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CALIFORNIA ENERGY COMMISSION

CALIFORNIA NATURAL RESOURCES AGENCY

March 12, 2024

Honorable Members of the California Legislature
California State Capitol
10th and L Streets
Sacramento, California 95814

Dear Honorable Members of the California Legislature:

The California Energy Commission (CEC) is pleased to provide this letter that outlines the progress and status of CEC's administration of the following defined Clean Energy Programs:

- Industrial Grid Support and Decarbonization Program (INDIGO)
- Food Production Investment Program (FPIP)
- Hydrogen Program
- Equitable Building Decarbonization Program
- Offshore Wind Waterfront Facilities Improvement Program

Assembly Bill 209 (Chapter 251, Statutes of 2022) created the Clean Energy Program, Chapter 7.6, Article 1, Section 25660.2 of the Public Resources Code, which directs the California Energy Commission to prepare and submit on or before March 1, 2024, and annually thereafter until all funds appropriated in the statute have been encumbered, information on the projects funded and how each program is achieving the specific purposes of the statute. As indicated in attached program summaries, CEC staff has spent considerable time developing the programs, consulting with tribal governments, and engaging with a wide variety of stakeholders to ensure transparency of our programs' development processes and to ensure the programs will provide benefits and meaningful results to help California reach its decarbonization goals. All of our programs have released or will be releasing solicitations in 2024 to encumber program funds. This letter and the attachment can be downloaded at each of the program websites described in the attachment.

The funding for these programs is crucial in demonstrating and promoting advanced electrification and decarbonization technologies in the industrial and building sectors and in supporting developments in our clean hydrogen and offshore wind resources. All of these will be needed to achieve our carbon neutrality goals while keeping our industries competitive, ensuring building upgrades benefit our most vulnerable and underserved communities, and developing more diverse sources of zero carbon energy. The attachment presents an overview of each program and responds to the following items listed in Assembly Bill 209, Section 25660.2.

- Funds expended for each program, balance remaining to be spent, and geographic distribution of the funds.
- Funds expended on administrative, technical, or scientific services for each program.

- Estimates on how expended funds are achieving the specific purposes of the program.
- Estimates of additional electrical capacity during critical grid conditions made available as a result of the program.
- Estimated reductions in greenhouse gas and criteria air pollutant emissions.
- Description of how the funds were used and a description of the industries receiving funding.

We welcome the opportunity to share information about our Clean Energy Program activities. If you have any questions or would like a briefing, please contact Director of the Office of Governmental and International Affairs Brady Borcherding at brady.borcherding@energy.ca.gov or 916-890-7019.

Sincerely,

Drew Bohan
Executive Director

Attachment: Report on Expenditures and Status of Clean Energy Programs
cc: Brady Borcherding, Director, Office of Governmental and International Affairs

Attachment 1

Report on Expenditures and Status of Clean Energy Programs
(Assembly Bill 209, Chapter 251, Statutes of 2022, Section 12, Chapter 7.6)

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Industrial Support and Decarbonization Program (INDIGO)

Established pursuant to Section 25662

California's industrial sector is the second largest emitter of greenhouse gases in California. This program provides grants for industrial projects that benefit the electrical grid and reduce greenhouse gas emissions and local air pollution. The program goals are to stimulate the transformation of California's industry toward a decarbonized economy; demonstrate technologies that are scalable; improve local air quality, especially in low-income and disadvantaged communities; and achieve greenhouse gas emissions reductions that are long-lasting and certain. The program is also known as the Industrial Decarbonization and Improvement of Grid Operations, or INDIGO, Program.

Milestones

- Released a solicitation in early 2023 offering to provide up to $15 million of cost share funding for those applying for and receiving a federal grant award for projects that are aligned with the INDIGO program. Providing a portion of the required cost share could enhance an applicant's chances of getting a federal grant and could leverage 5-10 times the CEC grant amount, or $75-$150 million, for California companies.
- Developed a competitive grant solicitation for $46.2 million to demonstrate and deploy advanced, emerging decarbonization technologies in California industries. The solicitation will be released in March or April 2024. These potential grants will fund projects that reduce greenhouse gas emissions, provide air quality benefits to local communities, and benefit the electric grid during net peak periods while also helping California industries decarbonize.

a) **Funds expended for the program, balance remaining to be spent, and geographic distribution of the funds.**

1) Released grant solicitation in early 2023 that commits up to $15 million to provide cost share for projects applying for and receiving a federal grant award for demonstrating advanced decarbonization technologies in a California industry.
    a. The availability of these funds helps California companies meet the 20 to 50 percent cost share requirement required by funding agencies and has the potential to leverage the CEC grant with federal and other funds by 5 to 10 times, or $75-150 million. As applicable federal funding opportunities are identified, they are added to the CEC's Cost Share Solicitation, GFO-22-902. No funds have yet been expended.
2) In the Governor's proposed FY 2024/25 budget, funding for the program was reduced from $90M to $68 million, and the funding source for the $68 million is the California Climate Investments Program (Greenhouse Gas Reduction Fund). The $22 million proposed for reduction in the Governor's budget is from the General Fund. Approximately 90 percent of the $68 million (or $61.2 million) will be used to provide grants for industrial decarbonization projects, which will include both CEC-sponsored grants and DOE cost share grants.
    a. A CEC grant solicitation for $46.2 million for competitive grants will be released in March or April 2024. This solicitation will fund decarbonization technologies that have the potential to reduce or eliminate fossil fuel use in industry and pave the

way for future deployments and demonstrations of these advanced emerging technologies by others. Eliminating or reducing fossil fuel use by California industries has the benefit of reducing greenhouse gas emissions and criteria air pollutant emissions, especially in low–income and disadvantaged communities, where most industries are located.

b. First awards are anticipated in summer 2024, with projects starting later this year.
c. If necessary, a second funding round could occur in late 2024, with awards announced in early 2025.
d. All awards are anticipated to be considered at a CEC business meeting by June 2025. No funds have yet been expended.

b) **Funds expended on administrative, technical, or scientific services for the program.**

1) Administrative expenses: $60,125

The program has held public workshops and participated in outreach events with stakeholders and other interested parties, including:

a. U.S. Department of Energy's Industrial Efficiency & Decarbonization Office to capture synergies in federal programs
b. American Council for Energy Efficient Economy (ACEEE) to coordinate on industrial heat pumps and other decarbonization technologies for industry
c. California Air Resources Board (CARB) to coordinate on potential industrial decarbonization technologies to consider and on completing the requirements of the California Climate Investment Program (Cap and Trade) and processing of the Expenditure Record for the Program (Expenditure Record and Attestation Memo for INDIGO Program)
d. Environmental justice groups to understand their concerns and needs
e. Academia, researchers, consultants to investor-owned utilities, and entrepreneurs to get insights on advanced decarbonization and load management technologies
f. California industries and industrial associations to get insights on technology of interest to help with decarbonization
g. Equipment manufacturers and international energy agencies to determine what advanced technologies are available or could be available for the US market

The program released a competitive solicitation (GFO-22-902) to provide cost share to California projects applying for and receiving a federal grant consistent with AB 209. Total INDIGO committed funding for cost share is up to $15 million.

c) **Estimates on how expended funds are achieving the specific purposes of the program.**

We anticipate that funding awards will occur in mid-2024 and that priority will be given to projects that focus on AB 209 priorities, such as providing benefits to the electrical grid, maximizing reduction of greenhouse gases, and reducing pollution in under-resourced communities. Information on these funding awards will be available later this year.

d) **Estimates of additional electrical generation or storage capacity at net peak hours or during critical grid conditions made available as a result of the program.**

Priority consideration will be given for projects that reduce net peak electrical use. We anticipate funding awards will occur later this year, and information on these awards will be available at that time.

e) **Estimated onsite reductions of greenhouse gas and criteria air pollutants emissions as a result of the program.**

Priority consideration will be given for projects that maximize reduction of greenhouse gas emissions and pollution in under-resourced communities. We anticipate funding awards will occur later this year, and information on these awards will be available at that time.

f) **Description of how the funds were used and a description of the industries receiving funding.**

We anticipate funding awards will be made later this year, and this information will be posted on the following CEC website: Industrial Decarbonization and Improvement of Grid Operations - INDIGO and CARB website

Food Production Investment Program (FPIP)

Established pursuant to Section 25663

Food manufacturing, specifically processing and production, is an industrial sector that is highly energy- and carbon-intensive and significantly contributes to the state's greenhouse gas emissions. Food manufacturing is a critical area of opportunity to advance industrial decarbonization and electrification efforts, but it faces many unique barriers and challenges due to its diversity of products produced. FPIP provides grants to food processors for projects that reduce greenhouse gas emissions and support electrical grid reliability. FPIP goals are to accelerate the adoption of advanced energy efficiency, decarbonization, and renewable energy technologies, and to support electrical grid reliability. The technologies funded by FPIP will help reduce energy costs, maintain product quantity and quality, and reduce greenhouse gas emissions associated with food production.

Milestones

- Released a solicitation in May 2023 offering to provide up to $5.89 million of cost share funding for those applying for and receiving a federal grant award for projects that are aligned with FPIP. Providing a portion of the required cost share could enhance an applicant's chances of getting a federal grant and, for this program, could leverage seven times the CEC grant amount, or $41 million for California food producers.
- Released a competitive solicitation on January 19, 2024, for a total of $36 million to demonstrate commercially available or cutting-edge technologies at food production facilities that will maximize greenhouse gas emissions reduction, reduce energy use, provide grid reliability benefits, and provide benefits to priority populations. The first awards from this solicitation will be announced in May 2024, with projects starting in summer 2024. A second round is anticipated to be released in summer 2024, with awards announced winter 2024.

a) **Funds expended for the program, balance remaining to be spent, and geographic distribution of the funds.**

1) CEC committed $5.89 million to provide cost share for projects applying for and receiving a federal grant award for demonstrating advanced energy and decarbonization technologies that support reductions in greenhouse gas emissions and increased electric grid reliability. The availability of these funds helps California companies meet the cost share requirement required by funding agencies and has the potential to leverage the CEC grant with federal and other funds by seven times, or $41 million. As applicable federal funding opportunities are identified, they are added to the CEC's Cost Share Solicitation, GFO-22-902. No funds have yet been expended. Any uncommitted funds remaining from the $5.89 million will be included in the second-round solicitation released in summer 2024.
2) CEC committed $36 million into a FPIP competitive grant solicitation (GFO-23-305). The grant solicitation was released January 19, 2024, and funding awards will be announced in May 2024 with projects starting in summer 2024. A second round is anticipated in summer 2024 with awards announced in winter 2024. If there are any federal cost share grant awardees, then the CEC anticipates approving these awards by early 2025. No awards have yet been made.
3) Funding for the program was reduced from $65 million to $46.2 million with the $18.8 million reduction coming from the General Fund as a result of the Governor's proposed

Fiscal Year 2024/25 budget. The $46.2 million consists of $40 million from the California Climate Investments Program (Greenhouse Gas Reduction Fund) and $6.2 million from the General Fund. Approximately 90 percent of the $46.2 million (approximately $42 million) will be used to provide grants for decarbonization projects for both CEC sponsored grants and DOE cost share grants.

b) **Funds expended on administrative, technical, or scientific services for the program.**

1) Administrative expenses: $62,939

The program has held public workshops and participated in outreach events with stakeholders and other interested parties, including:

a) **February 14-15, 2023:** Publicized FPIP at the California League of Food Producers Trade Show, met with over 100 stakeholders and other interested parties.

b) **March 24, 2023:** Released GFO-22-902 - Cost Share Solicitation for Federal Funding Opportunities INDIGO Program and FPIP. Total FPIP committed funding is up to $5.89 million.

c) **April 18, 2023:** Public workshop to discuss implementation of FPIP and receive stakeholder input on the proposed program scope, future competitive solicitations, and project eligibility and requirements. The workshop was attended by over 60 participants, representing California food processors, equipment manufacturers, industrial trade associations, state agencies, and other stakeholders.

d) **January 19, 2024:** Released FPIP competitive grant solicitation (GFO-23-305, $36 million).

i. February 6, 2024: Pre-application workshop to provide information and answer questions on GFO-23-305. Workshop was attended by over 90 people, and questions are due by February 16, 2024.
ii. April 26, 2024: GFO application submission deadline
iii. May 2024: Announce awards
iv. July 2024: Projects begin
v. There will be multiple solicitation rounds if funds remain.

e) **Ongoing:** Coordination with U.S. Department of Energy, California Air Resources Board (CARB), academia, researchers, entrepreneurs, California food processors, equipment manufacturers, industrial trade associations, and other stakeholders to inform FPIP activities and funding opportunities.

c) **Estimates on how expended funds are achieving the specific purposes of the program.**

We anticipate that funding awards will occur in mid-2024 and that priority will be given to projects that focus on AB 209 priorities, such as reducing greenhouse gas emissions, supporting electric grid reliability, and maximizing air quality benefits. Information on these funding awards will be available later this year.

d) **Estimates of additional electrical generation or storage capacity at net peak hours or during critical grid conditions made available as a result of the program.**

Priority consideration will be given for projects that support electrical grid reliability, and information on these awards will be available at that time.

e) **Estimated onsite reductions in greenhouse gas and criteria air pollutant emissions as a result of the program.**

Priority consideration will be given for projects that help reduce greenhouse gas emissions and maximize air quality benefits in under-resourced communities. We anticipate funding awards will occur later this year, and information on these awards will be available at that time.

f) **Description of how the funds were used and a description of the industries receiving funding.**
We anticipate funding awards will be made later this year and this information will be posted on the FPIP website and CARB website.

Clean Hydrogen Program

Established pursuant to Section 25664

Hydrogen can serve as a zero-carbon energy carrier and act as a potential replacement for fossil fuels in hard-to-electrify applications, particularly for the transportation, industrial, and electricity generation sectors. To achieve sustainable wide-scale deployment, hydrogen must be produced cleanly at increased scale and reduced cost. The Clean Hydrogen Program aims to stimulate increased production and use of clean hydrogen through strategic demonstration and deployment.

Milestones

- Released a solicitation in May 2023 offering to provide up to $20 million of cost share funding for those applying for and receiving a federal grant award for projects that are aligned with the Clean Hydrogen Program. Providing a portion of the required cost share could enhance an applicant's chances of getting a federal grant and, for this program, could leverage 4.4 times the CEC grant amount, or $88 million, for California companies.
- Developed two competitive grant solicitations for a total of $55 million to demonstrate or scale-up clean hydrogen production and use in California.
    - First solicitation for large-scale centralized hydrogen projects ($45 million) will be released March 2024, with awards to be announced in summer 2024.
    - Second solicitation for distributed hydrogen projects with on-site use ($10 million) will be released summer 2024, with awards to be announced winter 2024.

  These potential grants will fund projects that help reduce sector-wide emissions and maximize air quality, equity, health, and workforce benefits.

a) **Funds expended for the program, balance remaining to be spent, and geographic distribution of the funds**

1) Out of the $20 million in available funding for the federal cost share solicitation, the CEC committed $3.1 million to provide cost share to three projects that could leverage up to $13.7 million in federal funds pending U.S. Department of Energy award announcements. If funded, the projects would take place in Chatsworth, Hawthorne, and La Jolla, California. The remaining funds were ultimately removed due to the program budget reduction. No funds have yet been expended.
2) In the Governor's proposed FY 2024/25 budget, funding for the program was reduced from $100 million to $65 million, and the funding source is the General Fund. Approximately 90 percent of these funds ($58 million) will be used to provide grants for hydrogen production projects, which will include both CEC-sponsored grants and DOE cost share grants.
    1) First solicitation for large-scale centralized hydrogen projects ($45 million) will be released March 2024, with awards to be announced in summer 2024. No funds have yet been expended
    2) Second solicitation for distributed hydrogen projects with on-site use ($10 million) will be released summer 2024, with awards to be announced winter 2024. No funds have yet been expended.

b) **Funds expended on administrative, technical, or scientific services for the program.**

1) Administrative: $144,085. Program administrative activities to date:

a. **December 1, 2022:** Public workshop to discuss implementation of the Clean Hydrogen Program and receive stakeholder input on the program scope, eligibility, and requirements. Over 200 stakeholders attended the workshop, representing environmental and environmental justice organizations, state agencies, technology and project developers, trade organizations, and other stakeholders.
b. **May 18, 2023:** Released draft solicitation concept #1 focused on large-scale centralized hydrogen production and received over 20 comments from stakeholders.
   Competitive Grant Solicitation Timeline
   i. Release: early 2024
   ii. Grant awards: mid 2024
   iii. Solicitation Purpose: Fund the demonstration and deployment of large-scale clean hydrogen production facilities producing at least 5 metric tons per day, while co-locating renewable energy production, delivery networks, and storage facilities.
c. **May 23, 2023:** Released GFO-22-903 Cost Share for Federal Funding Opportunities Clean Hydrogen Program. Total committed Clean Hydrogen Program funding is up to $3.1 million.
d. **October 6, 2023:** Released draft solicitation concept #2 focused on distributed clean hydrogen production with onsite end use and received over 20 comments from stakeholders.
   Competitive Grant Solicitation Timeline
   i. Release: June 2024
   ii. Grant awards: late 2024
   iii. Solicitation Purpose: Fund the demonstration and deployment of distributed clean hydrogen production facilities producing 1 to 5 metric tons of hydrogen per day with onsite storage for hard-to-electrify end uses.
e. **November 7, 2023:** Released draft solicitation community engagement, benefits, and impacts requirements and received 8 comments from stakeholders.
f. **Ongoing:** Direct engagement with over 60 entities, including U.S. Department of Energy, California Air Resources Board, Governor's Office of Business and Economic Development, researchers, utilities, technology and project developers, and other stakeholders to inform program and solicitation development.

c) **Estimates on how expended funds are achieving the specific purposes of the program.**

We anticipate that funding awards will occur in mid-to-late 2024 and that priority will be given to projects that focus on AB 209 priorities, such as helping reduce sector-wide emissions and maximizing air quality, equity, health, and workforce benefits. Information on these funding awards will be available later this year.

d) **Estimates of additional electrical generation or storage capacity at net peak hours or during critical grid conditions made available as a result of the program.**

No estimates at this time. We anticipate funding awards will occur later this year, and information on these awards will be available at that time.

e) **Estimated onsite reductions of the emissions of greenhouse gas and criteria air pollutant emissions as a result of the program.**

Priority consideration will be given for projects that help reduce sector-wide emissions and maximize air quality benefits. We anticipate funding awards will occur later this year, and information on these awards will be available at that time.

f) **Description of how the funds were used and a description of the industries receiving funding.**
We anticipate funding awards will be made this year, and this information will be posted on the following CEC website: Clean Hydrogen Program.

Equitable Building Decarbonization Program

Established pursuant to Section 25665.1

California has 14 million homes and 7 billion square feet of commercial space. These buildings account for approximately 25 percent of the state's greenhouse gas emissions. The combustion of gas for space and water heating is the single largest source of greenhouse gas emissions from buildings as a category. While retrofits to existing buildings offer the greatest potential for emission reductions, they also face more barriers, including upfront costs, split incentives between tenants and building owners, structural issues, and space constraints. Furthermore, older buildings with minimal insulation, air gaps, and non-existent or low-performing space heating and cooling are not equipped to adequately withstand extreme heat and protect occupants.

To address these obstacles, the Fiscal Year (FY) 2022-23 budget appropriated $922 million over a five-year period to develop and implement a statewide Equitable Building Decarbonization (EBD) program that includes both a direct install program focused on decarbonizing homes in under-resourced communities and an incentive program to accelerate deployment of low-carbon building technologies. The primary goals of the EBD program are to reduce greenhouse gas emissions and advance energy equity in under-resourced communities.

Milestones

- Prioritized developing the statewide EBD Direct Install Program and adopted program Guidelines in October 2023 following robust public process on the program design.
- Prepared a draft solicitation to award $689.8 million dollars to three regional administrators to implement the EBD program. The draft solicitation will be released in March 2024 for public input with the final solicitation being released in April 2024. Proposals will then be reviewed, scored, and proposed winners announced in the summer with consideration by the CEC in fall.
- Start development of the Guidelines for the Tribal Direct Install Program in summer 2024 and for the Statewide Incentive Program in winter 2024.

a) **Funds expended for the program, balance remaining to be spent, and geographic distribution of the funds.**

1) The EBD Program was appropriated $922 million over a five-year period during FY 2022-23. The 2023-2024 Budget maintained the budget but spread it over six years and adjusted the funding sources: $405 million allocated from the California Climate Investments Program Greenhouse Gas Reduction Fund (GGRF) and $517 million from the General Fund in future years. The 2023-2024 FY allocation is $2 million from the General Fund and $405 million from GGRF. Approximately 90 percent of these funds will be used to implement decarbonization programs.
    a. Expenditures to date from the General Fund total $200,000 for Support Expenditures to date from the Greenhouse Gas Reduction Fund total $665,950.55 for Support.
    b. Remaining balance from the General Fund is $1.8 million for Local Assistance. Remaining balance from the Greenhouse Gas Reduction Fund is $39,834,049.45 for Support and $364.5 million for Local Assistance for the FY 23-24.
    c. The CEC intends to release a competitive solicitation for three regional administrators in April 2024.

2) Of the $922 million appropriation, up to $689,800,000 will be directed to the statewide Direct Install Program for three regional Program Administrators in Northern, Central, Southern California. The competitive solicitation for these three regional administrators will be released in April 2024. The funds will be divided among the regions based on the proportion of under resourced communities as follows:
    a. Northern: $158,700,000.
    b. Central: $131,100,000.
    c. Southern: $400,000,000.
3) In order to advance building decarbonization efforts as quickly as possible, the CEC is currently exploring opportunities to transfer up to $30 million to existing programs at the state that provide building decarbonization upgrades for low- to moderate-income California households.
4) Up to $30 million will fund a Tribal Direct Install Program, which will be implemented by an additional administrator selected through a competitive process. Recognizing the unique needs of tribes and tribal communities and consistent with Assembly Bill 209 (Committee on Budget, Chapter 251, Statutes of 2022), the CEC has set aside funding for a separately administered component of the direct install program to serve residential buildings owned or managed by California Native American tribes or California tribal organizations and buildings owned by members of California Native American tribes. Tribal Direct Install Program guidelines will be developed in late-2024 through a public process.
5) Lastly, up to $80 million will be directed to the development and implementation of a Statewide Incentive Program. This incentive program will provide incentives for low-carbon building technologies. Guidelines for this program will be developed through a public process.

b) **Funds expended on administrative, technical, or scientific services for the program.**
1) Administrative expenses: $200,000
Administrative activities to date include outreach with public stakeholders and the development of the EBD Guidelines:
    a. **December 9, 2022:** Release of Request for Information on program development.
    b. **December 13, 2022**: Scoping Workshop on EBD Program.
    c. **May 5, 2023**: Draft EBD Direct Install Program Guidelines posted for public review and comment. Spanish translation posted on May 17, 2023.
    d. **May 17, 2023:** Workshop on Draft EBD Direct Install Program Guidelines with comment period until June 30, 2023. Over 200 stakeholders attended the workshop.
    e. **May 24-25, 2023:** Tribal Listening Sessions.
    f. **June 6, 9, 10, 12, 15, 21, and 23, 2023:** Regional workshops in cities across state to solicit input on the design and implementation of the direct install program. Over 250 stakeholders attended. CEC received over 80 comments on the guidelines.
    g. **October 5, 2023:** Proposed EBD Direct Install Guidelines released for consideration.
    h. **October 17, 2023:** Amended Proposed EBD Direct Install Guidelines released for consideration.
    i. **October 18, 2023:** EBD Direct Install Guidelines adopted by CEC.

j. **March 14, 2024**: Workshop on draft solicitation for direct install program's regional administrators.
k. **April 2024**: Posting of solicitation.
l. **Quarterly**: Meetings with environmental justice groups and local governments to understand the concern and need of their communities.
m. **Ongoing:** Development of the competitive solicitation for three regional program administrators.

2) Technical and scientific services: $500,000
   a. $500,000 in funds were encumbered for a technical support contract with Recurve Analytics, Inc. The contract was a competitive solicitation and approved at a California Energy Commission Business Meeting. This contract will assist the CEC and its regional administrators utilize data to target the program at specific households.

c) **Estimates on how expended funds are achieving the specific purposes of the program.**
Following project implementation, data will be collected to quantify and qualify project outcomes including, but not limited to, estimated greenhouse gas emission reductions, locations of homes retrofitted to ensure energy equity, criteria air pollution reductions, energy savings, type and number of appliances installed, including heat pumps, and job creation.

d) **Estimates of additional electrical generation or storage capacity at net peak hours or during critical grid conditions made available as a result of the program.**
It is not expected this program will directly result in additional electrical generation or storage capacity, but program staff is expecting the program will generate additional load shift potential. Staff will be able to estimate and share this potential after proposed awardees are announced.

e) **Estimated onsite reductions in greenhouse gas and criteria air pollutant emissions as a result of the program.**
It is expected that this program will reduce greenhouse gas emissions and air pollutants from the replacement of fossil fuel burning equipment (water and space conditioning, cooking, clothes drying) with efficient electric. Staff will be able to estimate this potential after proposed awardees are announced.

f) **Description of how the funds were used and a description of the industries receiving funding.**
This information will be provided once funding awards have been made later this year. When available, information will be posted on the following CEC website: Equitable Building Decarbonization Program and included in the EBD Program Report to be submitted to the Legislature by September 1 of each year (SB 306, Caballero, Chapter 387, Statutes of 2023).

Program to Support Offshore Wind Waterfront Facilities Improvement

Established pursuant to Section 25666

Seaports (or ports) and waterfront facilities are essential for developing a new offshore wind industry and will be an important driver of potential economic benefits, including jobs and economic growth opportunities. Types of port sites needed to support the industry may vary depending on the type of floating turbine design, location, mooring systems, distance from shoreline, and water depths for turbine operation. Regardless of the specific floating technology used, staging and integration port sites will need to receive, stage, store, assemble, and load offshore wind components. Operations and maintenance sites will need to support operation and maintenance vessels; and manufacturing or fabrication sites will need to receive raw materials and manufacture and assemble larger components. Staging, integration, and operations and maintenance sites are essential, unlike manufacturing and fabrication sites since components can be imported.

The California State Lands Commission's AB 525 Port's Readiness Plan estimated investment of about $11 billion to $12 billion is needed to upgrade existing port infrastructure to meet the offshore wind planning goal of 25 gigawatts by 2045. A collaborative port development strategy is needed to support various port upgrades, and programs to encourage early-stage port development, including port readiness, concept design, and engineering, as well as permitting and environmental assessments are needed.

The AB 209 Offshore Wind Waterfront Facilities Improvement Program requires the CEC to establish and administer a program to support offshore wind infrastructure improvements to advance the capabilities of California ports, harbors, and other waterfront facilities to support the buildout of offshore wind facilities and maximize the economic and environmental benefits of an offshore wind industry in California.

The program supports three categories of infrastructure improvements:

- Category I activities support developing individual or regional retrofit concepts and investment plans.
- Category II activities support final design, engineering, environmental studies and review, and construction of retrofits.
- Category III activities include cost share funding to an eligible applicant that receives a federal award for purposes consistent with Category I or Category II activities.

A program webpage and docket (23-MISC-01) is available on the CEC's website: https://www.energy.ca.gov/programs-and-topics/programs/offshore-wind-waterfront-facility-improvement-program

Milestones

- Held in-person and virtual workshop on November 3, 2023. The workshop featured an overview of the program statutes as well as two panels: the first panel on "Perspectives from Ports and Harbors" included presentations from Moffat & Nichol and eight port facilities, the second panel "Perspectives from Private Sector Participants" provided an exchange of information from offshore wind industry and port developer/operator representatives. CEC received 10 public comments at the workshop and 12 written comments following the workshop.

- Drafted grant funding opportunity solicitation with the goal of opening a solicitation for applicants in mid-2024.

a) **Funds expended for the program, balance remaining to be spent, and geographic distribution of the funds**

The Budget Act of 2022, as amended by Assembly Bill 179 (2022), appropriates $45 million to the CEC to administer ($2.25 million) and provide incentives ($42.5 million) to support offshore wind infrastructure improvements and requires that the CEC expend or encumber the funds by June 30, 2025, and make available for liquidation until June 30, 2029. We anticipate making funding awards later this year and will provide an update on the award amounts and geographic distribution once the funds are committed. No funds have yet been expended.

b) **Funds expended on administrative, technical, or scientific services for the program.**

1) Administrative expenses: $63,940 for the following:
   a. Created program webpage, docket, and associated list server for the public to subscribe to receive timely updates and information on the program.
   b. Communicated and consulted regularly with state agencies on program approach
   c. Hosted public workshop on November 3, 2023, with stakeholder participation and public comment.
   d. Developing a grant solicitation to implement the program and expect to release the solicitation after June 2024 and make awards before the end of 2024.

c) **Estimates on how expended funds are achieving the specific purposes of the program.**

We anticipate that funding awards will occur in 2024 and that priority will be given to projects that focus on facilitating development of a renewable energy resource that can achieve the priorities of AB 209, such as benefits to the electrical grid, maximizing reduction of greenhouse gases, and reducing pollution in under-resourced communities. Information on these funding awards will be available later this year.

d) **Estimates of additional electrical generation or storage capacity at net peak hours or during critical grid conditions made available as a result of the program.**

Though this program is not expected to directly result in additional electrical generation or storage capacity, it is expected that development of offshore wind resources in California will reduce the need for fossil fuels for electricity generation. We anticipate funding awards will occur later this year, and information on these awards will be available at that time.

e) **Estimated onsite reductions in greenhouse gas and criteria air pollutant emissions as a result of the program.**

Though this program is not expected to directly result in reduction in greenhouse gas and criteria air pollutants because there will be no additional electrical generation or storage capacity, it is expected that development of offshore wind resources in California will reduce the need for fossil fuels for electricity generation. Further, the operations of port facilities developing offshore wind could have impacts, including air quality, on nearby communities and priority consideration will be given for projects that maximize reduction of greenhouse gas emissions and pollution in these communities, especially in under-resourced communities. We anticipate funding awards will occur later this year, and information on these awards will be available at that time.

f) **Description of how the funds were used and a description of the industries receiving funding.**
We anticipate funding awards will be made later this year, and this information will be posted on the following CEC website: https://www.energy.ca.gov/programs-and-topics/programs/offshore-wind-waterfront-facility-improvement-program