects that reduce criteria or toxic air pollutants, regional air quality improvements, clean alternative fuels and vehicle technologies, climate change benefits, market transformation of California's vehicle or equipment fleet to use low-carbon or zero-emission technologies, and leverage private capital investments. (HSC 44274)

7) Increases, beginning July 1, 2008, the smog abatement fee by $8 and requires $4 to be deposited in the Air Quality Improvement Fund and $4 to be deposited in the ARFVT Fund. Sunsets the fee increase on January 1, 2024. (HSC 44060.5)

8) Increases, beginning July 1, 2008, the vehicle registration fee by $3 and requires $2 of the increase to be deposited in the ARFVT Fund and $1 to be deposited into the Enhanced Fleet Modernization Subaccount. Sunset the fee increase on January 1, 2024. (Vehicle Code (VEH) 9250.1)

9) Increases, beginning July 1, 2008, the identification plate fee by $5 and requires $2.50 of the increase to be deposited into the ARFVT Fund and $2.50 to be deposited into the Air Quality Improvement Fund. Sunsets the fee increase on January 1, 2024. (VEH 9261.1)

10) Increases, beginning July 1, 2008, the even-numbered year vessel registration fee by $10 and requires $5 of the increase to be deposited into the ARFVT Fund and $5 to be deposited into the Air Quality Improvement Fund. Sunsets the fee increase on January 1, 2024. (VEH 9853.6 (a))

11) Increases, beginning July 1, 2008, the odd-numbered year vessel registration fee (VEH 9853 (b)(2)] by $20 and requires $10 of the increase to be deposited into the ARFVT Fund and $10 to be deposited into the Air Quality Improvement Fund. Sunsets the fee increase on January 1, 2024. (VEH 9853.6 (b))

**THIS BILL**:

1) Extends the sunset on the following fees until January 1, 2035:

   a) The $8 increase to the smog abatement fee;

   b) The $3 increase in the vehicle registration fee;

   c) The $10 increase in the fee for even-numbered vessel registration; and,

   d) The $20 increase in the fee for odd-numbered vessel registration.

2) Makes the following changes to the CTP:

   a) Specifies that the goals of the program shall be to advance the state's clean transportation, equity, air quality, and climate emission policies, including, the Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program; the short-lived climate pollutant strategy; the mobile source strategy; the Clean Cars 4 All Program; the strategy to reduce emissions of toxic air contaminants and criteria air pollutants in communities affected by a high cumulative exposure burden; preserving public access when power facilities are located in the coastal zone; the study on barriers for low-

income customers access to zero-emission transportation options; and, the Clean Freight Corridor Efficiency Assessment.

b) Requires CEC, by January 1, 2025, when developing the CTP investment plan, to ensure investments support:

i) Annually increasing deployment of infrastructure and other projects that advance or support the deployment of medium- and heavy-duty vehicles to meet clean transportation, equity, air quality, and climate emission goals; and,

ii) Annually increasing deployment of light-duty vehicle infrastructure technology to fill deployment gaps, as specified.

3) Repeals the requirement that CEC provide preference to projects that:

a) Provide a measurable transition from the nearly exclusive use of petroleum fuels to a diverse portfolio of viable alternative fuels;

b) Are consistent with existing and future state climate change policy and low-carbon fuel mandates;

c) Ability to decrease the discharge of water pollutants or other harmful substances;

d) Ability to reduce GHG emissions by at least 10% from current reformulated gasoline and diesel fuel standards; and,

e) Use of alternative fuel blends of at least 20%.

4) Requires CEC, on and after January 1, 2025, to expend at least 50% of moneys appropriated to the CTP on programs and projects that directly benefit or serve residents of disadvantaged and low-income communities and low-income Californians, and at least 50% of the funds for tangible location-based investments to be expended in disadvantaged and low-income communities.

5) Specifies that eligible programs and projects that meet the requirements of bullet (4) above include:

a) Programs that fill gaps in the equitable distribution of light-duty charging infrastructure;

b) Programs deploying publicly accessible or shared charging or refueling stations serving low-income or disadvantaged customers;

c) Infrastructure for public transportation and school bus electrification;

d) Programs that support the deployment of clean medium- and heavy-duty vehicles or other programs that displace local air pollution in disadvantaged and low-income communities;

e) Financing assistance and vehicle purchase, charging, or fueling incentives for customers in disadvantaged or low-income communities;

f) Multilingual marketing, education, and outreach designed to increase awareness and adoption of clean mobility options; and,

g) Programs that create high-quality jobs related to supporting new clean technology in transportation and reduce household energy burdens related to vehicle charging.

6) Requires CEC to consult with the disadvantaged community advisory group and the CTP Investment Plan advisory body.

7) Revises the primary purpose of AQIP to fund projects to reduce criteria pollutants in the logistics, trucking, and port sectors, improve air quality in nonattainment basins, and improve the air quality impacts of zero-emission transportation fuels and vehicles, vessels, and equipment technologies.

8) Removes from AQIP eligibility:

a) Projects that provide research to determine the air quality impacts of alternative fuels and projects that study the life-cycle impacts of alternative fuels and conventional fuels, the emissions of biofuel and advanced reformulated gasoline blends, and air pollution improvements and control technologies for use with alternative fuels and vehicles; and,

b) Projects that augment the University of California's agricultural experiment station and cooperative extension programs for research to increase sustainable biofuels production and improve the collection of biomass feedstock.

9) Adds to AQIP eligibility precommercial demonstrations of advanced vehicles, engine, equipment, and transportation systems.

10) Makes related technical and conforming amendments to existing law.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

AB 241 would modernize the Clean Transportation Program at the California Energy Commission (CTP) and the Air Quality Improvement Program (AQIP) at the California Air Resources Board to be zero-emission focused, address the gaps in light-duty zero emission vehicle (ZEV) charging infrastructure, support medium- and heavy-duty zero-emission vehicles, and create dedicated funding for low-income & disadvantaged communities. The bill would also reauthorize the fees that support these programs until 2035 which aligns with the Governor's Executive Order on zero-emission vehicle sales in California.

There is a need to focus public investments related to ZEVs in sectors of the market where private industry is unable or unwilling to go-such as ZEV infrastructure for disadvantaged low-income communities and multiunit dwellings. Funding for these important programs will expire at the end of this

year and we need to modernize them so they are supporting California's modern needs.

2) **California's emission reduction goals**. California has ambitious emissions reduction goals and has established numerous targets and programs to achieve the goals. State law requires ARB to approve a statewide GHG emissions limit equivalent to 85% below the 1990 level by 2045. The state has adopted a short-lived climate pollutant emissions reduction targets, including a 40% reduction in methane emissions, 40% reduction in hydrofluorocarbon gases, and 50% reduction in anthropogenic black carbon below 2013 levels by 2030. The law also requires the state to achieve carbon neutrality by 2045.

   In addition to specific emissions reduction goals, the state has adopted specific goals to increase the supply of ZEVs and charging and fueling stations. In a series of executive orders, the Governor requires, by 2025, 1.5 million ZEVs on the road, 200 hydrogen-fueling stations, and 250,000 electric vehicle chargers. By 2030, the state is directed to have 8 million ZEVs on the road. By 2035, 100% of new passenger vehicles and trucks are required to be ZEVs. By 2045, 100% of operating medium- and heavy-duty trucks and buses are required to be zero emission where feasible.

3) **Transportation emissions**. Nearly 40% of California's GHG emissions are generated by the transportation sector, which includes both the light-duty (passenger) and medium- and heavy-duty vehicles. Heavy-duty diesel trucks also contribute to unhealthy levels of ozone, particulate matter, carbon monoxide, nitrogen oxides, and sulfur dioxide, affecting local air quality. Measures to reduce GHG emissions in the transportation sector include requiring the use of low carbon fuels, cleaner vehicles, and strategies to promote sustainable communities and improved transportation choices that reduce growth in number of vehicle miles traveled.

4) **Clean Transportation Program**. CTP was established by the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 [AB 118 (Núñez), Chapter 750, Statutes of 2007] to provide funding to develop and deploy innovative advanced transportation and fuel technologies to help the state achieve its climate change, petroleum reduction, and ZEV goals. CTP invests up to $100 million annually in a broad range of transportation and fuel projects throughout the state. Under CTP, CEC leverages public and private investments to support the adoption of cleaner transportation using alternative and renewable fuels.

5) **Air Quality Improvement Program**. AQIP was also established by AB 118 to reduce GHG, criteria pollutant, and toxic air contaminant emissions through the deployment of advanced technology and clean transportation. The program is funded by the AQIP Guidelines, which regulate the administration and implementation of the program, and annual funding plans, which establish ARB's priorities for each funding cycle, describes the projects ARB intends to fund, and sets funding targets for each project. The 2022-23 Funding Plan allocates $326 million for vehicle purchase incentives, $55 million for mobility investments, over $2 billion for clean trucks and buses, and $135 million for demonstrations and commercial harbor crafts.

6) **Enhanced Fleet Modernization Program.** EFMP is a voluntary vehicle scrap program that promotes advanced technology for low-income California residents that live in an air district that implements an EFMP. Recipients of these incentive funds must scrap their older, higher

polluting vehicle and purchase a cleaner vehicle or they can receive an eligible mobility option, such as transit passes or a bicycle, in lieu of a replacement vehicle.

7) **This bill**. This bill updates and revises the CTP and AQIP to focus on medium- and heavy-duty ZEVs and the infrastructure needed to support their use. The bill also requires increased communication with disadvantaged communities, and codifies CEC's goal of directing 50% of funds be spent on CTP programs to serve or benefit residents of disadvantaged and low-income communities.

   In order to ensure continued funding of these programs and the EMFP, this bill reauthorizes the fees that fund the programs through 2035. Without legislation to extend the funding, these fees would sunset on January 1, 2024.

8) **Double referral**. This bill was approved by the Assembly Transportation Committee on April 17 with a vote of 11-3.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

California Environmental Voters
Coalition for Clean Air
Communities for a Better Environment
Environment California
Greenlining Institute
Natural Resources Defense Council
Plug In America

**Opposition**

California Hydrogen Business Council
California Hydrogen Coalition
Howard Jarvis Taxpayers Association

**Analysis Prepared by**: Elizabeth MacMillan / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 324 (Pacheco) – As Amended March 27, 2023

**SUBJECT**: Gas corporations: renewable gas procurement

**SUMMARY**: Requires the Public Utilities Commission (PUC) to consider establishing procurement goals for "renewable hydrogen," as defined, for gas corporations and core transport agents, as specified.

**EXISTING LAW**:

1) Defines "gas corporation" to include every corporation or person owning, controlling, operating, or managing any gas plant for compensation within this state, with exceptions. (Public Utilities Code (PUC) 222)

2) Defines "core transport agent" to include an entity that offers core gas procurement service to customers within the service territory of a gas corporation, but does not include a gas corporation, and does not include a public agency that offers gas service to core and noncore gas customers within its jurisdiction, or within the service territory of a local publicly owned gas utility. "Core transport agent" includes the unregulated affiliates and subsidiaries of a gas corporation. (PUC 980(b))

3) Defines "green electrolytic hydrogen" as hydrogen produced through electrolysis, not including hydrogen manufactured using steam reforming or any other conversion technology that produces hydrogen from a fossil fuel feedstock. (PUC 400.2)

4) Requires the PUC, California Energy Commission (CEC), and Air Resources Board (ARB) to consider green electrolytic hydrogen an eligible form of energy storage and consider its potential uses. (PUC 400.3)

5) Requires the PUC, in consultation with ARB, to consider adopting specific biomethane procurement targets or goals for each gas corporation. (PUC 651)

6) Requires, pursuant to the Renewables Portfolio Standard (RPS), utilities and other retail sellers of electricity to procure 60% of their retail electricity sales from eligible renewable energy resources by 2030 and thereafter, including interim targets of 33% by 2020, 44% by 2024, and 52% by 2027. (PUC 399.11, et seq.)

7) Provides that RPS-eligible generation facilities must use biomass, solar thermal, photovoltaic, wind, geothermal, renewable fuel cells, small hydroelectric, digester gas, limited non-combustion municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current. (Public Resources Code (PRC) 25741)

8) Establishes a policy that eligible renewable energy resources and zero-carbon electric generating facilities will supply all electricity procured to serve California customers by December 31, 2045, and directs the PUC, CEC, and ARB to incorporate this policy into all relevant planning and programs. (PUC 454.53)

**THIS BILL**:

1) Requires the PUC to open a new proceeding, or a new phase of an existing proceeding, to do all of the following:

    a) Consider establishing renewable hydrogen procurement goals for each gas corporation and core transport agent;

    b) Consider requiring each gas corporation and core transport agent to annually procure a proportionate share of renewable hydrogen to meet the established procurement goals; and,

    c) Before establishing renewable hydrogen procurement targets or goals, make the following findings:

        i) The targets or goals are a cost-effective means of achieving the forecasted reduction in the emissions of short-lived climate pollutants and other greenhouse gases (GHG), as specified;

        ii) The targets or goals comply with all applicable state and federal laws;

        iii) The safety risk of using renewable hydrogen in pipelines will be appropriately regulated, mitigated, and monitored. Prohibits transport of hydrogen in pipelines until the PUC acts to set safety standards and the pipelines meet those standards; and,

        iv) Combustion end uses that may be affected by the addition of hydrogen to pipelines are appropriately regulated and controlled to avoid increased emissions of oxides of nitrogen or any other air pollutant.

2) Defines "renewable hydrogen" as follows:

    a) The production process uses the following inputs:

        i) Electricity that is consistent with the RPS; and,

        ii) Material feedstock that is water, biomass, digester gas, diverted organic waste, or landfill gas.

    b) For a production process that uses landfill gas or digester gas as feedstock, that the procurement of that gas is consistent with specified RPS requirements regarding pipeline biomethane.

    c) For a production process that uses biomass to generate electricity or to provide feedstock, that the production of electricity or feedstock is by biomass conversion, as defined (i.e., not combustion), and, for forest waste biomass, is consistent with the guidelines adopted by the PUC to define the byproducts of sustainable forestry.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

> AB 324 aims to decrease the price of renewable hydrogen through procurement mandates of this important energy source. Following a process similar to the RPS, the goals are to jump start production to decarbonize the existing natural gas system and lower the cost of the fuel for a potential dedicated hydrogen system in the future. Diversifying the utilities' renewable procurement portfolios to include hydrogen reduces risk, improves California's chances of reaching its ambitious carbon-neutrality goals, increases competition between decarbonization pathways, and provides Californians access to a decarbonization pathway that many expect to provide lower long-term costs. We know that achieving carbon neutrality will be quite a challenge, but as legislators, it's our responsibility to clear a path for new technologies that will improve the lives of all Californians.

2) **Hydrogen is not a panacea**. The environmental impacts of hydrogen, including effects on climate and air quality, can range from very favorable to very unfavorable, depending on production, delivery, end use, and the fuel the hydrogen is replacing. For example, hydrogen produced with fossil fuels and used in a combustion application that replaces a renewable energy source is not a good environmental solution. However, hydrogen produced with zero-carbon energy and used in a zero-emission application that replaces diesel combustion has clear climate and air quality benefits.

   This bill focuses on renewable hydrogen, which, if properly defined, promises climate and air quality benefits on the production side. However, renewable hydrogen is far more expensive than conventional hydrogen and natural gas, and isn't competitive with other renewable energy sources without incentives and/or mandates. To promote renewable hydrogen, this bill proposes that the PUC would determine amounts each gas corporation and core transport agent must procure, presumably to be injected into the gas corporations' common carrier pipelines, where it would blend with natural gas. In this case, the hydrogen would be destined for combustion end uses, which does not provide an air quality benefit.

3) **Hydrogen production**. The source of the hydrogen and the source of the energy used to split hydrogen plays a significant role in determining the lifecycle emissions associated with hydrogen use. Today, there are several means of hydrogen production and it is likely that these will evolve as technology advances.

   "Green" hydrogen can result in almost no GHG emissions. Produced by electrolyzing water, green hydrogen is made using 100% renewable electricity to split hydrogen from water molecules. Less than 0.1% of hydrogen production globally comes from water electrolysis.

   Ninety six percent of the hydrogen today is considered to be gray hydrogen. Gray hydrogen is produced by heating natural gas, or methane, with steam to form syngas (a mixture of hydrogen and carbon monoxide and carbon dioxide). The syngas is separated to produce hydrogen. This process results in a relatively high release of GHGs.

Blue hydrogen attempts to mitigate some of the GHG emission release during the production of gray hydrogen by pairing production with carbon capture and storage. However, not all carbon dioxide emissions can be captured, and some carbon dioxide is emitted during the production of blue hydrogen. Carbon capture increases the cost and inefficiency of the production of blue hydrogen.

Currently hydrogen branded "renewable" is produced mainly by steam methane reformation of biomethane from North American landfills. SB 1505 (Lowenthal), Chapter 877, Statutes of 2006, requires 33% of the hydrogen produced for fueling stations that receive state funds be made from eligible renewable energy resources, including biomass, digester gas, landfill gas, solar, and wind. However, compliance is achieved largely on paper, through the use of credits from out of state renewable energy sources, rather than direct production and use of renewable hydrogen in California.

4) **Hydrogen delivery and end use**. Expanding end uses for hydrogen depends on reliable methods for safely storing and transporting it in large quantities. It is not as simple as injecting hydrogen directly into the natural gas pipeline. Hydrogen can embrittle and crack gas pipeline materials. Older pipelines may be compromised as the percentage of hydrogen in the pipeline increases, due to the operating pressure of the pipeline needing adjustment to accommodate the smaller gas.

   While hydrogen is not explicitly barred from pipelines, the PUC's Standard Renewable Gas Interconnection Tariff currently limits the amount of pure hydrogen gas concentration injected into intrastate pipelines to 0.10%. Any concentration above that amount would pass the "trigger level," and testing for hydrogen concentration must for done for all sources of biomethane without exception. As a result, pure hydrogen is currently not injected into common carrier pipelines. However, the PUC has had a $1.5 million contract with the University of California Riverside and the Gas Technology Institute to conduct experimental work on the safety and efficacy of injecting hydrogen into California's pipelines. In July 2022, researchers issued their final report finding:

   - Hydrogen blends of up to 5% in the natural gas stream are generally safe. However blending more hydrogen in gas pipelines overall results in a greater chance of pipeline leaks and the embrittlement of steel pipelines.
   - Hydrogen blends greater than 5% could require modifications of appliances such as stoves and water heaters to avoid leaks and equipment malfunction.
   - Hydrogen blends greater than 20% present a higher likelihood of permeating plastic pipes, which can increase the risk of gas ignition outside the pipeline.
   - Due to the lower energy content of hydrogen gas, more hydrogen-blended natural gas will be needed to deliver the same amount of energy to users compared to pure natural gas.

   Despite these findings, in December 2022, the PUC ordered California's gas corporations to launch pilot projects studying the safety impacts of blending hydrogen into the methane pipeline system, with the hydrogen blend making up to 20% of the gas in the system. The Decision (D.22-12-057) ordered the gas corporations to file an application proposing their

pilots by December 2024. The Decision also established an interim "clean renewable hydrogen" definition as emitting no more than "4 kilograms (kg) of carbon dioxide equivalent ($CO_2e$) per kg of hydrogen produced on a life-cycle basis and not using fossil fuel as a feedstock or production energy source." That definition matches the definition for clean hydrogen eligible for federal production incentive payments as established in the Inflation Reduction Act of 2022, while adding a loosely defined "renewable" standard that is ultimately contingent on further deliberation.

5) **Renewable hydrogen definition**. The definition of renewable hydrogen is a primary reason for opposition from environmental and environmental justice advocates, who object to endorsing the production of hydrogen using biogas or biomass feedstocks. The definition in this bill is similar to SB 733 (Hueso), which was approved by this committee in 2022. The definition requires hydrogen production to use electricity that is "consistent with" (rather than "eligible under") the RPS and permits biomass and biogas feedstocks. In contrast, the definition of green hydrogen in AB 1550 (Bennett), pending in this committee, is limited to production via electrolysis, using electricity that is RPS-eligible. It should be noted that this bill defines renewable hydrogen for gas procurement purposes and does not specifically make renewable hydrogen an eligible fuel under the RPS.

6) **Prior and related legislation**:

   SB 733 was substantially similar to this bill. SB 733 also required the PUC to consider establishing procurement goals for renewable hydrogen. Additionally, SB 733 required the PUC to evaluate whether to authorize a gas corporation to recover expenses from infrastructure built to deliver biomethane, renewable hydrogen, or both as part of the corporation's rate base paid for by their customers. SB 733 passed this committee, but was later held in the Assembly Appropriations Committee.

   AB 1550 requires all hydrogen produced and used in California for the generation of electricity or fueling of vehicles shall be green hydrogen by 2045. AB 1550 defines green hydrogen for purposes of electricity generation as hydrogen produced by electrolysis using RPS-eligible electricity. AB 1550 is pending in this committee.

7) **Double referral**. This bill passed the Assembly Utilities and Energy Committee, with amendments, by a vote of 10-0 on March 22.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

Southern California Gas Company (sponsor)
Arbor Energy
Bioenergy Association of California
Brad Thompson Company
California State Pipe Trades Council
Coalition for Renewable Natural Gas
Los Angeles County Sanitation Districts
Northeast-Western Energy Systems
Raven SR
Rincon Band of Luiseno Indians

San Joaquin Renewables
Stellar J
TSS Consultants
USA Water and Power
Yosemite Clean Energy

**Opposition**

350 Bay Area Action
350 Humboldt
Agricultural Council of California
Agricultural Energy Consumers Association
Air Products and Chemicals
Asian Pacific Environmental Network (APEN)
California Cotton Ginners & Growers Association
California Environmental Voters
California Farm Bureau
California Fresh Fruit Association
California League of Food Producers
California Manufactures & Technology Association
California Tomato Growers Association
Center for Biological Diversity
Climate Action California
Communities for A Better Environment
Earthjustice
Far West Equipment Dealers Association
Leadership Council for Justice and Accountability
Sierra Club California
Silicon Valley Youth Climate Action
The Climate Center
The Greenlining Institute
The Utility Reform Network (TURN) (unless amended)
Western Agricultural Processors Association

**Analysis Prepared by**: Lawrence Lingbloom / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 678 (Alvarez) – As Amended March 27, 2023

**SUBJECT**: Biomethane procurement targets or goals: core transport agents

**SUMMARY**: Requires the Public Utilities Commission (PUC) to consider adopting biomethane procurement targets or goals for core transport agents (an entity that offers core gas procurement service to customers within the service territory of a gas corporation).

**EXISTING LAW**:

1) Requires the PUC to consider adopting specific biomethane procurement targets or goals for each gas corporation, as specified. (Public Utilities Code (PUC) 651)

2) Defines "gas corporation" to include every corporation or person owning, controlling, operating, or managing any gas plant for compensation within this state, with exceptions. (PUC 222)

3) Defines a "core transport agent" (CTA) as an entity that offers core gas procurement service to customers within the service territory of a gas corporation, but does not include a gas corporation, and does not include a public agency that offers gas service to core and noncore gas customers within its jurisdiction, or within the service territory of a local publicly owned gas utility. "Core transport agent" includes the unregulated affiliates and subsidiaries of a gas corporation. (PUC 980)

**THIS BILL** requires the PUC to consider adopting biomethane procurement targets or goals for core transport agents consistent with biomethane procurement targets or goals established for gas corporations.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Background**. A "core transport agent" is an entity that offers core gas procurement service to customers within the service territory of a gas corporation, but is neither a gas corporation nor a public agency that offers gas service. CTAs include the unregulated affiliates and subsidiaries of a gas corporation. CTAs are analogous to community choice aggregators (CCAs), but provide gas for customers instead of electricity. In order to provide gas through the utility's distribution lines, the CTAs must enter into a contract with the utility subject to certain requirements. CTAs are required to register with the PUC, but the PUC does not regulate the rates that CTAs charge for natural gas service. There are currently 43 registered CTAs operating in California serving a variety of customers, from residential to large commercial and industrial. Recent efforts to decarbonize the natural gas system have not applied to CTAs, shifting the costs of ongoing climate efforts disproportionately to gas corporation customers and potentially introducing a financial incentive for gas corporation customers to switch their service to a CTA.

The PUC's February 2022 decision on the implementation of biomethane targets under SB 1440 (Hueso), Chapter 739, Statutes of 2018, adopted a short-term target for biomethane procurement of 17.6 billion cubic feet (Bcf) annually by 2025. The decision distributed this procurement among the investor-owned gas utilities (i.e., Southern California Gas Company, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southwest Gas Corporation), holding each responsible for a percentage of the 17.6 billion cubic feet according to their respective Cap-and-Trade allowance shares: Southern California Gas Company 49.26%, Pacific Gas and Electric Company 42.34%, San Diego Gas & Electric Company 6.77%, and Southwest Gas Corporation 1.63%.

2) **Author's statement**:

> In 2018, Senator Ben Hueso introduced SB 1440, which established the framework for the PUC to consider adopting specific biomethane procurement targets or goals for utility companies. Requiring utilities to procure biomethane generated from organic waste reduces landfill waste, open burning of agricultural and forest waste, and wildfires, which provides enormous benefits for public health and addresses the reduction of climate super pollutants methane and black carbon.
>
> Unfortunately, CTAs were not included in the legislation, leaving them without biomethane procurement requirements. California is the first state to establish a Renewable Gas Standard, but to achieve the desired intended results, legislation needs to be enacted to ensure that all core gas customers participate in the state's decarbonization efforts fairly and equitably. AB 678 supports decarbonization efforts while leveling the playing field for all gas customers by requiring the PUC to establish biomethane procurement targets for CTAs.

3) **Will adding CTAs increase total biomethane procurement targets, or spread the costs of existing targets**? Opposition to this bill centers on this question and the potential increased costs of larger biomethane procurement targets. The bill seems to leave the answer to the PUC. Under SB 1440, the PUC has discretion to set the procurement targets, as well as to determine the proportionate share of each gas utility. In adding CTAs, the PUC could increase the overall procurement targets adopted pursuant to SB 1440 or it could keep the existing targets and change the allocation and assign a proportionate share to CTAs.

4) **Double referral**. This bill passed the Assembly Utilities and Energy Committee, with amendments, by a vote of 12-0 on March 22.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

San Diego Gas & Electric Company (sponsor)
California Hydrogen Business Council
Coalition for Renewable Natural Gas
Los Angeles County Sanitation Districts

**Opposition**

Agricultural Council of California
Agricultural Energy Consumers Association
California Cotton Ginners & Growers Association
California Farm Bureau
California Fresh Fruit Association
California League of Food Producers
California Manufactures & Technology Association
California Tomato Growers Association
Far West Equipment Dealers Association
Nisei Farmers League
Western Agricultural Processors Association

**Analysis Prepared by**: Lawrence Lingbloom / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 841 (Berman) – As Amended April 17, 2023

**SUBJECT**: State Energy Resources Conservation and Development Commission: Industrial Heat Electrification Roadmap

**SUMMARY**: Requires the California Energy Commission (CEC) to identify various subsectors of industrial emissions in California and identify barriers to industrial electrification. Requires CEC to submit to the Legislature an industrial heat electrification roadmap (Roadmap) on or before January 1, 2025.

**EXISTING LAW**:

1) Requires the Air Resources Board (ARB), pursuant to California Global Warming Solutions Act of 2006 [AB 32 (Núñez), Chapter 488, Statutes of 2006], to adopt a statewide GHG emissions limit equivalent to 1990 levels by 2020 and adopt regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorizes ARB to permit the use of market-based compliance mechanisms to comply with GHG reduction regulations once specified conditions are met. Requires ARB to approve a statewide GHG emissions limit equivalent to 85% below the 1990 level by 2045. (Health and Safety Code (HSC) 38500-38599.11)

2) Requires ARB to prepare, adopt, and update an inventory of GHG emissions from different sectors, including estimates for carbon dioxide, methane, nitrous oxide, and fluorinated gases with high global warming potential. (Public Resources Code (PRC) 39607.4)

3) Establishes the Industrial Decarbonization and Improvements to Grid Operations (INDIGO) Program to provide incentives for the implementation of projects that provide significant benefits to the electrical grid, reduce GHG emissions, achieve the state's clean energy goals, and exceed compliance requirements. (PRC 25662-25662.6)

4) Requires the Public Utilities Commission (CPUC) to establish a renewable portfolio standard (RPS) requiring all retail sellers, as defined, to procure a minimum quantity of electricity products from eligible renewable energy resources, as defined, so that the total kilowatt hours of those products sold to their retail end-use customers achieves 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. (Public Utilities Code (PUC) 399.11)

5) Establishes that the policy goal of the state that eligible renewable energy resources and zero-carbon resources supply 100% of all retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045. (PUC 454.53)

6) Defines under-resourced communities as disadvantaged communities pursuant to HSC 39711, low-income communities pursuant to HSC 39713, or disadvantaged communities pursuant to PRC 75005. (PRC 71130)

**THIS BILL**:

1) Requires CEC, on or before January 1, 2025, to submit the Roadmap to the Legislature.

2) Requires the Roadmap to, at a minimum:

   a) Identify the industrial subsectors for various California facilities that use heat application equipment operating at or below 1,000 degrees Celsius and the facilities' locations;

   b) Identify, in consultation with ARB, the emissions associated with each industrial subsector identified;

   c) Assess the heat electrification feasibility and associated costs of electrifying heat application equipment and processes for each industrial subsector identified;

   d) Identify, in consultation with the California Public Utilities Commission (CPUC), industrial facilities in under-resourced communities that are able to be electrified by January 1, 2030;

   e) Quantify, in consultation with ARB, potential reductions in GHG emissions and toxic air pollutants, and commensurate health benefits, from electrifying the industrial subsectors identified;

   f) Quantify, in consultation with the California Workforce Development Board, the workforce necessary to support industrial electrification;

   g) Estimate electrical load growth under scenarios where 25%, 50%, and 75% of the facilities in subsectors identified transition to electric heat application equipment and processes; and,

   h) Identify, in consultation with the CPUC, barriers to industrial electrification and possible state agency solutions to reduce costs or reduce delays of industrial electrification that may include, but not be limited to, the use of distributed energy resources, infrastructure upgrades, and demand response programs, or accessing federal funding for industrial electrification. Authorizes CEC to consult, where feasible, with federal agencies to identify federal funding that may aid in reducing industrial electrification costs.

3) Requires the Roadmap to be submitted in accordance with state law, as specified.

4) States legislative findings and declarations regarding industrial heat emissions.

5) Sunsets the bill's provisions on January 1, 2028.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

   California is a leader in transitioning from combustion to zero-emission technologies in the electricity and transportation sectors, but industrial emissions

have largely remained unaddressed. Industrial emissions make up 23 percent of greenhouse gas emissions in California, which is the second largest source behind transportation. Unfortunately, emissions reported from industrial sources have remained flat or even risen in recent years. Moreover, these same sources also emit large quantities of criteria air pollutants and toxic air contaminants that contribute to the heavy air pollution that burdens primarily under-resourced communities. It is time for California to begin electrifying the state's industrial sector—a critical economic contributor to our state. AB 841 is a key first step for California to push the transition of our industrial sectors to zero-emission. This bill achieves this by tasking the California Energy Commission to prepare an Industrial Heat Electrification Roadmap. Planning for electrification will bring sustained economic growth to our industries and reduce heavy air pollution that burdens our most vulnerable communities.

2) **Industrial emissions**. ARB's GHG Emissions Inventory estimates the GHG emissions from major sectors in the state. According to the Inventory, from 2000-2020, industrial emissions comprised 23% of GHG total GHG emissions in the state, second only to the transportation sector, which accounted for 38%. Other major sectors included electricity (16%), agriculture and forestry (9%), residential (8%), and commercial (6%). Emissions from industrial sector are largely driven by fuel combustion from sources like refineries, oil and gas production, cement plants, and the portion of cogeneration emissions attributed to thermal energy output. Refineries and hydrogen production are the largest individual source within this sector, contributing 54% of the sector's total emissions. Industrial GHG emissions are trending downward. According to ARB, industrial sector emissions have declined by 9% since 2020, but additional reductions will be necessary to achieve the state's emissions reduction goals.

3) **Industrial Decarbonization and Improvements to Grid Operations**. The INDIGO Program was established by AB 209 (Budget), Chapter 251, Statutes of 2022, to contribute to economy-wide decarbonization by providing incentives for projects that enhance grid reliability, electrify processes that rely on fossil fuels, incorporate renewable resources, increase energy efficiency, or develop and deploy novel decarbonization technologies.

4) **Food Production Investment Program**. Established in 2018, the Food Production Investment Program (FPIP) provides grants to reduce GHG emissions at food production facilities through the adoption of advanced energy technologies. According to CEC, the food processing industry is one of California's largest energy users and a significant producer of GHG emissions. FPIP's goals include helping food producers achieve a low-carbon future, demonstrating the reliability and effectiveness of advanced energy decarbonization technologies and strategies, enhance the electric grid, especially during peak periods, and benefit or improve public health and the environment.

5) **Cement decarbonization**. Cement is one of the most widely manufactured products in the world, and its production is extremely energy intensive to achieve the necessary tempteratures. Cement production is hard to decarbonize because a majority of emissions result from the chemical process of limestone calcination (removing carbon from limestone-calcium carbonate), rather than the combustion of fuels. Cement plans are also one of the few remaining markets for coal in the state. ARB is required to develop a comprehensive strategy, by July 1, 2023, to achieve a GHG emissions intensity 40% below baseline levels by 2035, and net-zero by 2045.

6) **The federal roadmap**. In September 2022, the United States Department of Energy published the *Industrial Decarbonization Roadmap*, which focuses on the five major sources of industrial emissions nationally: chemical manufacturing, petroleum refining, iron and steel manufacturing, food and beverage production, and cement production. The federal roadmap identifies strategies to significantly reduce GHG emissions in these sectors, including electrification of process heat using induction, radiative heating, or advanced heat pumps; electrification of high-temperature range processes such as those found in iron, steel, and cement making; and, replacing thermally-driven processes with electrochemical ones.

7) **This bill**. A significant source of emissions within the industrial sector is heat generation. From industrial bakeries to cement plants, heating processes require large amounts of energy. This bill is intended to create a strategy, the Roadmap, to reduce GHG emissions generated by the industrial sector by transitioning the sector from fossil fuels to electricity, which, under the state's ambitious goals, will be 60% renewable by 2030.

8) **Double referral**. This bill was approved by the Assembly Utilities and Energy Committee on April 12 with a vote of 15-0.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

350 Bay Area Action
350 Humboldt
Breathe Southern California
California Environmental Voters
Central California Asthma Collaborative
Climate Action California
Community Environmental Council
Edison International and Affiliates, including Southern California Edison
GreenLatinos
Menlo Spark
Natural Resources Defense Council
NextGen California
People's Collective for Environmental Justice
Sierra Club California
SoCal 350 Action
Sunflower Alliance
The Climate Center

**Opposition**

None on file

**Analysis Prepared by**: Elizabeth MacMillan / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 985 (Arambula) – As Amended April 10, 2023

**SUBJECT**: San Joaquin Valley Unified Air Pollution Control District: emission reduction credit system

**SUMMARY**: Requires the Air Resources Board (ARB) to conduct an analysis of the San Joaquin Valley Unified Air Pollution Control District's (District) emission reduction credit banks for specified air pollutants by January 1, 2027. Requires the District to revise the regulation establishing its emission reduction credit system to require existing and future emission reduction credits to expire after a specified time period.

**EXISTING LAW**:

1) Establishes the Federal Clean Air Act to regulate, reduce, and control air pollution nationwide, including national ambient air quality standards for major air pollutants, hazardous air pollutants standards, state attainment plans, stationary source emissions standards and permits, and enforcement provisions. (42 United States Code 7401)

2) Designates ARB as the state agency with the primary responsibility for the control of vehicular air pollution and air pollution control and air quality management districts with the primary responsibility for the control of air pollution from all sources other than vehicular sources. (Health and Safety Code (HSC) 39500 et seq.)

3) Requires the board of every air district to establish, by regulation, a system by which all reductions in the emission of air contaminants that are to be used to offset certain future increases in the emission of air contaminants be banked prior to use to offset future increases in emissions, except as specified. (HSC 40709)

4) Requires ARB to develop and adopt a methodology for use by air districts to calculate the value of credits issued for emission reductions from stationary, mobile, indirect, and area-wide sources when those credits are used interchangeably, consistent with certain requirements. Requires ARB to periodically update the methodology as it applies to future transactions, if necessary. (HSC 40716)

5) Establishes the San Joaquin Valley Unified Air Pollution Control District and vests it with the authority to regulate air emissions from stationary sources located in the San Joaquin Valley Air Basin. (HSC 40600)

**THIS BILL**:

1) Requires the District to revise its regulation adopted pursuant to Section 40709 to require existing and future emission reduction credits in all banks to expire after a time period that is equal to, or less than, the shortest expiration period in effect as of January 1, 2024, for emission reduction credits issued by any state or any other air quality management control district.

2) Requires the revision of the system to be subject to disapproval by ARB within 60 days after adoption by the district.

3) Requires ARB, building on the June 2020 report, to conduct an analysis of the District's emission reduction credit banks for particulate matter below 10 microns (PM10), carbon monoxide (CO), and oxides of sulfur (SOx) to determine if any credits for those pollutants were issued in violation of state, local, or district laws, rules, regulations, or procedures in place at the time of original issuance. Requires the analysis to be completed no later than January 1, 2027.

4) Requires ARB, as part of the analysis, to ensure all of the following:

   a) An emission reduction credit issued in violation of state, local, or district laws, rules, regulations, or procedures in place at the time of original issuance shall be deemed invalid;

   b) If an emission reduction credit is deemed invalid, the credit shall be removed from the bank; and,

   c) If removal of credits from the banks for PM10, CO, or SOx leads, or would have led, to failing an equivalency demonstration for any of these banks, current and future credits in the bank or banks with the failed equivalency demonstration shall be valued at the time of use.

5) Provides that ARB is not required to conduct the analysis if it requires the District to value at the time of use all current and future emission reduction credits in the banks for PM10, CO, and SOx.

6) Requires ARB to conduct a stationary source analysis for all permits in the District that use a credit for oxides of nitrogen (NOx) or volatile organic compounds (VOCs). Requires the review to identify all of the following:

   a) The amount and source of emissions of NOx and VOCs;

   b) The type of pollution control equipment currently being used at each source; and,

   c) The emission reduction opportunities at each source, including the availability of a retrofit using best available retrofit control technology, and the cost.

7) Requires ARB, upon completion of the analyses, to submit a report to the Legislature summarizing the results of the analyses. Requires the report to be submitted in compliance with state law, as specified.

8) Defines the following terms:

   a) "June 2020 report" as the report published by the state board on June 4, 2020, reviewing the District's emission reduction credit system.

   b) "District" means the San Joaquin Valley Unified Air Pollution Control District.

9) Finds and declares that a special statute is necessary and that a general statute cannot be made applicable within the meaning the California Constitution because of the unique need to address air pollution and environmental injustices in the San Joaquin Valley Air Basin.

10) Provides that no reimbursement is required by this act pursuant to the California Constitution.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

> The San Joaquin Valley is home to some of the most disenfranchised people in the state. These people live adjacent to transportation corridors or stationary sources of pollution with extremely localized and severe pollution levels.
>
> For the San Joaquin Valley, data suggest that PM2.5 exposure is responsible for 1,200 cases of premature death in the Valley each year. However, the distribution of premature deaths is not equal as disadvantaged communities are at a disproportionately higher risk. People of color additionally are more likely to be exposed to air pollution and more likely to suffer harm to their health from air pollution than white people.
>
> Issues with the District's credits and banks have allowed the oil industry and other major polluters to release more pollution over the past decades than should have been allowed. This must be fully assessed and addressed. Local, state, and federal regulators have admitted to these and other issues within the Air District's credit banking system. To restore public confidence and to stop harming vulnerable people for economic benefit, the state must take corrective action. The state must require the District to address the disproportionate burden on vulnerable communities it has allowed under its watch.

2) **Air quality standards**. The federal Clean Air Act requires the U.S. Environmental Protection Agency (US EPA) to set health-based limits, called National Ambient Air Quality Standards (NAAQS), for six dangerous outdoor air pollutants: particulate matter (PM), ozone, NOx, SOx, CO, and lead. The NAAQS identify what is considered a safe level of each pollutant to breathe based on the most recent health and medical science, including an adequate margin of safety for those most at risk. These standards require states and local governments to take steps to reduce emissions to attain the standards.

   Geographic areas within each state that do not meet a standard are called non-attainment for that air pollutant. The designation of an area as non-attainment triggers the regulatory requirements for banking and use of emission reductions credits.

3) **San Joaquin Valley air quality**. The San Joaquin Valley covers an area of 23,490 square miles, is home to more than four million people, and is prone to one of the most challenging air quality problems in the nation. The San Joaquin Valley Air Basin is approximately 250 miles long and is shaped like a narrow bowl. The sides and southern boundary of the "bowl" are bordered by mountain ranges. The bowl-shaped Valley collects and holds emissions

caused by the activities of the Valley's residents, vehicular traffic on Highway 99 and Interstate 5, and weather conditions that are conducive to the formation and retention of air pollutants.

The Valley is designated as an attainment area for the federal Lead (Pb), Nitrogen Dioxide (NO2), Sulfur Dioxide (SO2), and CO NAAQS, but the Valley is designated as a nonattainment area for the federal 1997 annual and 2006/2012 PM2.5 standards and the federal 8-hour ozone standards. The American Lung Association's 2022 *State of the Air* report gave the Valley an 'F' for Ozone, an 'F' for particle pollution in a 24-hour period, and a failing grade for particle pollution annually. The report also indicates that 13,971 kids and 52,942 adults in San Joaquin County are at risk of developing asthma, and it reports that San Joaquin County has experienced an increase in dangerous "high particle days" every year since 2014, culminating in a record 25 high particle days in 2020.

Despite these successes to reduce criteria air pollutants with more stringent source-specific regulations, the San Joaquin Valley continues to face major air quality challenges with the worst air quality in the nation.

The District was formed in 1992 as a public health agency to regulate regional air quality by the unification of eight individual county districts and is made up of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the San Joaquin Valley Air Basin portion of Kern.

4) **Emissions trading system**. All air districts in California are authorized by the federal Clean Air Act and by the state to operate emission reduction credit programs within their jurisdictions. These programs function similarly to cap-and-trade. If a polluter reduces emissions beyond what is currently required, they can earn a credit. In order for a credit to be issued, the qualifying source emissions must be "quantifiable, enforceable, permanent, and surplus." These credits can then be sold to polluters that need to offset anticipated future emissions in order to obtain a permit.

   Credits are stored in "banks" managed by the air districts. There are ten credit banks at the District, each comprised of a list of credits that are available for sale to offset a different criteria pollutant. Once a credit is used by a permit, it is permanently removed from its bank.

   Federal law requires a credit to be valued at time-of-use, meaning that if a regulation would have reduced emissions from a source granted a credit, that credit must be discounted when used as an offset to reflect emissions after required controls from the regulation. The value of a credit will always be the same or lower at time-of-use than time of issuance. The current District credit bank contains nearly 11 million pounds per year of NOx credits when valued at time of issuance, more than 80% of which were generated more than 20 years ago. However, over the years, the District's regulatory program has become more stringent, and the District estimated in 2016 that these NOx credits, when valued at time-of-use, were worth about 18% of the time of issuance value. This reduction in time of issuance value is directly related to the stringency of the District's regulatory program.

5) **June 2020 report**. In November 2018, Earthworks released the report *Undeserved Credit: Why emissions banking in California's San Joaquin Valley puts air quality at risk*, which was a catalyst for ARB's 2020 review. The Earthworks report made the following findings and conclusions, among others: "a significant proportion of [credits] in the District's bank appear

to be invalid;" "ARB should audit the District [credit] system;" "equivalency should be questioned;" and, "ARB should not allow [credits] to last forever."

On January 24th, 2019, ARB conducted a review of the District's Emission Reduction Credit program. The resultant *Review of the San Joaquin Valley Air Pollution Control District Emission Reduction Credit System* discovered errors that invalidated some of the credits within the banks for NOx and VOCs. This caused the District to fail the equivalency demonstrations for these two banks and triggered the federal requirement that all credits in these two banks be valued at the time of use.

Specifically, ARB found that the District should make adjustments to how it implements its rule for the timeliness of credit application submittals, and could be more rigorous in its determination of surplus reductions in individual credits. For example, in 15 of the 52 credit projects reviewed, the District granted credits, generated by facility shutdowns, in which emissions ceased more than 180 days before submission of the credit application. In addition, in four of the 52 credit projects reviewed, ARB determined that it was unclear whether the emission reductions were surplus of every federal, state, or district law, rule, order, permit, or regulation. This benefitted the applicant by providing a greater face value to the credit. But, as a result, the District had to find additional reductions to cover the non-surplus credits.

Additionally, ARB identified issues in the District's equivalency demonstration. The District relies on electrification projects, generated through the Agricultural Internal Combustion Engine (AG-ICE) incentive program, to demonstrate NOx equivalency with federal requirements. In calculating and claiming credit for these projects, the District used an incorrect load factor, resulting in an overvaluing of reductions in the equivalency demonstration. While the reductions are real, they were not sufficiently documented to have resulted from a permitting action nor could ARB identify documentation showing that they were permanent and enforceable. ARB also concluded that potentially half of the credited projects appeared to be funded in part through the Carl Moyer program.

ARB notes in the report that many of their findings - regarding the issuance of individual credits, the time of issuance valuation of credits, the use of electrification projects from the AG-ICE program, and others – "relate to decisions made decades ago. Since these decisions were made, conditions have changed. Air quality has improved substantially, but ambient air quality standards have increased in stringency. Even though these decisions were made decades ago, they generate implications for air quality today."

The author states concern that it is likely that a similar analysis of the other major banks, which are for PM10, CO, and SOx, may reveal similar errors and should be reviewed. Thus, AB 985 would require ARB to analyze the District's emission reduction credit banks for specified air pollutants by January 1, 2027.

6) **Revising the District's credit regulation**. The bill also requires the District to revise the regulation for its emission reduction credit system to require existing and future emission reduction credits to expire after a specified time period that is equal to, or less than, the shortest expiration period in effect as of January 1, 2024, for emission reduction credits issued by any state or any other district.

Per federal and state law, new source review rules must include a no-net increase stationary source control program, which is satisfied through the use of offsets. This requirement can

help ensure that emissions continue to be reduced over time while still allowing for the construction and operation of critical public infrastructure like hospitals, public safety facilities, wastewater treatment plants, landfills, and power plants, which will be needed as the state transitions to a zero-emissions future.

The author argues, however, that "many of the credits currently held in the District's credit banks are decades old because the District's credit system does not include expiration dates in issued certificates. When compounded by the facts that the District doesn't discount the volume of emissions represented by older credits at the time they are used and the discovery by ARB of VOC and NOx credits that should never have been issued, the beneficial impact of older credits on actual air quality conditions should be questioned and reevaluated.

"There is also an important distinction between local pollutants and greenhouse gas emissions. A ton of PM 2.5 reduced 30 years ago, for example, doesn't do much to help local communities now who will then be faced with the currently released emissions allowed because of the old credit. A credit for a greenhouse gas, for example, could be argued to hold its value for longer because the real-world benefit of that surplus emission avoided also last much longer in the real world. These distinctions, both between pollutants and between pollutants and greenhouse gases, should be considered when determining an expiration standard for each of the credit banks."

The District expresses concern that "AB 985's requirement for [credits] to expire after an arbitrary time period that is based on other states' or air districts' rules will likely result in very few if any [credits] being available so that the critical infrastructure mentioned above cannot be permitted. Layering a misfit expiration requirement that is based on another air agency's unique and highly specific control strategy will not result in additional emissions reductions and instead impede the Valley's ability to build critical infrastructure or provide jobs for its residents."

Air districts develop their regulations based on the unique characteristics of their jurisdictions (i.e., meteorology, geography, industry, transit, etc.), and comparing the expiration of credits to another air district might not be a workable copy & paste.

The *author may wish to consider* striking the reference to emission reduction credits issued by any state or any other air quality management control district from Sec. 40714 to avoid frustrating the District's credit system with timelines that don't work for the Valley.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

350 Humboldt
Ban Single Use Plastic
California Environmental Voters
California Environmental Voters
Central California Environmental Justice Network
Central Valley Air Quality Coalition
Clean Water Action
Climate Action California
Coalition for Clean Air

Elders Climate Action Norcal Chapter
Elders Climate Action Socal Chapter
Families Advocating for Chemical and Toxics Safety
Leadership Counsel for Justice and Accountability
Little Manila Rising
Mi Familia Vota
Pesticide Action Network
Public Health Advocates
Santa Cruz Climate Action Network
The Climate Center
Valley Improvement Projects

**Opposition**

California Air Pollution Control Officers Association
California State Association of Counties
City of Avenal
County of Fresno
County of Merced
County of Stanislaus
Madera County
Rural County Representatives of California
San Joaquin County Board of Supervisors
San Joaquin Valley Air Pollution Control District
Urban Counties of California
Vector Environmental, INC.
Western States Petroleum Association

**Analysis Prepared by**: Paige Brokaw / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1216 (Muratsuchi) – As Amended April 13, 2023

**SUBJECT**: Wastewater treatment plants: monitoring of air pollutants

**SUMMARY**: Requires the Hyperion Wastewater Treatment Plant to install, operate, and maintain a fence-line monitoring system to track emissions of hydrogen sulfide, nitrogen oxides, and volatile organic compounds.

**EXISTING LAW**:

1) Establishes the Federal Clean Air Act to regulate, reduce, and control air pollution nationwide, including national ambient air quality standards for major air pollutants, hazardous air pollutants standards, state attainment plans, stationary source emissions standards and permits, and enforcement provisions. (42 United States Code 7401)

2) Designates ARB as the state agency with the primary responsibility for the control of vehicular air pollution and air pollution control and air quality management districts with the primary responsibility for the control of air pollution from all sources other than vehicular sources. (Health and Safety Code (HSC) 39500 et seq.)

3) Requires every local air district board to establish a permit system that requires, except as specified, that before any person builds, erects, replaces, operates, or uses any article, machine, or other contrivance that may cause the issuance of air contaminants, the person obtain a permit from the air pollution control officer of the district. (HSC 42300)

4) Prohibits any person from discharging from any source quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public. (HSC 41700)

5) Requires the owner or operator of a petroleum refinery to develop, install, operate, and maintain a fence-line monitoring system, defined as equipment that measures and records air pollutant concentrations near a petroleum refinery, in accordance with guidelines adopted by the appropriate local air district. (HSC 42705.6)

**THIS BILL**:

1) Defines terms used in the bill, including:

    a) "Wastewater treatment facility" as a wastewater treatment or reclamation facility that comes within both of the following descriptions:

        i) Is located within 1,500 feet of a residential neighborhood; and,

        ii) Has an original design capacity of 425 million gallons or more per day.

b) "Wastewater treatment-related fence-line monitoring system" as equipment that measures and records air pollutant concentrations at or adjacent to a wastewater treatment facility and that may be useful for detecting or estimating emissions of pollutants from the treatment facility, including the quantity of fugitive emissions and other air emissions, and meets the minimum requirements of the appropriate air quality management district.

2) Requires, on or before January 1, 2025, the owner or operator of a wastewater treatment facility to develop, install, operate, and maintain a fence-line monitoring system in accordance with guidance developed in accordance with guidance from the appropriate air quality management district. The system is required to include equipment capable of measuring pollutants of concern, including hydrogen sulfide, nitrogen oxides, and volatile organic compounds emitted into the atmosphere from wastewater treatment or reclamation processes that the appropriate district deems appropriate for monitoring.

3) Requires the owner or operator of a wastewater treatment facility to collect real-time data from the fence-line monitoring system, maintain records of that data, and transmit the date to the appropriate air quality management district in accordance with the district's guidance. To the extent feasible, requires that the data be provided to the public as quickly as possible in a publicly accessible format.

4) Requires that guidance developed by an air quality management district pursuant to the bill take into account technological capabilities and incorporate input from affected parties.

5) Requires the owner or operator of a wastewater treatment facility to be responsible for the costs associated with the implementation, maintenance, and operation of a fence-line monitoring system pursuant to the bill.

6) Specifies that no reimbursement is required by the bill pursuant to the California Constitution.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

> Current air-quality monitoring requirements in place for Hyperion Water Reclamation Plant are insufficient, and the residents of El Segundo and other surrounding communities deserve to know the air is safe to breathe. After a major sewage spill, nearby residents risk getting physically ill from the persistent strong odors outside. Worse, they do not know whether these odors are toxic or not. AB 1216 protects public health and these communities by raising the air monitoring standards for wastewater treatment plants to match refinery requirements currently in place.

2) **Hyperion Water Reclamation Plant**. Hyperion is Los Angeles City's oldest and largest wastewater treatment plant. The facility has been in operation since 1894, with numerous expansions and improvements over the last century. Hyperion treats an average of 275 million gallons of wastewater on a dry weather day; on rainy days, this number can double. The plant is designed to handle a maximum daily flow of 450 million gallons and peak wet

weather flow of 800 million gallons per day. Wastewater bio-resources generated by the plant are also used for energy generation and agricultural operations.

3) **Recent violations and enforcement actions**. On July 11, 2021, the plant experienced a catastrophic backup in its headworks facility when the machines designed to remove plastic and large objects from incoming sewage became clogged. The backup resulted in 17 million gallons of untreated wastewater flooding the plant and flowing into the plant's one-mile outfall. According to Los Angeles Sanitation, a portion of this wastewater was pumped back to the facility after the incident. The flooding caused major damage to the facility leading to a prolonged interruption in the plant's operations, causing significant odor issues and the inability to fully treat wastewater for an extended period of time. The Los Angeles Regional Water Quality Control Board (Water Board) fined the City of Los Angeles, the owner of the plant, $21.7 million for the release of more than 12 million gallons of untreated wastewater into Santa Monica Bay, contrary to Los Angeles Sanitation's statement that sewage did not reach the bay, and related violations, including monitoring deficiencies leading to the spill. According to Water Board, the short term impacts of the event persisted for weeks, including residents reporting skin rashes, headaches, nausea, and noxious odors, multiple beach closures, and untold impacts to the marine environment.

   In July of 2022, the South Coast Air Quality Management District (AQMD) issued six notices of violation for causing odors that have impacted residents on multiple occasions. Over the preceding month, the AQMD received more than 360 public complaints of sewage odors. The AQMD notes that between the spill on July 11, 2021 and July 21, 2022, inspectors responded to more than 3,000 complaints. The AQMD's webpage describing its ongoing oversight of the plant note numerous measurements with hand-held devices to check for hydrogen sulfide, methane, benzene, toluene, ethylbenzene, and xylenes. It also evaluates data from multiple air monitors located within one-mile of the plant that measure for hydrogen sulfide and volatile organic compounds, which have found some gases at higher than typical levels, but remain below the state's standard of 30 parts per billion averaged over one hour. These stationary monitors are not affiliated with the plant, but are instead part of a fence-line monitoring program at a nearby Chevron refinery.

   The Los Angeles County Department of Public Health issued a series of letters to Los Angeles Sanitation, including directives, in an attempt to mitigate the public health impacts of the spill, including the ongoing odor issues. The department notes a number of concerns in a letter dated May 19, 2022, including lack of evidence that equipment is sufficient to provide treatment and processing of daily sewage flow and insufficient monitoring protocols of daily and instantaneous readings for hydrogen sulfide (this concern is noted as urgent in the letter). The letter urged "the immediate installation of a continuous fence line monitoring system…"

   On September 8, 2022, the City of El Segundo declared a local state of emergency in response to the ongoing odors and gases being emitted from the Hyperion Wastewater Treatment Plant. According to the City, "Since the nearly catastrophic spill on July 11, 2022, El Segundo residents and businesses have continued to suffer from terrible odors and gases being released from the plant." The city identifies a number of positive steps that have been made since the declaration, including improved communication with the plant, specific actions required by the AQMD to reduce odors, and the assistance of a third-party expert.

However, residents of El Segundo and other nearby communities continue to suffer from odors and concerns about air emissions.

4) **This bill**. This bill is intended to protect public health in the communities surrounding the Hyperion Wastewater Treatment Plant by requiring the facility, defined by its capacity and proximity to neighborhoods, to install and maintain a fence-line monitoring system capable of measuring hydrogen sulfide, nitrogen oxides, and volatile organic compounds.

5) **Suggested amendments**. The *committee may wish to make* technical amendments to the bill:

   a) Revise the bill to ensure that the term "wastewater treatment-related fence-line monitoring system" is used consistently; and,

   b) Replace "implementation" with "installation" on page 3, line 39.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

City of El Segundo
Congressman Ted Lieu

**Opposition**

California Association of Sanitation Agencies

**Analysis Prepared by**: Elizabeth MacMillan / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1287 (Alvarez) – As Amended April 13, 2023

**SUBJECT**: Density Bonus Law: additional density bonus and incentives or concessions: California Coastal Act of 1976

**SUMMARY**: Provides that any density bonus, concessions, incentives, waivers or reductions of development standards, and parking ratios to which an applicant is entitled under the Density Bonus Law be permitted notwithstanding the California Coastal Act.

**EXISTING LAW**:

1) Pursuant to the Density Bonus Law:

    a) Requires a city or county to provide a developer that proposes a housing development within the city or county with a density bonus and other incentives or concessions, as specified, if the developer agrees to construct specified percentages of units for lower income households or very low income households, and meets other requirements. (Government Code (Gov Code) 65915 (b)(1))

    b) Provides that the Density Bonus Law does not supersede or in any way alter or lessen the effect or application of the Coastal Act, and requires that any density bonus, concessions, incentives, waivers or reductions of development standards, and parking ratios to which an applicant is entitled under the Density Bonus Law be permitted in a manner consistent with the California Coastal Act. (Gov Code 65915 (m))

    c) Requires the review of a housing element for jurisdictions located within a coastal zone to provide an additional analysis of units constructed, demolished and replaced within three miles of a coastal zone to ensure the affordable housing stock with the coastal zone is being protected and provided. (Gov Code 65588 (d))

2) Pursuant to the California Coastal Act of 1976 (Coastal Act):

    a) Regulates development in the coastal zone and requires a new development to comply with specified requirements. (Public Resources Code (PRC) 30000)

    b) Requires any person wishing to perform or undertake any development in the coastal zone, in addition to obtaining any other permit required by law from any local government or from any state, regional, or local agency, to obtain a coastal development permit. (PRC 30600)

    c) Defines "development" to mean, among other things, the placement or erection of any solid material or structure on land or in water. "Structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line. (PRC 30106)

d) Provides that the scenic and visual qualities of coastal areas must be considered and protected as a resource of public importance. Permitted development must be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government must be subordinate to the character of its setting. (PRC 30251)

e) Requires all new development to minimize risks to life and property in areas of high geologic, flood, and fire hazard; assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs; be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development; minimize energy consumption and vehicle miles traveled; and, where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses. (PRC 30253 (f))

f) Provides that the Legislature finds and declares that it is important for the California Coastal Commission (Commission) to encourage the protection of existing and the provision of new affordable housing opportunities for persons of low- and moderate-income in the coastal zone. (PRC 30604 (g))

**THIS BILL**:

1) Requires that an applicant for a density bonus shall receive the additional following incentives or concessions:

   a) Four incentives or concessions for projects that include at least 16% of the units for very low income households or at least 45% for persons and families of moderate income in a development in which the units are for sale.

   b) Five incentives or concessions for a project in which 100% of all units are for lower income households (current law provides four incentives).

2) Strikes the current prohibition on the density bonus law from superseding the Coastal Act.

3) Requires any density bonus, concessions, incentives, waivers or reductions of development standards, and parking ratios to which an applicant is entitled under current law to be permitted notwithstanding the Coastal Act.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Need for the bill**. According to the author:

While we must continue to support more affordable housing for low-income families, a holistic approach to the housing crisis requires we also tackle housing unaffordability for middle-income earners. AB 1287 does this by creating moderate income benefits, which would stack on top of the existing Density Bonus Law benefits.

Importantly, AB 1287 requires that a project maximizes the production of Very-Low, Low, or Moderate Income units, as allowed by current Density Bonus Law, before they can take advantage of the incentives in AB 1287. This structure ensures that the new Moderate Income Bonus never undermines existing incentives under Density Bonus Law. In fact, it even creates new economic reasons to maximize deeply affordable unit production, by offering an additional sweetener in the form of the stacked bonus and additional concessions.

2) **Affordable housing.** California state law recognizes that local governments play a vital role in developing affordable housing and requires each community's fair share of housing to be determined through a mandated regional housing needs allocation. In 1969, the state mandated that all California cities, towns, and counties to plan for the housing needs of our residents, regardless of income.

**3) Density Bonus Law**. California, like much of the country, is in the midst of a housing crisis that continues to exacerbate existing inequities. The median price for a single-family home in California in 2021 was $786,750, which only 26% of households could afford to purchase. Options for affordable rentals are similarly limited. California ranks in the top seven states in the country for inadequate affordable housing stock, and more than half of the state's renter households were cost burdened in 2019, meaning that they spent more than 30% of their household income on rent.

California's Density Bonus Law was enacted in 1979 to provide housing developers tools to encourage the development of much needed affordable and senior housing. The Law achieves this objective by allowing developers to exceed the normal density restrictions when they meet certain criteria. Cities and counties are required to grant a "density bonus," which is an exceedance of the otherwise allowable project density, if a housing project would include affordable units for one or more of these demographics. The amount of the density bonus is codified as a sliding scale based on the percentage of affordable units provided and the demographics targeted. The law also allows for a 100% density bonus for residential developments that are 100% affordable. In addition to proving a density bonus, the law requires a city or county to provide up to four incentives or concessions to any project that qualifies for a density bonus, depending on the percentage of affordable units provided.

The Legislature continues to refine the Density Bonus Law, with new legislation taking effect on January 1 of this year providing additional flexibility to developers in meeting requirements for a density bonus. In addition, a 2021 appellate court ruling changed the types of information that local governments can require from density bonus applications seeking an incentive or concession.

According to the Commission, many local jurisdictions in the coastal zone have already adopted inclusionary housing ordinances separate from Density Bonus Law. Inclusionary housing ordinances generally require that any new multi-unit residential project include a certain percentage of affordable units, with no density bonus or other development standard

exception granted in return. Such requirements frequently range from 15% to 20%, and are typically framed in terms of providing such units on-site, contributing a fee to allow for the construction of such units off-site, or some combination thereof. Inclusionary housing ordinances are not insulated from Density Bonus Law. In jurisdictions where an inclusionary housing ordinance has stronger requirements than the Density Bonus Law, a developer is not required to propose any additional affordable units in order to receive the multitude of exceptions afforded by the Density Bonus Law.

The policies of the Coastal Act establish development standards intended to protect coastal resources. Where the Density Bonus Law allows development projects to exceed these development standards, the Coastal Act and Density Bonus Law conflict with one another, potentially significantly. The Density Bonus Law reinforces this conflict by stating that the granting of a density bonus or an incentive/concession does not require amending the applicable Local Coastal Plan (LCP) or issuing any discretionary approval. Current law in the Density Bonus Law (Gov. Code sec. 65915 (m)) seeks to avoid these conflicts and harmonize the two laws.

The Density Bonus Law provides that its provisions do not supersede or in any way alter or lessen the effect or application of the Coastal Act, and requires that any density bonus, concessions, incentives, waivers or reductions of development standards, and parking ratios to which an applicant is entitled under the Density Bonus Law be permitted in a manner consistent with the Coastal Act.

AB 1287 proposes to repeal that provision and instead require any density bonus, concessions, incentives, waivers or reductions of development standards, and parking ratios to which an applicant is entitled under current law to be permitted regardless of the Coastal Act.

4) **Housing development in the coastal zone**. The Commission administers the Coastal Act and regulates proposed development along the coast and in nearby areas. Generally, any development activity in the coastal zone requires a coastal development permit from the Commission or local government with a certified LCP. Eighty-five percent of the coastal zone is currently governed by LCPs drafted by cities and counties, and certified by the Commission. In these certified jurisdictions, local governments issue Coastal Development Permits (CDP) with detailed planning and design standards. There are 14 jurisdictions without LCPs – also known as "uncertified" jurisdictions – where the Commission is still the permitting authority for CDPs. The width of the coastal zone varies, but it can extend up to five miles inland from the shore, including private and public property.

The original Coastal Act of 1976 included PRC Sec. 30213 of the Coastal Act, which stated:

> *Lower cost visitor and recreational facilities and housing opportunities for persons of low and moderate income shall be protected, encouraged, and, where feasible, provided.*

The definition of low- and moderate-income households was anyone earning up to 120% of the median income, which included about 2/3 of California households at the time.

In the first five years of the Coastal Act, the Commission successfully required the construction of more than 5,000 affordable, deed-restricted, owner-occupancy and rental units in high-

priced areas such as Laguna Nigel, San Clemente, and Dana Point. It also collected about $2 million in in-lieu fees for additional housing opportunities throughout the state.

Over time, however, many local governments objected to the loss of local control and stated that the Coastal Act's housing policies were preventing them from preparing LCPs. Subsequently, in 1981, the Legislature adopted the Mello Act (SB 626, Mello, Chapter 1007, Statutes of 1981) to remove the housing polices out of the Coastal Act and by providing that "*No local coastal program shall be required to include housing policies and programs."* (PRC sec. 30500.1) That legislation allowed any developer who had not yet completed a coastal housing project to require the Commission to remove the affordable requirements from the permit and prohibited the Commission from requiring local governments to include affordable housing in their LCPs. As a result, affordable housing development waned in the coastal zone.

Despite this, the Commission has maintained its mandate to protect the coast and, as of 2019, had approved more than 90% of all development applications. In fact, the Coastal Act continues to require the Commission to encourage housing opportunities for persons of low and moderate income. It further prohibits, in reviewing residential development applications for low- and moderate-income housing, the issuing local agency, or the Commission on appeal, from requiring measures that reduce residential densities below the density sought by an applicant if the density sought is within the permitted density or range of density established by local zoning plus the additional permitted density.

The Commission, in fact, has never denied a single affordable housing project in its history. Furthermore, permit review doesn't appear to be a roadblock to development. In terms of affordable housing project application turnaround times, permits are subject to the Permit Streamlining Act, thus the Commission must comply with those deadlines. Further, the Commission finds 'No Substantial Issue' on most of the appeals received, and turns permit applications around in 49 days.

5) **This bill**. AB 1287 would skirt the Coastal Act for permitting density bonuses, concessions, incentives, waivers or reductions of development standards, and parking ratios. Notwithstanding the Coastal Act null and voids coastal protections afforded to housing development in the coastal zone.

6) **Protecting the coastal zone**. A central tenet of the Commission and foundational pillar of the Coastal Act is equitable access to coastal resources. The Coastal Act, through coastal development permits, provides unique protections to the coastal zone that are separate and distinct from the California Environmental Quality Act. The Coastal Act includes consideration of the prevention of sprawling developing, protection of views to and along the ocean and scenic coastal areas, and maintenance and enhancement of public access to the coast. Further, all new development is required to minimize risk to life and property in areas of high geologic, flood, and fire hazard; assure geologic stability; minimize energy consumption and vehicle miles travelled, and, where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.

As Mary Shallenberger, Coastal Commissioner from 2004-2017, wrote in 2019:

> Relaxing development controls in the coastal zone isn't the answer because over-regulation was never the problem. The problem is there is little market-based incentive to build this type of housing to begin with, compounded by the fact that the Legislature stripped the regulatory authority from the agency that was doing more than any other to provide actual affordable units.

The Commission's January 2022 report, *Report on the Historical Roots of Housing Inequity and Impacts on Coastal Zone Demographic Patterns*, explains that one thing that makes tackling the affordable housing shortage difficult are the myriad overlapping jurisdictional authorities and housing policies that apply to one particular area. Commission staff and other housing advocates would benefit from research on the various housing policies applicable to the coastal zone and how they interact with each other and the Coastal Act. These include the Mello Act of 1982 and subsequent Mello Act Ordinances, the Density Bonus Law, the Housing Accountability Act, Coastal Act and LCP policies on accessory dwelling units, the California H.O.M.E. Act, inclusionary zoning initiatives, and others. Understanding this ecosystem of policy and legislation is an important part of designing effective policy solutions that are compliant with existing law.

The author may wish to consider this recommendation from the Commission, which could inform future legislation on this subject.

7) **Committee amendments**. To preserve the protections of the Coastal Act, *the Committee may wish to consider* striking the amendments to Sec. 65915 (m) and maintaining that provision of current law as it stands.

8) **Double referral**. This bill was heard in the Assembly Housing Committee on April 12, where it was approved 8-0.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

Abundant Housing LA
Bay Area Council
Buildcasa
California Community Builders
California Yimby
Circulate San Diego
Civicwell
Council of Infill Builders
East Bay for Everyone
East Bay Yimby
Eden Housing
Fieldstead and Company, INC.
Greenbelt Alliance
Grow the Richmond
Housing Action Coalition
How to Adu
Midpen Housing
Mountain View Yimby

Napa-Solano for Everyone
National Association of Hispanic Real Estate Professionals (NAHREP)
Northern Neighbors SF
Orange County Business Council
Peninsula for Everyone
People for Housing - Orange County
Progress Noe Valley
San Francisco Yimby
San Luis Obispo Yimby
Sand Hill Property Company
Santa Cruz Yimby
Santa Rosa Yimby
Silicon Valley @ Home
Silicon Valley Leadership Group
South Bay Yimby
Southside Forward
Spur
Urban Environmentalists
Ventura County Yimby
Yimby Action

**Opposition:**

Azul
California Contract Cities Association
California Coastal Commission
California Coastal Protection Network
California Coastkeeper Alliance
Citizens Preserving Venice
Coastal Environmental Rights Foundation
Coastal San Pedro Neighborhood Council
Environmental Action Committee of West Marin (EAC)
Environmental Center of San Diego
Environmental Defense Center
Friends, Artists and Neighbors of Elkhorn Slough
Humboldt Bay keeper
New Livable California
Ocean Conservation Research
Orange County Coastkeeper
Pacific Palisades Community Council
Planning and Conservation League
Public Trust Alliance, a Project of The Resource Renewal Institute
Resource Renewal Institute
San Diego Coastkeeper
Sierra Club California
So Cal 350 Climate Action

Turtle Island Restoration Network
Westwood South of Santa Monica Blvd. Homeowners Association

**Analysis Prepared by**: Paige Brokaw / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1319 (Wicks) – As Amended March 16, 2023

**SUBJECT**: Bay Area Housing Finance Authority: housing revenue

**SUMMARY**: Modifies how the Bay Area Housing Finance Authority (BAHFA) may collect and expend revenue. Provides that actions taken by BAHFA to raise, administer, or allocate funding for tenant protection, affordable housing preservation, or new affordable housing production, or to provide technical assistance consistent with BAHFA's purpose is exempt from the California Environmental Quality Act (CEQA).

**EXISTING LAW**:

1) Establishes BAHFA, and specifies its jurisdiction, governance structure, and powers related to financing development and protection of affordable housing in the nine Bay Area counties. (Government Code 64500, et seq.)

2) Requires, pursuant to CEQA, lead agencies with the principal responsibility for carrying out or approving a proposed project to prepare a negative declaration, mitigated negative declaration, or environmental impact report (EIR) for this action, unless the project is exempt from CEQA. (Public Resources Code (PRC) 21000, et seq.)

3) Exempts from CEQA actions taken by the Department of Housing and Community Development (HCD) or the California Housing Finance Agency (CalHFA) to provide financial assistance or insurance for the development and construction of affordable housing if the project that is the subject of the application for financial assistance or insurance will be reviewed pursuant to CEQA by another public agency. (PRC 21080.10)

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Background**. AB 1487 (Chiu), Chapter 598, Statutes of 2019, created BAHFA to allow the Bay Area region to raise and distribute new revenue to address the housing crisis. The statute requires BAHFA to direct most of the revenue towards the production of new affordable housing, with the remaining money going towards preservation of existing affordable housing, protection of tenants at risk of displacement and homelessness, technical assistance, and administration. BAHFA is required to return most of the money raised by regional initiatives to the counties and large cities from which the revenue was derived. The rest of the revenue is expended at the discretion of BAHFA to address regional priorities.

   BAHFA is governed by the same board as the Metropolitan Transportation Commission (MTC). Its expenditure plan must also be approved by the Association of Bay Area Governments (ABAG), made up of 101 cities and towns and nine counties. An external advisory committee is charged with designing an Equity Framework to ensure BAHFA serves the needs of resource-poor communities throughout the region.

Since the passage of AB 1487, BAHFA has hired an executive director and staff, and completed a draft Business Plan and Equity Framework. In 2020, BAHFA received $20 million from the state budget to help pilot large-scale approaches to address regional housing challenges, including a region-wide online portal designed to simplify the process of finding and applying for an affordable apartment. BAHFA is also gearing up to place its first regional housing bond on the ballot to raise billions of dollars to fulfill its mission of delivering housing affordability at scale.

In preparing for this regional bond, MTC and affordable housing advocates have identified a number of modifications and clarifications that would benefit the ability of BAHFA to collect and expend revenue. This bill contains those proposed modifications and clarifications

This bill was referred to this committee because it adds a new CEQA exemption for specified BAHFA actions. This provision is similar to the longstanding exemption for finance-related administrative actions by HCD. This exemption does not apply to the affordable housing development projects that BAHFA's actions may support. The lead agency for CEQA for such projects would be the relevant city or county.

2) **Author's statement**:

> AB 1319 enacts targeted modifications to state law governing BAHFA to maximize the benefits BAHFA can deliver for the region's residents. At no cost to the state, these changes will provide the Bay Area additional tools to lower housing development costs, expand housing options affordable to lower income households, and protect vulnerable renters.

3) **Related legislation**. SB 679 (Kamlager), Chapter 661, Statutes of 2022, established the Los Angeles County Affordable Housing Solutions Agency (LACAHSA), and authorized LACAHSA to utilize specified local financing tools for the purpose of funding renter protections, and the preservation and production of affordable housing units. SB 679, which was not heard in this committee, included a similar CEQA exemption for LACAHSA actions to finance, fund, or issue grants, loans, or bonds, as well as purchase or lease of real property for specified purposes.

4) **Double referral**. This bill was heard by the Housing and Community Development Committee on March 29 and passed by a vote of 6-2.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

All Home
Alta Housing
Association of Bay Area Governments (ABAG)
Bay Area LISC
Burbank Housing
California Housing Partnership
City of San Jose

Community Land Trust Association of West Marin
Deborah Penrose, Mayor of Half Moon Bay
Destination: Home
East Bay Housing Organizations
East Bay YIMBY
Eden Housing
Enterprise Community Partners
Epacando
Generation Housing
Greenbelt Alliance
Grow the Richmond
Housing Choices Coalition for Persons With Developmental Disabilities
Housing Leadership Council of San Mateo County
Housing Trust Silicon Valley
League of Women Voters of California
Menlo Together
Metropolitan Transportation Commission
MidPen Housing
Mission Street Neighbors
Monument Impact
Mountain View YIMBY
Napa-Solano for Everyone
New Livable California
Non-Profit Housing Association of Northern California
Northern Neighbors SF
Peninsula for Everyone
Progress Noe Valley
Public Advocates
Resources for Community Development
Sacred Heart Community Service
San Francisco YIMBY
Santa Rosa YIMBY
Save the Bay
Silicon Valley At Home
Silicon Valley Community Foundation
South Bay YIMBY
Southside Forward
SPUR
The John Stewart Company
The San Francisco Foundation
Transform
Urban Habitat
YIMBY Action

**Opposition**

Howard Jarvis Taxpayers Association

**Analysis Prepared by**: Lawrence Lingbloom / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1489 (Wood) – As Amended April 12, 2023

**SUBJECT**: Solid waste: compostable polymers

**SUMMARY**: Specifies that compostable polymers are not subject to the source reduction requirements of the Plastic Pollution Prevention and Packaging Producer Responsibility Act (Act).

**EXISTING LAW**:

1) Establishes the Act (Public Resources Code 42040 et seq.), which:

   a) Requires, by January 1, 2024, producers of single-use packaging and single-use plastic foodware (covered material) to form a producer responsibility organization (PRO), subject to specified requirements and Department of Resources Recycling and Recovery (CalRecycle) approval, to carry out the requirements of the Act. Prohibits a producer of covered material from selling, offering for sale, importing, or distributing covered materials in the state unless the producer is approved to participate in the PRO.

   b) Requires all covered material offered for sale, distributed, or imported into the state on and after January 1, 2032, to be recyclable or compostable, as specified.

   c) Requires all plastic covered material offered for sale, distributed, or imported into the state to meet the following recycling rates:

      i) Not less than 30% of covered material on and after January 1, 2028.
      ii) Not less than 40% of covered material on and after January 1, 2030.
      iii) Not less than 65% of covered material on and after January 1, 2032.

   d) Prohibits producers of expanded polystyrene (EPS) food service ware from selling, offering for sale, distributing, or importing EPS food service ware in or into the state unless the producer demonstrates that EPS meets the following recycling rates:

      i) 25% on and after January 1, 2025.
      ii) 30% on and after January 1, 2028.
      iii) 50% on and after January 1, 2030.
      iv) 65% on and after January 1, 2032.

   e) Requires the PRO to, among other things, develop and implement a plan to achieve a 25% source reduction by weight and 25% source reduction by plastic component for covered materials sold, offered for sale, or distributed in the state by January 1, 2032, including interim targets of 10% by January 1, 2027, and 20% by January 1, 2030. Requires at least 10% of plastic covered material to be source reduced by shifting to reusable or refillable covered material or through eliminating a plastic component and the remaining source reduction to be achieved through concentration, right-sizing,

lightweighting, shifting to bulk or large format packaging, or shifting from a plastic covered material to a nonplastic covered material.

2) Prohibits the sale, or offering for sale, of any product in the state that is labeled with the term "compostable" or "home compostable" unless the product meets specified ASTM standards. (PRC 42357)

3) Requires CalRecycle to adopt regulations to develop a process and criteria for determining the types of food service packaging that are reusable, recyclable, or compostable. (PRC 42370.2)

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

SB 54, the Plastic Pollution Producer Responsibility Act, was a landmark piece of legislation advancing California towards a more sustainable future. Critically, SB 54 ensures that that covered material offered for sale, distributed, or imported in or into the state on or after January 1, 2032, is recyclable or compostable.

Recyclable and compostable products must be a part of our future in California. To ensure that future remains viable, AB 1489 clarifies that that SB 54's 25% source-reduction requirements do not apply to certified compostable products. Under AB 1489, products eligible for exemption must meet California's carefully constructed compost standards. This clarification is needed as California transitions towards a more innovative, sustainable future.

2) **SB 54**. SB 54 (Allen), Chapter 75, Statutes of 2022, established the Act to require the development of a circular economy for packaging and plastic foodware in the state. The Act requires that producers meet ambitious recycling, composting, and source reduction targets. The Act states requires the producer responsibility organization to achieve specified source reduction requirements for plastic covered materials. The percentages increase from 10% by January 1, 2027, to 25% by January 1, 2032.

The Act includes an "ecomodulated fee" structure that is intended to provide financial incentives, or disincentives, to encourage producers to use environmentally-preferable materials in covered material. As it relates to this bill, the ecomodulated fee is reduced for compostable plastics.

CalRecycle has begun hosting monthly informal workshops as it begins the process of promulgating regulations to implement the Act. The next meeting will be held on April 25th.

3) **Determining compostability**. Compostable plastics are plastics that are designed to decompose under certain conditions. There are various standards in place to determine if a plastic product is compostable or not. Generally, the state has relied upon ASTM International standards, which include specifications for industrially compostable (D6400-19) and home compostable (D6868-19). However, the standard for industrially compostable runs between 90 to180 days, and California's industrial compost operations process material

more quickly than those timelines, resulting in incomplete degradation of the materials composted. The home compost standard requires degradation within 180 days. In recognition of the issues with the current ASTM standards, SB 1335 (Allen), Chapter 610, Statutes of 2018, which establishes reuse, recycling, and compost requirements for food packaging used in state facilities, required CalRecycle to adopt regulations to create standards for those terms. For composability, CalRecycle regulations require that the packaging must meet the ASTM standards D6400-19 or D6868-19, demonstrate 90% biodegradation within 60 days, and comply with related statutory requirements to be labeled "compostable" in the state. SB 54 uses the SB 1335 standards for composability.

4) **This bill**. This bill exempts compostable polymers from the source reduction requirements of the Act. It intended to address concerns from some manufacturers of compostable polymers about the effect of SB 54's source reduction requirements given how small a portion of the packaging and foodware stream they are. According to the Bio-Based and Biodegradable Industries Association, compostable materials could substitute up to 5-8% of current plastic packaging.

5) **Suggested amendments**. The *committee may wish to make the following amendments* to this bill:

   a) Clarify that the composability standard for the bill is the standard used in SB 54; and,

   b) Replace the term "polymers" with "covered material."

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

CJ Biomaterials
Newlight Technologies

**Opposition**

Monterey Bay Aquarium
Natural Resources Defense Council
Ocean Conservancy
Oceana
Plastic Free Future
Save Our Shores
The Nature Conservancy, California Chapter

**Analysis Prepared by**: Elizabeth MacMillan / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1526 (Committee on Natural Resources) – As Amended April 20, 2023

**SUBJECT**: Public resources

**SUMMARY**: Makes various technical, clarifying, and cleanup changes to the Public Resources Code (PRC).

**EXISTING LAW**:

1) Requires the Geologic Energy Management Division (CalGEM), in consultation with the Air Resources Board (ARB), to contract with independent experts to study fugitive emissions, including greenhouse gases (GHG), toxic air contaminants, and volatile organic compounds from a random sample of no more than 500 idle, idle-deserted, and abandoned wells in the state. Requires the study to be completed by January 1, 2023. Sunsets this requirement on January 1, 2024. (PRC 3206.2)

2) Requires CalGEM, in consultation with the State Water Resources Control Board (SWRCB), to annually report to the Legislature on the Underground Injection Control (UIC) Program, including specified information about project applications, timing of permits, exemptions, violations, enforcement actions, and related program information. Sunsets this requirement on October 1, 2024, and repeals this provision on January 1, 2025.

3) Authorizes, under the Forest Practice Act, the State Board of Forestry to exempt timber operations from both the Timber Harvesting Plan (THP) and Timberland Conversion Permit (TCP) processes for "one-time" conversions of less than three acres of timberland for another use. (PRC 4584)

4) Establishes the Plastic Pollution Prevention and Packaging Producer Responsibility Act (Act), which imposes minimum content requirements for single-use packaging and food ware and source reduction requirements for plastic single-use packaging and food ware, to be achieved through an expanded producer responsibility (EPR) program. (PRC 42040 et seq.)

5) Establishes the Architectural Paint Recovery Program (Program), which establishes an EPR program for the collection and recycling of architectural paint. (PRC 48700 et seq.)

**THIS BILL**:

1) Extends the due date of the CalGEM study regarding emissions until January 1, 2028, and extends the sunset for this provision until January 1, 2029.

2) Extends the sunset for the CalGEM UIC Program annual report until October 1, 2029, and repeals the provision on January 1, 2030.

3) Authorizes the exemption for the conversion of timberland to other uses to be used more than one time.

4) Corrects drafting errors and makes technical corrections to the Act, including:

a) Specifying that nothing in the Act modifies, limits, or abrogates the existing right of an owner of recyclable materials to sell or donate those materials;

b) Correcting cross references;

c) Clarifying how local jurisdiction costs will be reimbursed; and,

d) Making a number of changes to enable the California Department of Tax and Fee Administration (CDTFA) to collect the environmental mitigation surcharge.

5) Adds aerosol paint to the Program.

6) Specifies that no reimbursement is required by the bill pursuant to Section 6 of Article XIIB of the California Constitution for specified reasons.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **This bill**. This committee omnibus bill makes a number of technical, clarifying, and cleanup changes to the PRC, including a number of cleanup and consensus changes to the Act, which was established by SB 54 (Allen), Chapter 75, Statutes of 2022.

2) **CalGEM study**. In 2019, the Legislature approved AB 1328 (Holden), Chapter 772, Statutes of 2019, which requires CalGEM, in consultation with ARB, to contract with independent experts, as specified, to study fugitive emissions, including greenhouse gases, toxic air contaminants, and volatile organic compounds, from a stratified random sample of no more than 500 idle, idle-deserted, and abandoned wells in California. The bill included sunset dates on the reporting and posting requirements. The 2022-23 Budget included $1 million to initiate the study. This bill extends the sunset dates for the report to reflect the timing of the funding being made available.

3) **UIC report**. The state's UIC Program, unfortunately, remains out-of-compliance with all of its requirements, although there has been progress made in the last eight years. For example, in 2015 many aquifers that CalGEM had approved injection into had not been reviewed by the SWRCB or approved by the United States Environmental Protection Agency (US EPA). Multiple "aquifer exemptions" have since received SWRCB's concurrence and US EPA approval. However, as of August 2022, the US EPA was still asking CalGEM to make progress on and respond to questions about the remaining aquifer exemption proposal packages. The state will continue to provide status updates to US EPA for the remaining aquifer exemptions in progress, including updates on individual remediation and monitoring plans as conduit analyses are completed. In addition, oil field project-by-project review remains incomplete, and the status of many wells with respect to UIC program compliance is unclear. Given the ongoing progress, the Legislature should continue to receive annual reports about the UIC Program.

4) **Timber conversion exemptions**. The one-time ministerial timberland conversion exemption is used by many owners of small parcels of timberland to build homes and other structures and to establish other uses of timberland. For example, individuals who want to build a home on their timberland may do so under the conversion exemption, so long as the total

timberland conversion is less than three acres.

The problem is that a landowner can only use the less than three acre exemption one time. If a landowner decides after using the exemption that she also wants a garage, deck, barn, or, of increasing importance in California, an accessory dwelling unit, she must go through the full THP/TCP process, even if the total land converted in both conversions is less than three acres, and she could have accomplished the entire conversion under one exemption had she foreseen, or been able to afford, her future plans. This dynamic favors aggressive planning, where landowners convert more timberland than needed to make the most of a one-time exemption, and also lawlessness, where landowners decide to move forward without a harvest document because of the high cost of a THP/TCP. This bill would remove the one-time limitation for eligibility for exemption from the Forest Practice Act.

5) **SB 54**. SB 54 was a landmark bill that creates sweeping new requirements to create a circular economy for packaging and foodware in the state. The bill was developed on a tight timeline, as it had to be adopted before June 30, 2022 due to a related Initiative that was qualified for the November 2022 ballot. Given the scope of the bill, the tight timeline under which it was drafted, and the number of stakeholders involved in its development, the finished bill contained a number of minor and technical drafting errors. This bill corrects those drafting errors and makes related technical and clarifying amendments.

   Additionally, while there was agreement among stakeholder to add aerosol paint to the state's paint EPR program as part of SB 54, there was insufficient time to include those changes. This bill incorporates the necessary changes to add aerosol paint to the Program.

   Finally, this bill makes a number of changes that are necessary for CDTFA to collect the environmental mitigation surcharge established by SB 54.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

American Coatings Association
California Product Stewardship Council
Californians Against Waste
National Stewardship Action Council

**Opposition**

None on file

**Analysis Prepared by**: Elizabeth MacMillan / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1550 (Bennett) – As Amended April 18, 2023

**SUBJECT**: Green hydrogen

**SUMMARY**: Requires, on and after January 1, 2045, all hydrogen produced and used in California for the generation of electricity or fueling of vehicles to be "green hydrogen." Defines green hydrogen for purposes of generation of electricity as hydrogen produced through electrolysis using renewable electricity, as specified.

**EXISTING LAW**:

1) Defines "green electrolytic hydrogen" as hydrogen produced through electrolysis, not including hydrogen manufactured using steam reforming or any other conversion technology that produces hydrogen from a fossil fuel feedstock. (Public Utilities Code (PUC) 400.2)

2) Requires the Public Utilities Commission (PUC), California Energy Commission (CEC), and Air Resources Board (ARB) to consider green electrolytic hydrogen an eligible form of energy storage and consider its potential uses. (PUC 400.3)

3) Requires, pursuant to the Renewables Portfolio Standard (RPS), utilities and other retail sellers of electricity to procure 60% of their retail electricity sales from eligible renewable energy resources by 2030 and thereafter, including interim targets of 33% by 2020, 44% by 2024, and 52% by 2027. (PUC 399.11, et seq.)

4) Provides that RPS-eligible generation facilities must use biomass, solar thermal, photovoltaic, wind, geothermal, renewable fuel cells, small hydroelectric, digester gas, limited non-combustion municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current. (Public Resources Code 25741)

5) Establishes a policy that eligible renewable energy resources and zero-carbon electric generating facilities will supply all electricity procured to serve California customers by December 31, 2045, and directs the PUC, CEC, and ARB to incorporate this policy into all relevant planning and programs. (PUC 454.53)

6) Declares the policy of the state to achieve net zero greenhouse gas (GHG) emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. (Health and Safety Code 38562.2)

**THIS BILL**:

1) Requires, on and after January 1, 2045, all hydrogen produced and used in California for the generation of electricity or fueling of vehicles to be green hydrogen in furtherance of the state's policy to achieve net zero GHG emissions as soon as possible, but no later than 2045.

2) Defines green hydrogen, for purposes of the requirement that all hydrogen produced and used in California for the generation of electricity be green hydrogen, as hydrogen gas produced through electrolysis and consistent with all of the following:

   a) The production process uses both renewable electricity that is eligible under the RPS and a material feedstock that is water;

   b) The facility generating the electricity used for the production of the green hydrogen does not use tradable renewable energy credits to demonstrate reliance on renewable electricity;

   c) The facility generating the electricity used for the production of the green hydrogen demonstrates that the electricity it uses comes from a new renewable generation resource developed specifically to serve the green hydrogen production process, consistent with specified prohibitions of resource shuffling, and that the new renewable generation resource has a first point of interconnection to the California balancing authority in which the electrolytic hydrogen production facility is sited; and,

   d) For purposes of generation of electricity, "green hydrogen" does not include hydrogen gas manufactured using steam reforming or any other conversion technology that produces hydrogen from a fossil fuel feedstock.

3) Adds eligibility requirements to the RPS for green hydrogen delivered via pipeline.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

   California has set a very ambitious goal to reach a 100% clean grid by 2045. To reach that goal we have focused on wind energy, solar energy, and battery storage. However, CARB's draft 2022 scoping plan identifies a role for hydrogen for the state to reach its climate goals, what is not clear is what type of hydrogen that will be in the long run.

   AB 1550 seeks to bring greater certainty to everyone by making clear that any hydrogen used and produced in this state must be green by the same deadline as the grid, 2045. Bringing greater certainty about California's goal regarding hydrogen produces three major benefits. One, investors in hydrogen projects benefit from increased certainty. This bill lets them know in advance that they must achieve a 100% green level by 2045. Two, we will have less uncertainty and concern as to whether hydrogen projects are going to be used to extend the lifecycle of oil and gas, harming local communities with pollutants and emissions. Three, there are serious concerns that if we do not move forward to begin establishing an infrastructure for hydrogen soon, we will not be able to timely decarbonize hard to electrify sectors and industry will not appropriately invest in California.

   Hydrogen is not the sole solution to our green energy and fueling needs, but it is an important one, especially for hard to electrify sectors like shipping, long-haul trucking, long-term storage, and aviation. We need to give more clarity and certainty to all

stakeholders so that they know that California is committed to the environment, energy reliability, and meeting our green energy goals.

2) **Background**. The environmental impacts of hydrogen, including effects on climate and air quality, can range from very favorable to very unfavorable, depending on production, delivery, end use, and the fuel the hydrogen is replacing. For example, hydrogen produced with fossil fuels and used in a combustion application that replaces a renewable energy source is not a good environmental solution. However, hydrogen produced with zero-carbon energy and used in a zero-emission application that replaces diesel combustion has clear climate and air quality benefits.

   The source of the hydrogen and the source of the energy used to split hydrogen plays a significant role in determining the lifecycle emissions associated with hydrogen use. Today, there are several means of hydrogen production and it is likely that these will evolve as technology advances.

   Green hydrogen can result in almost no GHG emissions. Produced by electrolyzing water, green hydrogen is made using 100% renewable electricity to split hydrogen from water molecules. Less than 0.1% of hydrogen production globally comes from water electrolysis.

   Ninety six percent of the hydrogen today is considered to be gray hydrogen. Gray hydrogen is produced by heating natural gas, or methane, with steam to form syngas (a mixture of hydrogen and carbon monoxide and carbon dioxide). The syngas is separated to produce hydrogen. This process results in a relatively high release of GHGs.

   Blue hydrogen attempts to mitigate some of the GHG emission release during the production of gray hydrogen by pairing production with carbon capture and storage. However, not all carbon dioxide emissions can be captured, and some carbon dioxide is emitted during the production of blue hydrogen. Carbon capture increases the cost and inefficiency of the production of blue hydrogen.

   Currently hydrogen branded "renewable" is produced mainly by steam methane reformation of biomethane from North American landfills. SB 1505 (Lowenthal), Chapter 877, Statutes of 2006, requires 33% of the hydrogen produced for fueling stations that receive state funds be made from eligible renewable energy resources, including biomass, digester gas, landfill gas, solar, and wind. However, compliance is achieved largely on paper, through the use of credits from out of state renewable energy sources, rather than direct production and use of renewable hydrogen in California.

   This bill focuses on green hydrogen, which, if properly defined, promises climate and air quality benefits. The bill's requirement for 100% green hydrogen production and use doesn't take effect until January 1, 2045, and the bill provides no interim targets, or otherwise address implementation.

   As recently amended, the bill includes a stringent definition of green hydrogen for purposes of electricity generation, requiring production through electrolysis using RPS-eligible energy. This is appropriate if green hydrogen is claimed as "renewable" for purposes of complying with the RPS, as a weaker standard would provide a path to launder ineligible energy sources into the RPS by using them to produce hydrogen. The bill also prohibits the use of tradeable

renewable energy credits and requires electricity only from a new renewable generation resource developed specifically to serve the green hydrogen production process, which is stricter than the prevailing RPS requirements for other eligible sources.

The bill leaves the definition of green hydrogen for purposes of vehicle fuel unaddressed. The bill also does not address use of hydrogen outside of electricity generation and vehicle fuel, such as industrial production, buildings, shipping, or aviation.

3) **No matter how green it is, where hydrogen is used matters**. There have been recent evaluations seeking to identify the "least-regrets" end-uses of hydrogen, especially given the costliness of initial hydrogen production and the varied emissions benefits of hydrogen usage in different sectors. For instance, Earthjustice, an environmental law organization, released a report in 2021 identifying promising applications for green hydrogen and ranking hydrogen use by least-regrets uses, sectors to explore with caution, and sectors where hydrogen is not a solution. The report categorizes the least-regrets use for hydrogen as displacing fossil hydrogen in current industrial feedstocks. The usage of hydrogen in maritime shipping, aviation, and long-haul trucks and trains were categorized as "sectors to explore with caution." While Earthjustice categorized hydrogen usage in combustion in fossil gas power plants, gas-burning appliances in homes and commercial buildings, and cars, buses, and regional trucks as sectors where hydrogen is not a solution.

   Following the passage of SB 1075 (Skinner), Chapter 363, Statutes of 2022, ARB, the PUC, and the CEC are evaluating the possible deployment, development, and uses of hydrogen in the state. The evaluation is mandated to be publicly posted by June 1, 2024. ARB must also consult with the California Workforce Development Board and labor and workforce organizations on the evaluation. SB 1075 also requires the CEC to study and model potential growth for hydrogen and its role in decarbonizing the electrical and transportation sectors of the economy as part of the 2023 and 2025 editions of its Integrated Energy Policy Report. Ideally this joint agency work will aide understanding of the appropriate end-uses of hydrogen within the state. It may be worth the Legislature contemplating different definitions of hydrogen corresponding with different end-uses. Sectors identified as yielding less emission benefits for the cost of hydrogen production may be more suited to rigorous, i.e. "cleaner," definitions of hydrogen than those that would realize enormous emissions benefits from hydrogen usage regardless of the source of the hydrogen.

4) **Is any of this binding before 2045**? The definition of green hydrogen in Section 1 of the bill applies to the production and use requirements that don't take effect until 2045. Sections 2 and 3 of the bill make green hydrogen, as defined in Section 1, eligible for the RPS. To the extent these RPS provisions apply before 2045 is a bit unclear, considering they rely on a definition that is explicitly tied to the 2045 requirement. Regardless, the definition does not limit the use of hydrogen in electricity generation, or any other use, before 2045. It would only affect a claim that hydrogen is a RPS-eligible fuel. Without this bill, it is not.

5) **Related legislation**. AB 324 (Pacheco) requires the PUC to consider establishing procurement goals for "renewable hydrogen," as defined, for gas corporations and core transport agents, as specified. The definition of renewable hydrogen for purposes of AB 324 is less stringent than this bill's definition of green hydrogen for purposes of electricity generation. AB 324 is pending in this committee.

6) **Double referral**. This bill passed the Assembly Utilities and Energy Committee, with amendments, by a vote of 11-4 on April 12.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

Coalition for Clean Air

**Opposition**

California Hydrogen Business Council
California Hydrogen Coalition
Clean Energy
Coalition for Renewable Natural Gas
Oberon Fuels
State Building and Construction Trades Council of California
Western States Petroleum Association

**Analysis Prepared by**: Lawrence Lingbloom / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1554 (Joe Patterson) – As Introduced February 17, 2023

**SUBJECT**: California Environmental Quality Act: exemption: wildfire fuels reduction projects

**SUMMARY**: Expressly exempts from the California Environmental Quality Act (CEQA) a project for the reduction of fuels in areas within moderate, high, and very high fire hazard severity zones, as provided.

**EXISTING LAW**, pursuant to CEQA (Public Resources Code (PRC) 21000-21189.70.10):

1) Requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of an environmental impact report (EIR) on a project that it proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not have that effect.

2) Requires a lead agency to prepare a mitigated negative declaration for a project that may have a significant effect on the environment if revisions in the project would avoid or mitigate that effect and there is no substantial evidence that the project, as revised, would have a significant effect on the environment.

3) Defines "project" as an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and which is any of the following:

    a) An activity directly undertaken by any public agency;

    b) An activity undertaken by a person which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies; and,

    c) An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

**THIS BILL**:

1) Exempts from CEQA a project for the reduction of fuels in areas within moderate, high, and very high fire hazard severity zones, including, but not limited to, for the removal or reduction of overgrown vegetation through the use of prescribed fire, tree thinning, pruning, chipping, or roadway clearance.

2) Provides that no reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement:**

> AB 1554 is a measure that strengthens the health of California's forests. By creating an exemption for projects that propose to reduce fuel load to bypass CEQA requirements, this bill will ultimately expedite this process in high risk areas and make California's forests more resilient.

2) **CEQA**. CEQA generally requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of proposed projects, and to reduce those environmental impacts to the extent feasible.

   The process is intended to: (1) inform government decision-makers and the public about the potential environmental effects of proposed activities; (2) identify the ways that environmental damage can be avoided or significantly reduced; (3) prevent significant, avoidable environmental damage by requiring changes in projects, either by the adoption of alternatives or imposition of mitigation measures; and (4) disclose to the public why a project was approved if that project has significant environmental impacts that cannot be mitigated to a less than significant level.

   If an agency determines that a proposed activity is a project under CEQA, it will usually take the following three steps: (1) determine whether the project falls under a statutory or categorical exemption from CEQA; (2) if the project is not exempt, prepare an initial study to determine whether the project might result in significant environmental effects; and (3) prepare a negative declaration, mitigated negative declaration, or EIR, depending on the initial study.

   There are two types of CEQA exemptions: (1) statutory exemptions and (2) categorical exemptions. There are 15 statutory exemptions to CEQA in PRC 21080 (among other stand-alone statutory exemptions). This bill is proposing to create a 16$^{th}$ statutory exemption for fuel load reduction projects in moderate, high, and very high fire hazard severity zones.

3) **Wildfire prevention**. Wildfires have been growing in size, duration, and destructivity over the past 20 years. Growing wildfire risk is due to accumulating fuels, a warming climate, and expanding development in the wildland-urban interface. Since 2005, wildfires have destroyed more than 97,000 structures, requiring mass evacuations, and exacerbating the state's already-pressing need for more housing. In addition, wildfire smoke is unhealthy to breathe and is a public health concern. Further, wildfire losses are not experienced equally. Lower-income households are more likely to lose all of their assets and less likely to have adequate insurance to cover their losses

   To prevent the risk of wildfire, in August 2020, California and the U.S. Forest Service agreed to scale up vegetation treatment and maintenance to one million acres of federal, state, and private forest and wildlands annually by 2025.

   California is responsible for fire and resource protection on nearly 13.3 million acres of private and state-owned forested lands. The state owns about 1.1 million acres of these lands, and 12.2 million acres of lands are under private ownership. In the past several years, forest management has significantly expanded on these lands. CAL FIRE has increased its forest

thinning and prescribed fire activities from about 30,000 acres in 2016 to more than 50,000 acres in 2020. Partners receiving state-funded grants treated more than 30,000 acres in 2020. Private landowners currently actively manage 250,000-300,000 acres through fuels reduction, mechanical thinning, and timber harvest projects. Fuel load reduction is vital to restricting fire spread and wildfire prevention.

4) **California Vegetation Treatment Program (CalVTP).** CalVTP was developed and approved by the Board of Forestry and Fire Protection (Board) on December 30, 2019, and includes the use of prescribed burning, mechanical treatments, manual treatments, herbicides, and prescribed herbivory as tools to reduce hazardous vegetation around communities in the Wildland-Urban Interface (WUI), to construct fuel breaks, and to restore healthy ecological fire regimes.

   CalVTP is a statewide program by which public agencies, through a series of individual projects, will undertake to perform vegetation treatment activities for the purposes of wildfire prevention. These individual projects will occur throughout those portions of the State Responsibility Area that make up the "treatable landscape."

   On the same date on which the Board approved the CalVTP, it also certified a related Final Program Environmental Impact Report (FPEIR) prepared pursuant to CEQA. The FPEIR can be used by public agencies and includes a long list of such agencies, which include, but are not limited to, state agencies such as the CAL FIRE, California Department of Fish and Wildlife and the California Department of Parks and Recreation, cities, counties, water and irrigation districts, conservation districts, park and open space districts, conservation agencies, community service districts, utility districts, flood control districts, water agencies, transportation authorities, cemetery districts, and airport districts. There are more than 200 agencies with land ownership or land management responsibilities in the treatable landscape.

   The Programmatic EIR provides a helpful tool to expedite the implementation of vegetation treatments. The FPEIR is intended to provide broad CEQA coverage for individual projects consistent with the analysis and mitigation strategies set forth in the document.

   Private landowners conducting vegetation management activities are only covered under CEQA if they have received public funding for the activity (i.e., a grant for forestry management).

5) **High fire zones**. The State Fire Marshal classifies lands within state responsibility areas into fire hazard severity zones (PRC 51178). Each zone is based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by CAL FIRE as a major cause of wildfire spread. Fire Hazard Severity Zones fall into the following classifications: Moderate, High, and Very High based on consistent statewide criteria and based on the severity of fire hazard that is expected to prevail in those areas.

   As of 2010, about one-third of California's housing units were located within WUI. Residential developments in the WUI and other wildfire prone areas can significantly increase the risks of wildfires and the risk to public safety for several reasons. First, introducing more people—via additional development—into a flammable landscape increases the likelihood of: (1) a wildfire igniting due to the increased presence of people; and (2) the ignition becoming a wildfire because of the placement of homes amongst the flammable vegetation. Second, building housing units in the WUI puts more people in

harm's way. The WUI and the Fire Hazard Severity Zones have a lot of overlap; the WUI is a strong consideration for designation of a Fire Hazard Severity Zone.

6) **This bill**. AB 1554 would exempt from CEQA fuel load reduction projects in areas within moderate, high, and very high fire hazard severity zones including, but not limited to, for the removal or reduction of overgrown vegetation through the use of prescribed fire, tree thinning, pruning, chipping, or roadway clearance.

7) **Committee amendments**. To tighten up the exemption, the Committee may wish to consider amending the bill to tailor it for defensible space requirements being met in the Fire Hazard Severity Zones, and include a December 31, 2029, sunset to allow the Legislature the opportunity to assess the value of the exemption.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

Humboldt Redwood Company LLC

**Opposition**

None on file

**Analysis Prepared by**: Paige Brokaw / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1567 (Garcia) – As Amended April 7, 2023

**SUBJECT**: Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2024

**SUMMARY**: Enacts the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2024, to authorize $15.105 billion in general obligation bonds for safe drinking water, wildfire prevention, drought preparation, flood protection, extreme heat mitigation, and workforce development programs.

**EXISTING LAW**:

1) Requires, except under certain circumstances, a $^2/_3$ vote of the Legislature and a majority vote of the people at an election, before the state may issue a general obligation (GO) bond. (Article XVI of the California Constitution.)

2) Prescribes the state's responsibilities regarding the issuance and sale of GO bonds. (Government Code 16720)

3) Provides, pursuant to voter-approved Proposition 68, $4 billion through the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018. (Public Resources Code 80000 et seq).

**THIS BILL**:

1) Establishes the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2024 for submission of these provisions to the voters at the March 5, 2024, statewide primary election.

2) Requires any administering agency expending funds from this bond to give priority to projects that leverage private, federal, and local funding or produce the greatest public benefit.

3) Requires, to the extent practicable, a project funded by this bond to include signage informing the public that the project received funding from the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2024.

4) Requires any administering agency dispersing funds from this bond to give priority to projects that reduce near-term risks of climate change impacts while promoting long-term resilience, and promote equity, foster community resilience; protect the most vulnerable by prioritizing projects that meaningfully benefit disadvantaged communities (DAC), severely DAC, and vulnerable populations; avoid solutions that would likely worsen climate impacts or transfer risks unreasonably from one area, location, or social group, to another; advance solutions to prevent displacement of low-income residents and businesses that could occur as

an unintended consequence of a project that causes an increase in the cost of owning or renting property; or, incorporate partnerships with community stakeholders, including community-based organizations, to ensure that projects have support from disproportionately affected communities, where applicable, develop and harness local talent for quality jobs, and promote community-based leadership.

5) Requires to the extent practicable, a project that receives from this bond to provide workforce education and training, contractor, and job opportunities for vulnerable populations.

6) Caps administrative costs to no more than 5% of the funds allocated for a program.

7) Requires the Department of Finance to provide for an independent audit of expenditures. Requires the Secretary of the Natural Resources Agency (NRA) to publish a list of all program and project expenditures at least once annually in specified formats. Specifies audit requirements.

8) Provides that any moneys allocated pursuant to this bond that are not encumbered or expended by the recipient entity within the time period specified by the administering state agency, the unexpended moneys shall revert to the administering state agency for allocation consistent with the applicable chapter.

9) Requires at least 35% of the funds available to be allocated for projects that provide meaningful and direct benefits to at least one of the following: vulnerable populations, under-resourced communities, or DACs. Requires at least 10% of the moneys available pursuant to each chapter of this bond to be allocated for projects that provide meaningful and direct benefits to severely DACs.

10) Authorizes administering agencies awarding grants to provide advanced payments in the amount of 25% of the grant award to the recipient, including state-related entities, to initiate the project in a timely manner.

11) Allows up to 10% of funds available to be allocated for technical assistance and capacity building by the administering state agency. Allows technical assistance to DACs to exceed 10%.

12) Requires funded projects to demonstrate ongoing monitoring and scientific review. Allows up to 5% of project funds to be used for this purpose.

13) Prohibits any funds from being used to fulfill any environmental mitigation requirements or compliance obligations imposed by law or to pay the costs of the design, construction, operation, mitigation, or maintenance of Delta conveyance facilities.

14) Requires grant administering agencies to do all of the following: develop and adopt project solicitation and evaluation guidelines; conduct at least one public meeting to consider public comments before finalizing the guidelines; allow for virtual attendance at the public hearing; and, make guidelines available online and consistent with all applicable statutes.

15) Requires any apprenticeship or preapprenticeship program funded pursuant this bond to be approved by the Division of Apprenticeship Standards.

16) Gives preference to use of the California Conservation Corps or certified community conservation corps.

17) Provides that eligible applicants are a public agency, local agency, nonprofit organization, park and open-space district and authority, resource conservation district, joint powers authority, tribe, public water agency, groundwater sustainability agency, or regional collaborative for climate adaptation.

18) Provides that all funds made available by this bill are subject to appropriation by the Legislature.

19) Requires $2.18 billion to be available for the prevention and reduction in the risk of wildfires to lives, properties, and natural resources. Of these funds, the bill requires:

    a) $400 million be available to the Office of Emergency Services (CalOES) for a prehazard mitigation grant program, and specifies grant requirements. Allows up to $75 million for each project.

    b) $775 million be available to NRA and to its departments, boards, and conservancies for projects and grants to improve local fire prevention capacity, improve forest health and resilience, and reduce the risk of wildfire spreading into populated areas from wildlands. Allocates those funds as follows:

        i) $150 million to the Department of Conservation's (DOC) Regional Fire and Forest Capacity Program to improve forest health and fire resilience;

        ii) $250 million to the Department of Forestry and Fire Protection (CAL FIRE) for long-term forest health projects, including reforestation; conservation easements; activities that promote long-term carbon storage and sequestration; upper watershed, riparian, and mountain meadow restoration; and prescribed burns;

        iii) $150 million for watershed improvements projects in forests and other habitats, including, but not limited to, redwoods, conifers, oak woodlands, mountain meadows, chaparral, deserts, and coastal forests;

        iv) $75 million for the Sierra Nevada Conservancy for watershed improvement, forest health, biomass utilization, and forest restoration workforce development. Requires at least 70% of the funds be made available to the Sierra Nevada Watershed Improvement Program;

        v) $150 million for CAL FIRE for the administration of grants pursuant to the Wildfire Prevention Program;

        vi) $30 million be available to the Air Resources Board (ARB) to incentivize new projects in California that provide long-term capital infrastructure to convert forest

and other vegetative waste removed for wildfire mitigation to uses that maximize reductions in greenhouse gas emissions, provide local air quality benefits, and increase local community resilience against climate change impacts;

vii) $100 million be available to the Department of Parks and Recreation and $100 million be available to regional park entities to plan for and implement projects to reduce the risks of fire and for the fire hardening of infrastructure for units of the state park system, and for grants to restore, enhance, and protect public lands and improve carbon sequestration through, among other things, ecologically sensitive vegetation management practices, or reduce black carbon emissions;

viii) $350 million be available to NRA for grants on a block grant basis to eligible city, county, district, and regional park and open-space entities for specified projects. Establishes that minimum awards for grants issued pursuant to this section are $150,000 for cities and districts, and 300,000 for counties and regional entities; and,

ix) $125 million be available to the California Conservation Corps and certified community conservation corps for demonstrated jobs projects. Requires no less than 30% of the total amount be available for the construction of permanent California Conservation Corps and certified community conservation corps residential accommodations with not less than one established in northern California and one in southern California; at least 60% of the total amount to be available to certified community conservation corps; and, up to 5% available for training, support, recruitment, and retention, and other wraparound services for corps members.

20) Requires $1.925 billion to be available for protection of coastal communities from sea level rise, restoration of coastal and ocean resources, mitigation of ocean acidification, and addressing the impacts of climate change along California's coast. Of these funds, the bill requires:

a) $1.1 billion to the State Coastal Conservancy for grants or expenditures to protect, restore, and increase the resilience of beaches, bays, coastal dunes, wetlands, coastal forests, watersheds, trails, and public access facilities. Of this amount, requires:

i) $250 million for projects that are consistent with the San Francisco Bay Restoration Authority Act including, but not limited to, projects that address sea level rise, flood management, and wetland restoration;

ii) $250 million for the San Francisco Bay Area Conservancy Program;

iii) $100 million for grants for projects that use natural infrastructure to promote climate resilience and protect critical infrastructure that is vulnerable to sea level rise and flooding; and,

iv) $65 million for projects to remove outdated or obsolete dams and to upgrade associated downstream infrastructure to increase climate resilience, enhance natural sediment transport, improve wildlife and fish passage, and modernize associated

infrastructure, including related planning, monitoring, permitting, habitat restoration, and recreational improvements.

b) $30 million to the California Coastal Commission for grants for local adaptation planning and updating local coastal programs and $20 million to the San Francisco Bay Conservation and Development Commission for coastal planning and projects within its jurisdiction.

c) $300 million for deposit into the California Ocean Protection Trust Fund for grants. Gives priority to projects that assist coastal communities, including those reliant on commercial fisheries, with adaptation to climate change, including projects that address ocean acidification, increasing ocean temperatures, sea level rise, stewardship of the state's marine protected areas, kelp restoration, or habitat restoration and protection.

d) $50 million available to the Department of Parks and Recreation to plan for and implement projects to reduce the risks of sea level rise for units of the state park system.

e) $50 million be made available for the Invasive Species Council of California to implement projects to protect and restore island ecosystems and prevent and mitigate island invasive species.

f) $25 million be available for projects identified by the Department of Fish and Wildlife (DFW) to implement climate-ready fisheries management approaches that expand opportunities for experimentation and adaptive cooperative management, and to implement modernized electronic fisheries data management systems and increase the use of electronic technologies to improve fisheries management responses and resiliency under changing ocean conditions.

g) $50 million be available for projects identified by DFW to support the management of kelp ecosystems.

21) Requires $5.015 billion to be made available for the delivery of safe drinking water, drought preparation and response, and flood protection. Of these funds, the bill requires:

a) $250 million be made available to the Department of Water Resources (DWR) in collaboration with State Water Resources and Control Board (State Water Board), for grants and projects that advance groundwater sustainability consistent with the Sustainable Groundwater Management Act. Identifies funding priorities.

b) $200 million be made available for expenditures on, and competitive grants and loans to, projects that are included in, and implemented in, an adopted integrated regional water management plan and that respond to climate change and contribute to regional water security.

c) $400 million to the State Water Board for competitive grants or loans to help provide clean, safe, and reliable drinking water to all Californians.

d) $30 million to the State Water Board for competitive grants or loans to develop and implement regional or countywide drought and water shortage contingency plans, resilience measures, and programs, including those adopted according to the recommendations and guidance proposed by the DWR.

e) $100 million to the State Water Board for loans or grants or forgivable loans to public agencies or public-private partnerships for projects that will prevent or substantially reduce the contamination of groundwater or surface water supplies that serve as a source of drinking water and improve access to wastewater infrastructure. Requires the State Water Board to give preference in allocating the grants and loans based on specified criteria.

f) $100 million available to the State Water Board for competitive grants or loans for projects that prevent, reduce, or treat the contamination of groundwater that serves as a major source of drinking water for a community. Requires prioritization based on specified criteria.

g) $450 million available to the NRA and its departments, boards, and conservancies for the protection and restoration of rivers, lakes, and streams to improve climate resilience, water supplies, or water quality. Requires at least $240 million to NRA for capital outlay projects that provide air quality, public health, and habitat benefits to the Salton Sea and surrounding communities, which includes $30 million for the Salton Sea Authority and $2 million for projects developed and prioritized using a public process that includes participatory budgeting. The funding shall include:

    i) $50 million to be available to the NRA for the Tijuana River Border Pollution Control Project;

    ii) $25 million available to the Santa Monica Mountains Conservancy for projects within the San Fernando Valley that protect or enhance the Los Angeles River watershed and its tributaries or headwaters;

    iii) $25 million available to the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy;

    iv) $15 million available for multiple-benefit watershed protection, restoration, and public access projects that improve climate resilience pursuant to the Lower American River Conservancy Program;

    v) $15 million available to NRA for projects in and around Clear Lake;

    vi) $5 million available to NRA for projects supporting a comprehensive regional use management plan for the Russian River to reduce conflict and promote water supply improvements, habitat restoration and protection, cooperative public recreation, and commercial activity;

vii) $5 million available to NRA for projects within the County of Placer to promote habitat restoration and protection and connect and expand trails and trail systems along county rivers, lakes, and waterways; and,

viii) $10 million available to DWR to implement the Urban Streams Restoration Program.

h) $50 million available to the California Environmental Protection Agency for purposes consistent with the New River Water Quality, Public Health, and River Parkway Development Program.

i) $200 million to DWR for multiple-benefit flood management system improvements that reduce flood risk and provide fish and wildlife habitat including $50 million for urban coastal watersheds and $50 million for Sacramento-San Joaquin Delta (Delta) levees.

j) $400 million to DWR for projects to repair or expand facilities that are part of the State Plan of Flood Control.

k) $200 million to DWR for the Flood Control Subventions Program.

l) $150 million to DWR for projects in the Delta to increase flood protection and climate resiliency.

m) $300 million to the State Water Board for water recycling projects.

n) $25 million to DWR for implementation of the Open and Transparent Water Data Act.

o) $100 million to the State Water Board to address hexavalent chromium in drinking water systems with high compliance costs, as specified.

p) $70 million to the State Water Board for drinking waters systems to address perfluoroalkyl and polyfluoroalkyl substances (PFAS).

q) $100 million to DWR to reactivate existing steam gauges and deploy new gauges.

r) $250 million to the Wildlife Conservation Board (WCB) for the Stream Flow Enhancement Program.

s) $200 million for tribal water infrastructure projects.

t) $150 million to NRA for multibenefit flood projects in urbanized areas.

22) Authorizes $1.625 billion for the protection and restoration of natural lands to as to maintain diversity, preserve fish and wildlife, and allow species migration in response to climate conditions, allocated as follows:

a) $750 million to WCB for the protection of fish and wildlife in response to changing climate conditions.

b) $100 million to DOC for the Multibenefit Land Repurposing Program for groundwater sustainability projects that provide wildlife habitat.

c) $50 million to DFW for projects to improve climate resilience of fish and wildlife.

d) $540 million for climate resilience of communities, fish and wildlife, and natural resources as follows:
   i) $15 million to the Baldwin Hills Conservancy;

   ii) $40 million to the Coastal Conservancy's Santa Ana River Conservancy Program;

   iii) $30 million to the Coastal Conservancy's Coyote Valley Conservation Program;

   iv) $10 million to the Coastal Conservancy; v) $35 million to the California Tahoe Conservancy;

   v) $30 million to the Coachella Valley Mountains Conservancy; vii)$35 million to the Delta Conservancy;

   vi) $50 million to the San Diego River Conservancy;

   vii) $65 million to the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy;

   viii) $15 million to the San Joaquin River Conservancy;

   ix) $65 million to the Sierra Nevada Conservancy;

   x) $15 million to the American River Conservancy; and,

   xi) $70 million for the creation of new conservancies, including $15 million for a Salton Sea Conservancy and $25 million for a California Trails Conservancy.

23) Authorizes $820 million for the protection of California's agricultural resources, communities, open spaces, and lands from climate change impacts, allocated as follows:

a) $100 million to the Department of Food and Agriculture (CDFA) to improve soil health, carbon sequestration, air or water quality, or fish and wildlife habitat.

b) $50 million to CDFA for on-farm water use efficiency.

c) $80 million to CDFA for projects that reduce methane emissions from dairy and livestock operations and that improve water quality.

d) $20 million for to CDFA for projects and activities recommended by the Invasive Species Council of California.

e) $10 million to CDFA for pollinator habitat and forage.

f) $100 million to CDFA for grants that benefit small- and medium-sized farms and socially disadvantaged farmers and increase the sustainability of agricultural infrastructure.

g) $100 million to DOC for the protection and restoration of farm and ranch land.

h) $10 million to WCB for recovering and sustaining populations of monarch butterflies and other pollinators.

i) $50 million to CDFA for a resilient and higher welfare grant program to support improved farm animal welfare.

24) Authorizes $1.74 billion for climate resilience and mitigation strategies to address increasing temperatures and extreme heat, allocated as follows:

a) $850 million to State Parks for the Statewide Park Development and Community Revitalization Program (Statewide Park Program).

b) $175 million to NRA for urban greening projects that benefit vulnerable populations;

c) $150 million to CAL FIRE for urban forestry projects.

d) $75 million to the Department of Community Services and Development for the Energy Efficiency Low-Income Weatherization Program.

e) $150 million to the Strategic Growth Council (SGC) to reduce the urban heat island effect and other extreme heat impacts.

f) $40 million to NRA to provide fuel breaks, risk reduction buffers, and recreational corridors through the Recreational Trails and Greenways Grant Program.

25) Authorizes $1.8 billion to strengthen climate resilience based on regional needs, allocated as follows:

a) $1 billion to SGC for climate resilience and the reduction of climate risk to communities.

b) $200 million to SGC for the Transformative Climate Communities Program.

c) $100 million to SGC for multijurisdictional projects led by countywide special districts created for the purpose of building resiliency to the impacts of sea level rise and extreme storms.

d) $100 million to OES for grants to create strategically located climate resilience centers.

e) $100 million to CDFA for grants to fairgrounds to enhance their ability to serve as community staging and evacuation centers, including deployment of communications and broadband.

f) $50 million to the Department of Resources Recycling and Recovery to provide funding for organic waste infrastructure.

26) Provides that bonds authorized pursuant to the Act shall be prepared, executed, issued, sold, paid, and redeemed consistent with the General Obligation Bond Law except provisions that require bond funds to only be used to fund or provide grants or loans for capital outlay projects.

27) States legislative findings and declarations regarding the climate crisis and the threat it poses to Californians, particularly to low-income communities and communities of color.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement:**

> The impacts of climate change to our state and our communities require us to act quickly. California needs to protect itself against future climate disasters and rebuild our workforce from an ongoing pandemic that has shown us what can happen when we aren't prepared for an emergency. This bill seeks to make California more climate resilient by investing in various adaptation activities throughout the state, ranging from wildfire risk reduction, to drought preparation, to protection against sea-level rise. Not only will this measure help create new jobs for Californians, it will create long-term green jobs that help the state reach its climate goals. We must invest in the infrastructure necessary to protect our communities, our environment, and our economy from an evolving climate crisis.

2) **Cost of climate change.** California Fourth Climate Change Assessment found that the costs to adapt to the impacts of climate change will be incredibly high. Specifically, the report found it could soon cost Californians $200 million a year in increased energy bills to keep homes air conditioned; $3 billion from the effects of a long drought on agriculture; and, $18 billion to replace buildings inundated by rising seas. It also underscored the loss of life from heat waves, which could add more than 11,000 heat-related deaths a year by 2050 in California, and carry an estimated $50 billion annual price tag. Investing in GHG emissions reductions and climate resiliency are critical to protecting public health and the environment for current and future Californians.

3) **Making ends meet with bonds**. Bonds are a way the state can borrow money to pay various state investments. The state sells bonds to investors to receive "up-front" funding for these projects and then repays the investors, with interest, over a period of time. The state repays GO bonds using the state General Fund. Under the California Constitution, state GO bonds must be approved by voters.

   After selling bonds, the state makes annual payments until the bonds are paid off. The annual cost of repaying bonds depends primarily on the interest rate and the time period over which the bonds have to be repaid. The state often makes bond payments over a 30-year period. Over the last five fiscal years, the state has issued an average of $7.3 billion of GO bonds annually. In 2021-22, the state issued $6.6 billion of GO bonds.

4) **State budget deficit.** The state is facing a $22.5 billion deficit, and multi-billion dollar deficits over the next several future fiscal years. Governor Newsom's proposed budget for fiscal year 2023-2024 proposes to cut $6 billion (~27% of the total cuts) from its climate change agenda.

   The Legislature is currently considering several environmental bond proposals as potential funding options to both fill the gaps where budget cuts may be made and augment funding where the authors want to prioritize spending. Those measures include:

   a) AB 408 (Wilson) - $3.365 billion for the Climate-resilient Farms, Sustainable Healthy Food Access, and Farmworker Protection Bond Act of 2024;

   b) SB 638 (Eggman) - $6 billion for the Climate Resiliency and Flood Protection Bond Act of 2024; and,

   c) SB 867 (Allen) – an undetermined amount for the Drought and Water Resilience, Wildfire and Forest Resilience, Coastal Resilience, Extreme Heat Mitigation, Biodiversity and Nature-Based Climate Solutions, Climate Smart Agriculture, and Park Creation and Outdoor Access Bond Act of 2023.

5) **Previous natural resource and water bonds**. Since the 2000, California voters have authorized the state to take on more than $19.6 billion in GO bond debt to fund various water, natural resource, and flood protection programs (out of more than $30 billion of all voter-authorized bonds). Administered by a number of state departments, agencies, boards, and conservancies, bond proceeds are expended on various capital outlay projects, and are also disbursed to federal, state, local, and non-profit entities in the form of grants, contracts, and loans.

   According to the state's Bond Accountability website, roughly $281 million from Proposition 68 (2018), $40 million from Proposition 1 (2014), $3.6 million from Proposition 84 (2006), and $29 million from Proposition 1E (2006) are uncommitted to a specific grantee or project at this time. If voters approved this bill, funding would not likely be appropriated and available until after January 2025. Bond funding is typically appropriated over multiple fiscal years.

6) **Bond indebtedness**. The State Treasure's office's (STO) Public Finance Division (PFD) manages the state's debt portfolio, overseeing the issuance of debt, and monitors and services

the state's outstanding debt. According to PFD, the state has approximately $949 million of variable rate GO bonds outstanding as of the end of 2021-22.

Using certain assumptions for debt issuance, the STO estimates debt service payments from the General Fund will increase by $63.7 million in 2022-23 and $618.6 million in 2023-24.

The most recent reported ratio of General Fund-supported debt service to General Fund revenues was 3.42% in 2021-22. The STO estimates this ratio will be 3.50% in 2022-23.

7) **Committee amendments.** The Assembly Water, Parks and Wildlife Committee proposed, and the author committed to accepting, the following amendments in this committee:

a) Amend Public Resources Code section 80501(e) as follows:

(e) To the extent practicable, a project that receives moneys pursuant to this division shall provide workforce education and training, contractor, and job opportunities for vulnerable populations <u>or socially disadvantaged groups</u>.

b) Amend Public Resources Code, Section 80503 to add definition of "socially disadvantaged group" to as follows:

<u>"Socially disadvantaged group" means a group whose members have been subjected to racial, ethnic, or gender prejudice because of their identity as members of a group without regard to their individual qualities. These groups include all of the following:</u>

<u>(1) African Americans.
(2) Native Americans.
(3) Alaskan Natives.
(4) Hispanics.
(5) Asian Americans.
(6) Native Hawaiians and Pacific Islanders.
(7) Women.</u>

c) Add Public Resources Code Section 80550.5 to recognize that appropriately-designed and scaled desalination projects that utilize renewable energy to the extent feasible and incorporate measures to minimize impacts on the environment are an important to developing additional water supplies and making the state more climate resilient.

<u>80550.5 (a) Of the funds made available by Section 80540, one hundred million dollars ($100,000,000) shall be available for capital investments in brackish desalination, seawater desalination, contaminant and salt removal, and salinity management projects to improve California water and drought resilience. Priority shall be given to projects that use renewable energy and reduce greenhouse gas emissions associated with their construction and operation.
(b) For ocean desalination projects, priority shall be given to projects that do both of the following:
(1) Incorporate measures to minimize the intake of all forms of marine, brackish, and freshwater life in their construction and operation.
(2) Incorporate measures to minimize the adverse impacts of outfalls on marine, brackish, and freshwater life in their construction and operation.</u>

8) **Double referral**. This bill was heard in the Assembly Water, Parks and Wildlife Committee on April 18, where it was approved by a vote 10-0.

9) **Urgency**. As an urgency statute, AB 1567 must be approved by 2/3 vote of each house of the Legislature.

10) **Previous legislation**. AB 2387 (E. Garcia, 2022) proposed the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Act of 2022, a $7.4 billion GO bond to address the impacts of climate change, to be placed before voters on the November 8, 2022, general election ballot. It was held in the Assembly Appropriations Committee.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

American Society for The Prevention of Cruelty to Animals
Anaheim; City of
Bear Yuba Land Trust
California Association of Local Conservation Corps
California Climate Reality Coalition
California Municipal Utilities Association
California Park & Recreation Society
California Urban Forests Council
City of Riverside
Coachella Valley Association of Governments
Coachella Valley Conservation Commission
County of Orange
County of Placer
County of Riverside
East Bay Regional Park District
Eastern Sierra Land Trust
Feather River Land Trust
IRWM Roundtable of Regions
Jurupa Valley; City of
Kings Basin Water Authority
Mammoth Lakes Trails and Public Access Foundation (MLTPA)
Midpeninsula Regional Open Space District
Mojave Water Agency
Nevada; County of
North Tahoe Public Utility District
Placer Land Trust
San Bernardino; County of
Santa Ana Watershed Project Authority
Santa Clara Valley Open Space Authority
Save Mount Diablo
SCDD
Self-help Enterprises

Sierra Business Council
Sierra County Land Trust
Sierra Foothill Conservancy
Sierra Nevada Alliance
Sonoma County Regional Parks
Sultana Community Services District
Tahoe City Public Utility District
The Nature Conservancy
The Wildlands Conservancy
Truckee Donner Land Trust
Upper Feather River Integrated Regional Water Management Group
Westside Sacramento Integrated Regional Water Management Coordinating Committee

**Opposition**

None on file

**Analysis Prepared by**: Paige Brokaw / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1591 (Wallis) – As Introduced February 17, 2023

**SUBJECT**: Energy: petroleum pricing

**SUMMARY**: Requires the State Energy Resources Conservation and Development Commission (CEC) to post and regularly update a dashboard on its internet website that includes the difference in average gasoline prices in California compared to national average gasoline prices, the identification of California-specific taxes, fees, regulations, and policies and their individual contribution to gasoline prices in the state, and any substantiated evidence of price gouging or other anticompetitive behavior within the petroleum industry and its contribution to the price differential.

**EXISTING LAW**:

1) Establishes the Petroleum Industry Information Reporting Act of 1980 to require each refiner and major marketer to submit information each month to the CEC on their feedstock inputs, origin of petroleum receipts, imports of finished petroleum products and blendstocks, by type, including the source of those imports, exports of finished petroleum products and blendstocks, by type, including the destination of those exports, refinery outputs, refinery stocks, and finished product supply and distribution, including all gasoline sold unbranded by the refiner, blender, or importer. Requires each major oil producer, refiner, marketer, oil transporter, and oil storer to annually submit information to the CEC on transportation and storage capacity, among other things. (Public Resources Code (PRC) § 25353-25354)

2) Establishes the California Oil Refinery Cost Disclosure Act to require operators of refineries in the state that produce gasoline meeting California specifications, within 30 days of the end of each calendar month, to submit a report to CEC containing certain information regarding its refining activities related to the production of gasoline in that month. Requires the CEC to post those reported data, in aggregate, within 45 days of the end of each calendar month, on its internet website. (PRC § 25355(c))

**THIS BILL**:

1) Requires the CEC to post and regularly update a dashboard on its internet website that includes all of the following information:

    a) The difference in average gasoline prices in California compared to national average gasoline prices.

    b) The identification of all California-specific taxes, fees, regulations, and policies that directly or indirectly contribute to higher gasoline prices within the state, and the relative contribution of each individual tax, fee, regulation, or policy to the identified price differences, including taxes, fees, regulations, and policies that contribute to higher costs for covered entities, to the extent that these higher costs are passed on to consumers.

c) Any substantiated evidence of price gouging or other anticompetitive behavior within the petroleum industry, and the relative contribution of this behavior to the identified price difference.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Need for the bill**. According to the author,

> California's high gas prices create a burden on low-income and middle class families. When prices spike, these households have no options to escape the higher cost. Whenever prices increase, fingers start pointing and we begin playing the blame game. Some say it is price gouging, some say it is the taxes and some say it is decades of policy decisions that increase costs and reduce supply. AB 1591 will give Californians the transparency they need to understand why they are paying more than the rest of the country for gas.

2) **California's gas prices**. The cost of a gallon of gasoline is tethered to a number of different variables, including:

- Taxes:
  Federal Excise Tax: 18.4 cents per gallon
  State Excise Tax: 53.9 cents per gallon
  Sales Tax (estimated): 10 cents per gallon (can vary by location)

- Fees:
  Low Carbon Gas Programs: 22 cents per gallon
  Greenhouse Gas Programs: 15 cents per gallon
  Underground Tank Storage: 2 cents per gallon

- Imbedded cost of compliance with environmental regulations: California has some of the strictest environmental regulatory requirements on oil extraction and refinement, in addition to the state's ambitious climate emission reduction goals, which contribute to the cost of doing business in the state.

- Industry profit margins: how profits are calculated into the price of a gallon per gasoline are speculative, but truly unknown. The price of gasoline in California is unregulated and companies can charge prices based on what consumers are willing to pay.

California is notorious for having some of the most expensive gas in the country. Oil refiners refer the added costs to taxes and fees for environmental programs, but those added costs are less than half the delta between U.S. and California pump prices.

The CEC found growth of the average retail margin in California has exceeded growth of the national margin, especially since 2012. From 2004 to 2010, the average retail margin in California was either equivalent to or below the national margin. From 2015 to 2017, however, the California retail margin increased to an average of 19 cents greater than the national margin.

More recently, since Russia invaded Ukraine in February of last year, oil prices have increased. The U.S. and other Western nations introduced financial sanctions that made it difficult to clear Russian oil transactions through Western banks. Russian oil normally accounts for about 10% of global oil supply. It's still being traded, but not to the same degree, resulting in a gap in supply, and increased demand – and prices – for gas.

Last October, CEC chair David Hochschild released a statement saying,

> Over the course of 10 days, oil companies increased gas prices by a record 86 cents per gallon. At the end of August, crude oil prices were roughly $100 per barrel, and the average gas price in California was $5.06. Now, even though the price of oil has decreased to $90 per barrel, today the average gas price at the pump has surged to $6.43 … Data show even as crude oil prices decreased and state fees and taxes remained unchanged, the price at the pump still went up because refinery costs and profits more than tripled, now accounting for $2.18 for every gallon of gas that Californians buy.

As of this month, the statewide average is $4.90 – nearly $1.50 per gallon greater than U.S. gasoline prices, according to the latest data from AAA.

3) **Market price volatility**. In 2014, the Legislature passed SB 448 (Leno) to require CEC to investigate suspected motor vehicle fuel price manipulation and make recommendations to the Legislature on how to limit motor vehicle fuel price volatility. The bill was vetoed by Governor Brown, who said: "I am directing [CEC] to work with the Attorney General to evaluate market trends and ways to respond to price volatility. We need to have a plan and a rapid response team in place with the capability to respond when sudden and untoward price fluctuations occur."

   In response to this direction, CEC established the Petroleum Market Advisory Committee (PMAC) in 2014 to provide expertise on factors leading to price increases and strategies for addressing price volatility. The energy economists and experts on PMAC provided CEC and state regulators with independent advice and insights on issues affecting the market, from local policies to global events. The final report, issued in 2017, found several gasoline market anomalies that appeared to be new trends in California, including increasing retail margins for California gasoline, and increasing retail price differentials between the California and U.S. average, among others.

4) **Petroleum Industry Information Reporting Act**. PIIRA, which the Legislature enacted in 1980, requires qualifying petroleum industry companies to submit weekly, monthly, and annual data to the CEC. Analysis of data collected under PIIRA is an important part of the CEC's responsibility to create a thorough understanding of the operations of the petroleum industry in California. Businesses that ship, receive, store, process and sell crude oil and petroleum products in California file PIIRA reports.

   PIIRA has confidentiality protections for refinery data collected by CEC, but they are very restrictive and limit the extent to which information covered by this bill can be publicly reported. The only way to get public reporting for info under PIIRA is to mandate public reporting or exempt it from PIIRA's confidentiality requirements.

5) **New transparency requirements**. Last year, the Legislature enacted the California Oil Refinery Cost Disclosure Act SB 1322 (Allen), Chapter 374, Statutes of 2022 to require the CEC to publicly report specified pricing data from each oil refinery operating in the state, including the "gross gasoline refining margin," or the difference, expressed in dollars per barrel, between the volume-weighted average price of wholesale gasoline sold by a refiner in the state and the average price of crude oil received by the refinery.

   The Associated Press reported on March 14 that four of the five oil companies that provide 97% of the state's gasoline met the March 2 deadline under SB 1322 for disclosing how much money they are making from selling gasoline in the state: Marathon, PBF Energy, Phillips 66, and Valero, according to the CEC. Chevron, which accounts for about 30% of all gasoline sold in the state giving it the largest share of the market, had not yet complied.

6) **Industry profits**. In the third quarter of 2022, from July to September, oil companies reported record high profits. According to Governor Newsom, Phillips 66 reported $5.4 billion in profits, a 1,243% increase over last year's $402 million; BP posted $8.2 billion in profits, its second-highest on record; Marathon Petroleum profits were reported at $4.48 billion, a 545% increase over last year's $694 million; Valero's $2.82 billion in profits that were 500% higher than the year before; PBF Energy's $1.06 billion that was 1700% higher than the year before; Shell reported a $9.45 billion haul that sent $4 billion to shareholders for stock buybacks; Exxon reported their highest-ever $19.7 billion in profits; and, Chevron reported $11.2 billion in profits, their second-highest quarterly profit ever.

   A 2019 CEC report concluded that "the primary cause of the residual price increase is simply that California's retail gasoline outlets are charging higher prices than those in other states… The overall California increase in retail margins, above that experienced by the rest of the U.S., has resulted in California gasoline consumers paying an estimated additional $1.5 billion in 2018 and $11.6 billion over the last five years."

7) **Special session.** Last November, Governor Gavin Newsom called for a special session of the Legislature to investigate last fall's unprecedented spike in gasoline prices. The spike in gasoline prices, Newsom alleges, resulted in record refiner profits of $63 billion in just 90 days. Last fall's spike occurred while crude oil prices dropped, state taxes and fees remained unchanged, and gas prices did not increase outside the western U.S., and major refiners failed to explain the reasoning behind the price increases at the pump.

   The burden of high gas prices is borne disproportionately by lower-income Californians, many of whom must drive to commute long distances for work and have less ability to absorb higher gas prices in their budgets and have been disproportionately impacted by inflation generally.

   In the Governor's proclamation for the special session, he acknowledged the enactment of SB 1322, and said "even greater transparency is needed in light of oil companies' recent pricing decisions, particularly with respect to information regarding the timing and production impact of refinery maintenance and timely information about inventory levels."

   On March 28, the Governor signed SBx1 2 (Skinner), Chapter 1, Statutes of 2023 to expand and significantly update both PIIRA and the California Oil Refinery Cost Disclosure Act of 2022, to mandate extensive reporting from various specified entities along California's oil and gasoline supply chain. The bill also authorizes the CEC to establish a maximum gross

gasoline refining margin (max margin) and penalty on gasoline sold by refiners in the state, pursuant to certain findings. Included is a price-gouging penalty that would fine oil companies for making excessive profits; if oil companies do engage in price gouging, then SBx1 2 will collect penalties and deposit them in the Price Gouging Penalty Fund to "address any consequences of price gouging on Californians."

In addition, the bill creates a new division and advisory committee at the CEC, and requires various reports and assessments by the CEC to be submitted to the Legislature regarding the current status and future managed decline of transportation fuels.

8) **This bill**. AB 1591 proposes requiring the CEC to make information available about the difference in average gasoline prices in California compared to national average gasoline prices, the identification of California-specific taxes, fees, regulations, and policies and their individual contribution to gasoline prices in the state, and any substantiated evidence of price gouging or other anticompetitive behavior within the petroleum industry and its contribution to the price differential.

   As it relates to California's price at the pump compared to the national average, AAA maintains a national gas price data inventory, including average gas prices per state.

   As it relates to the various taxes and fees that go into the cost of a gallon of gas, the CEC provides the estimated gasoline price breakdown and margins on its website.

   More notably, though, SBx1 2 checks the box for codifying policies to identify and substantiate evidence of profits and price gouging.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

None on file

**Opposition**

None on file

**Analysis Prepared by**: Paige Brokaw / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1633 (Ting) – As Amended April 18, 2023

**SUBJECT**: Housing Accountability Act: disapprovals: California Environmental Quality Act

**SUMMARY**: Adds two actions under the California Environmental Quality Act (CEQA) review process – failing to determine if a project is exempt and failing to adopt an environmental review document – to the definition of "disapproval" of a housing development project under the Housing Accountability Act (HAA), creating a private right of action under the HAA to sue a local agency over these CEQA actions and seek a court order to comply with the HAA, including requiring the local agency to approve the project.

**EXISTING LAW**:

1) CEQA requires lead agencies with the principal responsibility for carrying out or approving a proposed project to prepare a negative declaration, mitigated negative declaration, or environmental impact report (EIR) for this action, unless the project is exempt from CEQA. CEQA includes several statutory exemptions, as well as categorical exemptions in the CEQA guidelines, for housing projects. (Public Resources Code (PRC) 21000, et seq.)

2) Authorizes judicial review of CEQA actions taken by public agencies, following the agency's decision to carry out or approve the project. Challenges alleging improper determination that a project may have a significant effect on the environment, or alleging an EIR doesn't comply with CEQA, must be filed in the Superior Court within 30 days of filing of the notice of approval. Challenges alleging that a public agency has improperly determined that a project is not subject to CEQA must be filed within 35 days of the filing of the notice of exemption, or within 180 days of the agency's approval of the project if no notice is filed. The courts are required to give CEQA actions preference over all other civil actions. (PRC 21167, et seq.)

3) Establishes the HAA (Government Code (GC) 65589.5), which provides the following:

    a) That a local government must not disapprove or render infeasible a housing development project that includes 20% of its units for lower income households or all of its units for moderate-income households unless it makes written findings, supported by a preponderance of the evidence in the record, that specified conditions are met.

    b) That a local government must not disapprove or reduce the proposed density of a housing development project that does not meet affordability criteria, but complies with applicable, objective general plan, zoning, and subdivision standards in effect at the time that the application was deemed complete, unless it makes specified written findings.

    c) That disapproval of a housing development project includes any instance in which a local agency does either of the following:

i) Votes on a proposed housing development project application and the application is disapproved, including any required land use approvals or entitlements necessary for the issuance of a building permit; or

ii) Fails to comply with the time periods specified in the Permit Streamlining Act (PSA).

d) Authorizes the applicant, a person who would be eligible to apply for residency in the housing development project or emergency shelter, or a housing organization to bring an action to enforce this section; and if the court finds the local agency in violation of the HAA, a judge may order compliance with the HAA, including requiring the local agency to approve the project.

e) Provides that a petition to enforce the HAA must be filed within 90 days from the later of (1) the effective date of a decision of the local agency imposing conditions on, disapproving, or any other final action on a housing development project or (2) the expiration of the time periods under the PSA.

f) Requires a court to award reasonable attorney's fees and costs of suit to the plaintiff or petitioner, except under extraordinary circumstances in which the court finds that awarding fees would not further the purposes of the HAA.

g) Permits the Department of Housing and Community Development (HCD) to enforce the HAA, and authorizes HCD to refer violations of the HAA to the Attorney General.

h) Provides that nothing in the HAA shall be construed to relieve the local agency from complying with CEQA.

4) Establishes the PSA, which, among other things, establishes time limits within which state and local government agencies must either approve or disapprove permits. (GC 65920)

5) Defines "abuse of discretion" for purposes of CEQA (PRC 21168.5: "Abuse of discretion is established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence.") and for writ proceedings generally (Code of Civil Procedure (CCP) 1094.5: e.g., "Abuse of discretion is established if the respondent has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by the evidence.")

**THIS BILL**:

1) Adds local agency actions, and inactions, pursuant to CEQA to the HAA definition of "disapprove the housing development project." Specifically, this bill adds:

a) Fails to make a determination of whether the project is exempt from CEQA, or commits an abuse of discretion; and,

b) Fails to adopt a negative declaration or addendum for the project, to certify an environmental impact report for the project, or to approve another comparable environmental document.

2) For purposes of CEQA-related disapprovals, requires a housing development project to meet specified requirements and limitations, including the project is not on a list of excluded sites, is located within an urbanized area, has a density of at least 15 units per acre, and there is substantial evidence in the record to support the CEQA determination.

3) Requires the applicant to give timely written notice to the local agency of the action or inaction that the applicant believes constitutes a failure to make a determination or an abuse of discretion and the local agency did not make a lawful determination, as defined, within 90 days of the applicant's written notice.

4) Redefines the established definitions of "abuse of discretion" for purposes of CEQA determinations as follows:

    a) For purposes of exemption determinations, defines "abuse of discretion" as the local agency determines not proceed to determine that the project is exempt or issue a notice of exemption when a project has satisfied the relevant conditions in the bill.

    b) For purposes of environmental document approvals, defines "abuse of discretion" as either of the following:

        i) If the local agency fails to adopt a negative declaration, "abuse of discretion" means that the agency, *in bad faith* or without substantial evidence in the record to support a fair argument that further environmental study is necessary to identify or analyze potentially significant impacts on the physical environment, decided to require further environmental study rather than adopting the negative declaration.

        ii) If the local agency fails to adopt an addendum for the project, certify an environmental impact report for the project, or approve another comparable environmental document, "abuse of discretion" means that the agency, *in bad faith* or without substantial evidence in the record that further environmental study is legally required to identify or analyze potentially significant impacts on the physical environment, decided to require further environmental study rather than adopting, approving, or certifying the environmental review document.

5) Defines "lawful determination" as any final decision about whether to approve or disapprove an exemption, or a negative declaration, addendum, environmental impact report, or comparable environmental review document under CEQA that is not an abuse of discretion, as defined.

6) Limits the ability of a court to award attorney's fees in cases concerning CEQA disapprovals if the court finds that the local agency acted in good faith and had reasonable cause to disapprove the project due to the existence of a controlling question of law about the application of CEQA as to which there was a substantial ground for difference of opinion at the time of the disapproval.

7) Provides that, upon any motion for an award of attorney's fees, a court, in weighing whether a significant benefit has been conferred on the general public or a large class of persons and whether the necessity of private enforcement makes the award appropriate, must give due weight to the degree to which the local agency's approval furthers specified policies of the HAA.

8) States the intent of the Legislature that attorney's fees and costs must rarely, if ever, be awarded if a local agency, acting in good faith, approved a housing development that satisfies certain site location and density criteria, as specified.

9) Adds a severability clause to the HAA.

10) Makes related findings.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement**:

> The Legislature first passed the HAA in 1982 to limit the ability of local agencies to deny qualifying housing projects from being built in their jurisdiction. Over the past several years, the Legislature has strengthened the HAA and, in response, some cities resorted to far-fetched arguments to deny valid CEQA clearances to projects the HAA protects. For example, agencies have used redundant environmental review to delay a project from being built to the point that the project is no longer economically feasible. AB 1633 requires local agencies to exercise their responsibilities to approve housing projects under CEQA in good faith or be in violation of the HAA.

2) **The poster child: 469 Stevenson Street**. In October 2021, the San Francisco Board of Supervisors (BOS) voted to overturn a final EIR certified by the City's Planning Commission for a 495-unit housing project on a parking lot near multiple major transit stops. According to a November 2021 letter from HCD to the city, "the BOS cited various vague concerns about EIR deficiencies, including seismic concerns, effects (e.g., shadowing) on historic resources, and gentrification. It appears that the BOS has tasked city planners to prepare a new environmental study and recirculate the EIR or portions of the EIR. To date, no written findings have been published or provided to the project applicant nor has any substantial evidence in support of these findings been identified." However, the letter stopped short of stating that San Francisco was definitively in violation of the HAA.

   Upon release of an updated EIR, in November 2022, HCD wrote another letter on the project, stating "The purpose of this letter is to express HCD's support of the Project and to urge the City/County to approve the Project, which is protected by the Housing Accountability Act. Any further delay or additional conditions on the Project's approval may subject the City to the HAA's provisions regarding bad faith." HCD's letters suggest that current provisions of the HAA can be used to enforce, or at least threaten to enforce, unfavorable CEQA actions.

   The 469 Stevenson Street project was approved by the San Francisco Planning Commission on April 20, 2023. The project was also recently certified as an Environmental Leadership Development Project pursuant to SB 7 (Atkins), Chapter 19, Statutes of 2021, which provides for expedited judicial review.

3) **In some cases, the 90-day shot clock may not permit completion of legitimate CEQA review**. Notwithstanding the existing requirement that nothing in the HAA "shall be construed to relieve the local agency from complying with CEQA," this bill sets up a conflict between CEQA and the HAA, allowing a project applicant to take a local agency to court

before the agency's CEQA review, and the administrative record, may be complete. This seems to be the point of the bill – to allow the applicant to call the question, and appeal the agency's action or inaction to court, if they aren't getting the result they want. While the bill includes conditions to protect the agency and provide a defense in court, those conditions don't prevent the applicant from filing a HAA lawsuit before the agency's CEQA process is complete. Particularly in the case of an exemption, this bill lays out a path for the applicant to bring a HAA lawsuit based on an interim action (or inaction), before the record is complete, before administrative remedies are exhausted, and before the project has been approved or denied.

4) **Prior legislation**. AB 2656 (Ting, 2022) was similar to this bill, enabling HAA lawsuits challenging an agency's action to deny a CEQA exemption or require further environmental study. AB 2656 passed this committee last April, but was later held in the Senate Appropriations Committee.

5) **Double referral**. This bill passed the Housing and Community Development Committee on April 12 by a vote of 8-0.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

Abundant Housing LA
Bay Area Council
California Community Builders
California Housing Consortium
California YIMBY
CBIA
Civicwell
Council of Infill Builders
East Bay for Everyone
East Bay YIMBY
Fieldstead and Company
Grow the Richmond
Habitat for Humanity California
Housing Action Coalition
How to ADU
Los Angeles Area Chamber of Commerce
MidPen Housing
Mountain View YIMBY
Napa-Solano for Everyone
Northern Neighbors
Peninsula for Everyone
People for Housing - Orange County
Progress Noe Valley
San Francisco Bay Area Planning and Urban Research Association (SPUR)
San Francisco YIMBY
San Luis Obispo YIMBY
Santa Cruz YIMBY

Santa Rosa YIMBY
Silicon Valley Leadership Group
South Bay YIMBY
Southside Forward
Urban Environmentalists
Ventura County YIMBY
Westside for Everyone
YIMBY Action

**Opposition**

Center for Biological Diversity
Planning and Conservation League
State Building and Construction Trades Council of California

**Analysis Prepared by**: Lawrence Lingbloom / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1711 (Juan Carrillo) – As Amended April 10, 2023

**SUBJECT**: Energy: hydrogen: Clean Energy Equity Act

**SUMMARY**: Requires the State Energy Resources Conservation and Development Commission (CEC) to equitably allocate funds appropriated for hydrogen-fueling infrastructure to specifically prioritize rural communities and low-income communities.

**EXISTING LAW**:

1) Etsablishes the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 (now known as the Clean Transportation Program) and stablishes the Alternative and Renewable Fuel and Vehicle Technology Fund to provide the funding for implementation of the Act. (Health and Safety Code (HSC) 43018.9)

2) Requires, until January 1, 2024, the CEC to allocate $20 million annually to fund the number of publicly available hydrogen-fueling stations identified by the Air Resources Board (ARB), not to exceed 20% of the moneys appropriated by the Legislature from the Alternative and Renewable Fuel and Vehicle Technology Fund, until there are at least 100 publicly available hydrogen-fueling stations in operation in the state. (HSC 43018.9 (e)(1))

3) Requires CEC and ARB, on an annual basis, to jointly review and report progress toward establishing a hydrogen-fueling network that provides the coverage and capacity to fuel vehicles requiring hydrogen fuel that are being placed into operation in the state. Requires CEC and ARB to consider certain information while conducting this review and determine the remaining cost and timing to establish a network of 100 publicly available hydrogen-fueling stations in operation in the state and whether funding from the Clean Transportation Program remains necessary to achieve this goal. (HSC 43018.9 (e)(6))

**THIS BILL**:

1) Establishes the Clean Energy Equity Act (Act).

2) Finds and declares that in enacting this Act, it is the intent of the Legislature to direct the appropriate agencies, in their expenditure of budgetary allocations for our state's hydrogen refueling infrastructure, to prioritize the needs of rural regions and disadvantaged communities (DACs).

3) Requires the CEC to equitably allocate moneys appropriated by the Legislature for hydrogen-fueling infrastructure to specifically prioritize rural communities and low-income communities.

4) Requires, on or before January 1, 2025, the CEC and ARB to jointly review and submit a report to the Legislature on the progress toward establishing hydrogen-fueling infrastructure that is equally accessible to all communities, especially rural communities and low-income communities.

5) Provides that the operative language of the bill shall not become operative if the provisions of the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act are extended beyond January 1, 2024.

**FISCAL EFFECT**: Unknown

**COMMENTS**:

1) **Author's statement:**

> As California moves towards a clean energy economy it is essential that this transition occurs equitably. The legislature and state agencies have taken great care to ensure that disadvantaged and low income communities receive their fair share of resources and new infrastructure, unfortunately many rural communities are being left behind. This is particularly acute when it comes to hydrogen infrastructure, which may play an outsized role in rural communities that generally use more heavy duty equipment and travel further than their urban counterparts. This bill will require the CEC to ensure rural communities are not left out of the state resources allocated towards developing hydrogen infrastructure.

2) **Zero Emission Vehicles**. A zero emission vehicle, or ZEV, is an umbrella term for hydrogen fuel cell electric vehicles (FCEV), battery electric vehicles (EVs), and plug-in hybrid electric vehicles. California has some of the most ambitious greenhouse gas (GHG) reduction goals in the nation, which include goals to reduce petroleum use in California up to 50% from 2015 levels by 2030, phase out passenger combustion-engine cars by 2035, and reduce GHG emissions 85% below 1990 levels by 2045. The transportation sector represents about 40% of California's total GHG emissions portfolio, so replacing traditional gas-powered cars with ZEVs is a significant part of California's effort to reduce climate emissions.

   Governor Newsom's ZEV Executive Order (EO) N-79-20 set the following ZEV targets for California: 100% of in-state sales of new passenger cars and light-duty trucks will be zero emission by 2035; 100% zero-emission medium and heavy-duty vehicles in the state by 2045, where feasible, and by 2035 for drayage trucks; and, 100% zero-emission off-road vehicles and equipment operations by 2035, where feasible.

   ARB's 2022 Scoping Plan notes that, to meet the ambitious goals of EO N-79-20, "electric and hydrogen transportation refueling must be as accessible as today's corner gas stations, and active transportation including clean transit options must be cheaper and more convenient than driving."

3) **Schwarzenegger's Hydrogen Highway**. In 2004, Governor Schwarzenegger signed EO S-7-04 to build a Hydrogen Highway in California by 2010, which was a pipedream at the time, but the state is actually inching toward seeing that dream come to fruition.

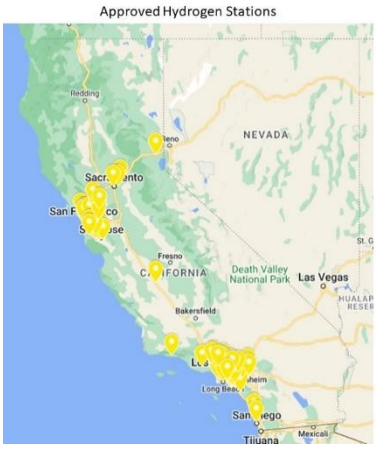
   At the time of Schwarzenegger's EO for hydrogen-fueling stations, California Environmental Protection Agency Secretary Terry Tamminen said an early network of only 150 to 200 hydrogen-fueling stations throughout the state (approximately one station every 20 miles on

the State's major highways) would make hydrogen fuel available to the vast majority of Californians.

AB 8 (Perea, Chapter 401, Statutes of 2013) directs the CEC to allocate $20 million annually from the Clean Transportation Fund for planning, developing, and building hydrogen-fueling stations until there are at least 100 publicly available stations in California. That bill also required ARB to evaluate the need annually for additional publicly available hydrogen-fueling stations.

ARB's *2021 Annual Evaluation of Fuel Cell Electric Vehicle Deployment & Hydrogen Fuel Station Network Deployment* report stated "[t]oday's hydrogen network development plans are unprecedented in California's history and a major milestone in supporting ZEV deployment. Early goals for the fueling network and FCEV market may be within reach. California will be well on its way to developing a viable market for FCEVs as a strategic component of meeting the State's ZEV deployment targets." ARB reported that 61,100 FCEVs are projected by 2027 based on auto manufacturer survey responses.

In December 2021, CEC and ARB released the *Joint Agency Staff Report on Assembly Bill 8: 2021 Annual Assessment of Time and Cost Needed to Attain 100 Hydrogen Fueling Stations in California*. The report states that when 90 funded stations are open, the network will have enough fuel to support nearly 100,000 FCEVs. Since the release of the report, two stations that were in development were canceled, changing the total funded stations to 88. These 88 stations include 80 that are receiving grant funding and eight that are privately funded under their CEC agreement. The report states that awardees of the most recent CEC funding solicitation are expected to develop as many as 82 additional stations (including eight to be privately funded under CEC agreements) if fully funded through future appropriations of Clean Transportation Program funds. In addition, seven privately funded stations are anticipated outside CEC agreements. Adding all these together makes 177 publicly available light-duty stations. The CEC estimates that California will have in excess of 100 open retail stations by the end of 2023, thereby meeting the original AB 8 minimum requirement of 100 stations.




As of March 7, 2023, 75 hydrogen stations were approved for ZEV infrastructure crediting, most of which are concentrated in the state's urban areas.

4) **Alternative and Renewable Fuel and Vehicle Technology Program.** The Alternative and Renewable Fuel and Vehicle Technology Program (AB 118, Núñez, Chapter 750, Statutes of 2007), also known as the Clean Transportation Program, was established at the CEC to provide grants, loans, and other financial support mechanisms to public and private entities to develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies.

During the legislative negotiations on AB 118, members of the Legislature expressed concerns about investing significant state funding in vehicle and fueling technologies that may end up being a loss on investment. Hydrogen was at the center of that debate. Given the status of vehicle technologies at the time and venture capital investments in new cars, some

legislators feared investments in hydrogen above plug-in vehicles or electric vehicles would be for naught.

AB 118 was amended to state that alternative and renewable fuel funds shall be spent to develop and deploy fuels "without adopting any one preferred fuel or technology." As the bill was enacted, CEC is required to determine what alternative fuel and vehicle technology projects may receive funds, establish sustainability goals for those projects, and select projects to receive grants and loans, including alternative and renewable fuel projects to develop, improve, demonstrate, deploy, and commercialize alternative and renewable fuels, and alternative and renewable fuel infrastructure, fueling stations, and equipment.

The CEC has provided seed funding for electric vehicle charging and hydrogen-refueling infrastructure, low carbon fuel production plants, vehicle and component manufacturing plants, and other projects for the last 10 years at roughly $100 million per year.

The 2022–2023 Investment Plan Update for the Clean Transportation Program includes $20 million of Clean Transportation Program funds for hydrogen-fueling infrastructure, consistent with AB 8.

5) **This bill**. According to CARB's 2022 *Annual Evaluation of Fuel Cell Electric Vehicle Deployment and Hydrogen Fuel Station Network Development*, only one-quarter of the DACs and general populations live within the more standard convenience metric of a six-minute drive to a hydrogen station. "Spatial analysis also indicates that most of the rural DACs and DACs with lower population density are outside of both the 6-minute and 15-minute drivetime metrics. Although hydrogen station development appears to similarly benefit some DACs alongside the general population, many DACs are not at all addressed by the open and planned hydrogen fueling network. More work must be done to ensure the hydrogen fueling network reaches all communities."

   An incomplete hydrogen fueling network across the state disenfranchises certain populations of Californians from driving a hydrogen-fueled ZEV, and it jeopardizes consumer acceptance of ZEVs, sending a distressing signal to automakers considering fuel cell electric vehicle offerings in future years.

   AB 1711 states the intent of the Legislature to direct the appropriate agencies, in their expenditure of budgetary allocations for our state's hydrogen refueling infrastructure, to prioritize the needs of rural regions and DACs, and requires the CEC to equitably allocate moneys appropriated by the Legislature for hydrogen-fueling infrastructure to specifically prioritize rural communities and low-income communities.

6) **Double referral**. This bill was heard in the Assembly Transportation Committee on April 17 and approved 15-0.

7) **Related legislation**. AB 1329 (Newman, 2022) would have required ARB to determine the number of publicly available hydrogen-fueling stations necessary to provide hydrogen-fueling access statewide and sets a new goal of 200 stations that ARB and CEC must annually report on progress towards. The bill was held in the Assembly Appropriations Committee.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

None on file

**Opposition**

None on file

**Analysis Prepared by**: Paige Brokaw / NAT. RES. /

Date of Hearing: April 24, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 1743 (Bennett) – As Amended April 10, 2023

**SUBJECT**: Lower Emissions Transition Program

**SUMMARY**: Enacts the Lower Emissions Transition Program (Program) and would require the Air Resources Board (ARB) to approve projects that reduce cumulative emissions from cargo handling equipment, and sources at seaports in the state during the transition period to zero-emissions cargo handling equipment requirements.

**EXISTING LAW**:

1) Pursuant to the California Global Warming Solutions Act of 2006 (Health and Safety Code (HSC) 38500 et seq.):

    a) Establishes Air Resources Board (ARB) as the state agency responsible for monitoring and regulating sources emitting greenhouse gas (GHG) emissions.

    b) Requires the GHG emissions reduction limit, pursuant to AB 1279 (Muratsuchi, Chapter 337, Statutes of 2022) to be at least 85% below the 1990 level by 2045, and establishes a goal of zero net carbon emissions by 2045, commonly known as carbon neutrality.

    c) Requires ARB to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs. Requires ARB to consult with all state agencies with jurisdiction over sources of GHGs. Requires the Scoping Plan to identify and make recommendations on direct GHG emissions reduction measures, among other things. Requires ARB to update Scoping Plan for at least once every five years.

2) Establishes the Charge Ahead California Initiative that, among other things, includes the goal of placing at least one million ZEV and near-zero emission vehicles into service by January 1, 2023, and increasing access to these vehicles for disadvantaged, low-income, and moderate income communities and consumers. (HSC 22458)

3) Establishes the Air Quality Improvement Program (AQIP), administered by ARB in consultation with local air districts, to fund programs that reduce criteria air pollutants, improve air quality, and provide research for alternative fuels and vehicles, vessels, and equipment technologies. (HSC 44274)

4) Requires ARB to allocate funds on a competitive basis for projects that are shown to achieve the greatest emission reductions from each emission source identified as specified, from activities related to the movement of freight along California's trade corridors, commencing at the state's airports, seaports, and land ports of entry.

5) Establishes the Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards (CHE) Regulation to reduce toxic and criteria emissions (13 California Code of Regulations 2479)

**THIS BILL**:

1) Establishes the Program.

2) Defines the following terms used in the bill:

   a) "Cargo handling equipment" or "covered equipment" as any off-road, self-propelled vehicle or equipment used at a port or intermodal rail yard to lift or move container, bulk, or liquid cargo carried by ship, train, or another vehicle, or used to perform maintenance and repair activities that are routinely scheduled or that are due to predictable process upsets. Cargo handling equipment includes, but is not limited to, rubber-tired gantry cranes, yard trucks, top handlers, side handlers, reach stackers, forklifts, loaders, aerial lifts, excavators, and dozers. Cargo handling equipment does not include any yard truck that is licensed as an on-road vehicle;

   b) "Lower emission equipment" as any nondiesel or hybridized diesel equipment that incorporates other technologies that significantly reduce criteria pollutants, toxic air contaminants, or GHG emissions, utilizes zero-emission technologies, or enables technologies that provide a pathway to zero-emissions operation;

   c) "Repower" as to replace an existing engine with a newer engine or power source; and,

   d) "Zero-emission equipment" means any equipment that produces no emissions of criteria pollutants, toxic air contaminants, and GHGs when stationary or operating.

3) Requires ARB to administer the Program.

4) Requires the Program to approve projects that reduce cumulative emissions from applicable cargo handling equipment sources at seaports in the state during the transition period to zero-emission cargo handling equipment requirements.

5) Requires eligibility for project approvals to be determined by ARB.

6) Prohibits a project from being approved after the compliance date required by any applicable statute, regulation, or rule that otherwise requires the change in equipment to a zero-emission standard.

7) Requires the quantity of surplus emissions reductions that demonstrate lower cumulative emissions under a project than from compliance with applicable zero-emission equipment statute, regulation, or rule shall be evaluated by ARB pursuant to the methodology established by ARB.

8) Provides that eligible projects include, but are not limited to, any of the following:

a) Purchase of new lower emission or zero-emission covered equipment in operation at a seaport;
b) Emission-reducing retrofit of covered equipment, or replacement of old engines powering covered equipment with newer lower emission or zero-emission engines, motors, or drives; and,
c) Development and demonstration of lower emission and zero-emission retrofit technologies, repower options, and advanced technologies for covered equipment.

9) Prohibits a project from being deemed ineligible for approval solely on the basis that lower emission or zero-emission equipment is purchased with the use of any state or federal grant funding, funded or used for credit under any state or federal emissions averaging, banking, or trading program, or participates in any other voluntary emission reduction program.

10) Prohibits a project from being deemed ineligible for approval solely on the basis that the purchase of lower emission or zero-emission equipment is entered into pursuant to a corporate or a controlling board's policy, tenancy agreement, port lease, or any other contract, so long as the project is approvable.

11) Authorizes eligible applicants to be any individual, company, or public agency that owns one or more pieces of cargo handling equipment that operate at a seaport in the state and that is not out of compliance with existing state board regulations that cover cargo handling equipment.

12) Requires ARB to establish guidelines for determining eligibility for projects under the Program. Requires the guidelines to include all of the following:

a) A methodology for evaluating cumulative emissions reductions of nitrous oxides emissions;

b) A methodology for evaluating cumulative emissions reductions of diesel particulate matter;

c) A methodology for evaluating cumulative emissions reductions of GHGs;

d) A methodology for determining the useful life for a piece of cargo handling equipment;

e) A methodology for evaluating the cumulative emission reductions, as specified, for the repower of cargo handling equipment purchased pursuant to an approved project under this chapter; and,

f) A baseline emissions profile for regulated emissions reductions of nitrous oxides, diesel particulate matter, and greenhouse gases based on the application of both the current applicable statutes, regulations, and rules regarding cargo handling equipment regulation and the future compliance date for zero-emission cargo handling equipment applicable as established, if a date is not yet adopted, the 2037 target date for zero-emission cargo handling equipment established in the plan adopted by ARB pursuant to the California Global Warming Solutions Act of 2006 or that date as amended and updated by ARB pursuant to applicable law.

13) The establishment of guidelines by this section is not subject to the rulemaking requirements of the Administrative Procedure Act (APA).

14) Requires projects to be approved by ARB if they meet all of the following:

    a) Demonstrate cumulative emissions reductions of nitrous oxides greater than the regulatory baseline over the useful life of the cargo handling equipment identified in a project application;

    b) Demonstrate cumulative emissions reductions of diesel particulate matter greater than the regulatory baseline over the useful life of the cargo handling equipment identified in a project application;

    c) Demonstrate cumulative emissions reductions of GHGs greater than the regulatory baseline over the useful life of the cargo handling equipment identified in a project application. At the discretion of ARB, cumulative emissions reductions of GHGs may be required to include a commitment of payment to purchase GHG offsets of at least 10% greater than the regulatory baseline over the useful life of the cargo handling equipment in the time, place, and manner established by ARB. If required by ARB, the full value of this amount shall be paid or bonded as a condition of approval at the discretion of ARB; and,

    d) An application was provided to ARB for a project approval prior to January 1, 2030.

15) Prohibits ARB from approving a project that fails to demonstrate emissions reductions of nitrous oxides and diesel particulate matter that are at least 10% greater than the regulatory baseline at the time of project application.

16) Requires ARB to maintain discretion to approve the repower of cargo handling equipment purchased pursuant to an approved project based on the specified evaluation methodology.

17) Requires project applicants to submit all information required by ARB at the time of submission and upon subsequent request as necessary to process the application.

18) Requires ARB to establish an application fee limited to an amount that will partially offset the administrative costs of processing project applications. Application fees shall be deposited in the Air Pollution Control Fund and made available to ARB for those purposes upon appropriation by the Legislature.

19) Prohibits the retirement, replacement, retrofit, or repower of cargo handling equipment purchased pursuant to an approved project under the Program from being required by any rule or regulation adopted by ARB until the end of the useful life of the equipment as established by ARB for each piece of equipment or January 1, 2045, whichever date is earlier.

20) Requires ARB, by January 1, 2027, and January 1, 2031, evaluate the impact of the provisions of this chapter on state and local clean air efforts to meet state and local clean air goals.

21) Requires ARB to hold at least one public workshop prior to the completion of the evaluations required.

22) Sunsets the Program on January 1, 2032.

**FISCAL EFFECT**: Unknown.

**COMMENTS**:

1) **Need for the bill**. According to the author:

> AB 1743 would allow ports flexibility in replacing existing, dirtier, equipment with cleaner technologies today, but only if they meet very high evidentiary standards. The key is to be sure there is truly a significant net reduction in emissions over the life of the equipment including comparing it to likely new emissions standards. Ports need certainty that their investment is not a stranded asset and the public needs certainty that there is a certifiably significant overall long-term decrease in emissions that would not take place if the ports wait. This bill would require ports to prove, to the satisfaction of the California Air Resources Board, that the equipment they are purchasing would offer greater emissions reductions, over the lifetime of the equipment, than what would occur if they simply comply with regulatory mandates. This bill does not weaken current standards but it can accelerate the greening of port equipment if the port meets a high evidentiary bar. The sooner we reduce emissions at the port, the sooner we will be able provide disadvantaged port communities with better air quality and make progress on meeting our climate goals.

2) **Air quality at California's ports**. Shipping containers are large standardized containers designed to be used across different modes of transport—from ship to rail to truck—without unloading or reloading the cargo. Container ports are facilities where cargo or shipping containers are transshipped between different vehicles and machinery to move goods, both containerized and bulk. Cargo handling equipment such as yard trucks (hostlers), rubber-tired gantry cranes, container handlers, and forklifts are central to port operations. Historically, most port equipment has been powered by diesel or gasoline.

   California has 12 ports, through which large volumes of goods are both imported and exported internationally. These ports process about 40% of all containerized imports and 30% of all exports in the United States. In recent years, California's ports have faced several challenges, including congestion and air pollution from associated facilities and vehicles. The Ports of Los Angeles and Long Beach remain some of the largest sources of air pollution in the South Coast Air Basin. These ports are responsible for about 10% of the basin's total nitrogen oxide (NOx) emissions.

   Air pollution from port activities has significant public health and environmental implications. Exposure to air pollution is associated with an increased risk of heart and lung disease, increased cancer risk, and increased respiratory symptoms. Harmful emissions also have been associated with negative impacts on birth and developmental outcomes, such as low birth weight, premature births, and lower lung function in children. In addition, diesel fuel consumption emits GHGs, which accelerates climate change.

3) **Coastal community impacts.** Communities that neighbor ports face the highest exposure of air pollutants from port operations. As a result, these communities tend to experience a disproportionate share of the pollution burden in the state. For example, nearly all of the census tracts that surround the Ports of Long Beach and Los Angeles are ranked in the top one-third of the most pollution burdened in the state, according to the California Communities Environmental Health Screening Tool (CalEnviroScreen), a tool which assesses communities' pollution burden and vulnerability. In addition to greater exposure, these communities also are relatively more vulnerable to pollution impacts. This is because these areas tend to have (1) a higher share of sensitive populations—those with physiological conditions, such as asthma and heart disease, that make them more vulnerable to pollutants—and (2) socioeconomic factors associated with higher pollution vulnerability, such as poverty and lower educational attainment. This combination of disproportionately high pollution exposure *and* vulnerability results in the neighborhoods adjacent to the Long Beach and Los Angeles ports scoring in the top quartile for their overall CalEnviroScreen assessment. Such a score indicates high levels of cumulative environmental and health impacts, and identifies these areas as "disadvantaged communities" eligible for prioritized funding from certain state programs.

4) **Cargo Handling Equipment Regulation to Transition to Zero-Emissions**. Mobile cargo handling equipment is any motorized vehicle used to handle cargo or perform routine maintenance activities at California's ports and intermodal rail yards. The type of equipment includes off-road, self-propelled vehicle or equipment used at a port or intermodal rail yard to lift or move container, bulk, or liquid cargo carried by ship, train, or another vehicle, or used to perform maintenance and repair activities that are routinely scheduled or that are due to predictable process upsets. Equipment includes, but is not limited to, rubber-tired gantry cranes, yard trucks, top handlers, side handlers, reach stackers, forklifts, loaders, aerial lifts, excavators, and dozers.

   ARB's CHE Regulation was adopted in 2005 to reduce toxic and criteria emissions to protect public health and was fully implemented by the end of 2017 and remains in full effect until amended or superseded with new requirements.

   ARB resolution 17-8 adopted in March 2017 directed ARB staff to develop new regulatory requirements for CHE that will require up to 100% zero-emissions technologies at ports and intermodal railyards by 2030. In March 2018, ARB staff presented a plan to begin development of a regulation to minimize emissions and community health impacts from cargo handling equipment. The CHE regulation sets in-use requirements for diesel cargo handling equipment at ports and rail yards. Staff would assess the availability and performance of zero-emission technology as an alternative to all combustion-powered cargo equipment and evaluate additional solutions that may include efficiency improvements.

   Proposed regulatory amendments, to be considered by ARB in 2024, would propose an implementation schedule for new equipment and facility infrastructure requirements, with effective dates beginning in 2026. In this potential action, all mobile equipment at ports and rail yards, including but not limited to: diesel, gasoline, natural gas, and propane-fueled equipment, would be subject to new requirements. ARB staff would also consider opportunities to prioritize the earliest implementation in or adjacent to the communities most impacted by air pollution.

This action could potentially achieve emission reductions of criteria pollutants, air toxics, and GHGs, beginning in 2026, with more than 90% penetration of zero-emission equipment by 2036. The proposed changes to the CHE Regulation are in line with the 2022 Scoping Plan, which calls for 100% of cargo handling equipment be zero-emission by 2037 and 100% of drayage trucks are zero emission by 2035.

5) **New program.** The Legislative Analyst's Office (LAO) *2022 Overview of California's Ports*, suggests to reduce emissions in the long term, ports will need to electrify their heavy-duty fleets. The LAO identified several barriers that impede ports' progress in pursuing this goal, including: (1) certain electric vehicles and equipment are not yet widely available, (2) costs are high, and (3) current battery reliability may not suit port operations. The LAO suggested that given the scope of the types of equipment and vehicles that will need to be electrified across all California ports, the costs could easily reach billions of dollars.

   In recognition of the challenges the LAO reported, this bill would create the Lower Emissions Transition Program at ARB to approve projects that reduce *cumulative* emissions from cargo handling equipment, as defined, sources at seaports in the state during the transition period to zero-emissions cargo handling equipment requirements.

   The bill would prohibit the approval of a project after the compliance date required by any applicable statute, regulation, or rule that requires a change in equipment to a zero-emission standard. The bill would require ARB to establish guidelines to determine eligibility for project approvals. The bill would describe certain types of eligible projects and would require the state board to approve projects that meet specified criteria.

   The bill would require ARB to establish eligibility criteria for projects, and, by January 1, 2027, and January 1, 2031, evaluate the impact of the program on state and local clean air efforts to meet state and local clean air goals and to hold at least one public workshop before completing the evaluation. The bill sunsets the Lower Emissions Transition Program in 2032.

6) **Offsets**. Under AB 32, ARB adopted the cap-and-trade program as a market-based compliance mechanism to establish a declining limit on major sources of GHG emissions throughout California, and ARB creates allowances equal to the total amount of permissible GHG emissions (i.e., the "cap"). Each year, fewer allowances are created and the annual cap declines. Under the program, covered entities can invest in "offsets" – projects that sequester carbon in forests, flooded rice fields, biogas control systems for manure management on dairy cattle and swine farms, and others – to satisfy a small percentage of their overall compliance obligation.

   The bill would allow, at ARB's discretion, cumulative emissions reductions of GHGs to be accounted for with a commitment of payment to purchase GHG offsets. Though the bill would require the offset to be at least 10% greater than the regulatory baseline over the useful life of the cargo handling equipment, allowing use of offsets presents a number of issues.

   The point of the CHE regulations – and AB 32 – is to reduce GHG emissions at the source. While offsets offer compliance mechanisms for investing in carbon sequestration and other projects to meet the requirements under cap-and-trade, this bill does not put any parameters on how many offsets can be purchased (based on a percentage of overall GHG emissions), or

whether more efficient equipment would need to be purchased once the useful life of the offset (i.e., the amount of GHGs that would be sequestered or avoided) is achieved.

Additionally, the bill isn't clear on whether ARB would rely on the offset protocols for cap-and-trade or not, or if this bill would result in decreased emissions of air pollutants and GHGs.

7) **Investments in lower-emission equipment may be getting the cart before the horse.** The useful life of cargo handling equipment can be up to 22 years, so this bill will likely result in front loading the purchases of 'not quite zero' emission cargo equipment that would then be in service for up to 22 years – or longer. This bill would prohibit any rule or regulation requiring the retirement before 2045 of an emission-producing piece of equipment purchased under this Program, even though ARB is working on revising the CHE regulations to require 100% zero-emissions technologies at ports by 2030.

   Investing in expensive equipment for a program that sunsets in 2032 may not be economically practical given the likely impending amendments in 2024 to the current CHE regulation and availability of zero emission equipment, but the bill is attempting to provide a stepping stone to compliance with zero emission requirements. And, the Program would be voluntary, so investments would only be made in new equipment if an entity chose to do so.

   However, grandfathering in lower-emission equipment until 2045 – likely well past a zero emission regulatory requirement – runs counter to the states GHG and air quality laws. The 2045 date is intended to capture the average life span of the equipment, but the bill could be amended to better match ARB's intended goal of 2037.

   Furthermore, ARB administers the Zero- and Near Zero-Emission Freight Facilities Program to accelerate the adoption of clean freight technologies and reduce air pollution caused by the movement of goods throughout the state. Under the program, ARB provides funding to local air districts, other California public entities, and nonprofits, which may partner with private sector parties (e.g., end-users, manufacturers) for pre-commercial demonstrations of advanced vehicles, engines, equipment, and transportation systems. As of November 2022, ARB has allocated nearly $150 million, including to fund a hybrid tugboat and electric cranes and forklifts at the Port of Long Beach. Since its inception, the program has funded 49,622 metric tons estimated GHG emissions reductions.

   This existing program could support the transition to zero emission technologies in the interim (before the CHE Regulations are updated), thus avoiding any complications of entities' investments in expensive cargo handling equipment that will ultimately be noncompliant.

8) **Committee amendments**. *The Committee may wish to consider amending the bill* as follows:

   a) To remove the allowance of offsets, strike the language in Sec. 39905.3 (a)(3).

      (3) Demonstrate cumulative emissions reductions of greenhouse gases greater than the regulatory baseline over the useful life of the cargo handling equipment identified in a project application. ~~At the discretion of the state board, cumulative emissions reductions of greenhouse gases pursuant to this section may be required to include a~~

~~commitment of payment to purchase greenhouse gas offsets of at least 10 percent greater than the regulatory baseline over the useful life of the cargo handling equipment in the time, place, and manner established by the state board. If required by the state board, the full value of this amount shall be paid or bonded as a condition of approval at the discretion of the state board.~~

b) To reduce the timeframe from 2045 to 2037 for which lower-emissions equipment can be exempt from potential future zero-emission requirements, except for rubber-tired gantry cranes, amend Sec. 39905.4 as follows:

(a) Except for rubber-tired gantry cranes, the retirement, replacement, retrofit, or repower of cargo handling equipment purchased pursuant to an approved project under this chapter shall not be required by any rule or regulation adopted by the state board until the end of the useful life of the equipment as established by the state board for each piece of equipment pursuant to Section 39905.2 or January 1, ~~2045,~~ 2037, whichever date is earlier.

(b) The retirement, replacement, retrofit, or repower of rubber-tired gantry cranes purchased pursuant to an approved project under this chapter shall not be required by any rule or regulation adopted by the state board until the end of the useful life of the equipment as established by the state board for each piece of equipment pursuant to Section 39905.2 or January 1, 2045, whichever date is earlier.

9) **Double referral**. This bill was heard in the Assembly Transportation Committee on April 17 and approved 15-0.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

Elders Climate Action, Norcal and Socal Chapters
Pacific Merchant Shipping Association

**Opposition**

Sierra Club California

**Analysis Prepared by**: Paige Brokaw / NAT. RES. /