Cornucopia Hybrid Project

Senate Bill (SB) 149 Infrastructure Project Application

Applicant:

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Prepared for:

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1 Project Description and Background

Cornucopia Hybrid, LLC[1] (the Applicant) submits this application in accordance with California Public Resources Code (PRC) Division 13, Chapter 7, commencing with Section 21189.80 in accordance with Senate Bill (SB) 149. This application is to support the Governor of California (Governor) in certifying the Cornucopia Hybrid Project (Project) as an Energy Infrastructure Project under PRC Section 21189.82.

This section describes the Project location and background and provides a description of Project characteristics.

1.1 Project Location

The Project site is located in an unincorporated portion of Fresno County, California, situated between the communities of Coalinga and Avenal. The Project includes approximately 2,446 acres of land leased by BayWa r.e. Solar Projects LLC at the base of the eastern slope of the Diablo Range. Interstate 5 (I-5) is located approximately four miles east of the Project site. The Project site is bifurcated north to south by Sutter Avenue and east to west by State Route (SR) 33 (South Lost Hills Road). The Project site includes fallow agricultural land and is mostly surrounded by vacant agricultural land to the north, west, and south with residential uses to the southeast. There is a small residential area which lies just north of the northernmost portion of the Project site along SR 33 and a commercial barn that borders the Project site to the east of SR 33 at the junction of SR 33 with Sutter Avenue.

Figure 1 shows the regional location and Figure 2 shows the Project site location and boundary.

1.2 Project Background and Objectives

Solar energy development is expanding on land and water throughout the state of California. The rate of development is expected to increase such that solar energy would be the dominant source of electricity. According to the California Air Resources Board (ARB) Scoping Plan, at least 72 gigawatts (GW) of photovoltaic (PV) solar energy capacity (with 37 GW of storage) is anticipated to be needed to fully decarbonize the state's energy system by 2045.

The objectives of the Project are to:

- Develop a renewable energy project including solar power generation and battery energy storage in Fresno County, which would support the economy by investing in the local community, creating local construction jobs, and increasing tax and fee revenue to the County.
- Increase electricity independence and resilience through the generation of renewable energy.
- Provide the County and the State of California with a renewable energy source that would assist the state in complying with the Renewables Portfolio Standard under Senate Bill (SB) 100, approved in 2018, which requires that 100 percent of all electricity sold in the state shall be generated from renewable energy sources by 2045.

[1] Cornucopia Hybrid LLC is a subsidiary of BayWa r.e. U.S. Solar Projects

- Establish solar PV power-generation with battery energy storage facilities of sufficient size and configuration to produce reliable electricity in an economically feasible and commercially financeable manner.
- Expand the reach of renewable energy development through the development of battery energy storage systems, making solar more valuable by storing energy after sunset and placing it on the grid.
- Site and design the project in an environmentally responsible manner, which includes:
  - Locating generation facilities in an area which receive appropriate solar radiation;
  - Using existing electrical transmission facilities, rights-of-way, roads, and other existing infrastructure where practical;
  - Utilizing land that has been fallow due to lack of water;
  - Minimizing water use; and
  - Reducing greenhouse gas emissions.
- Support California's efforts to reduce greenhouse gas emissions consistent with California Assembly Bill 32, the Global Warming Solutions Act of 2006, and SB 32, to at least 40 percent below the statewide greenhouse gas emissions limit by 2030.

Figure 1 Regional Location

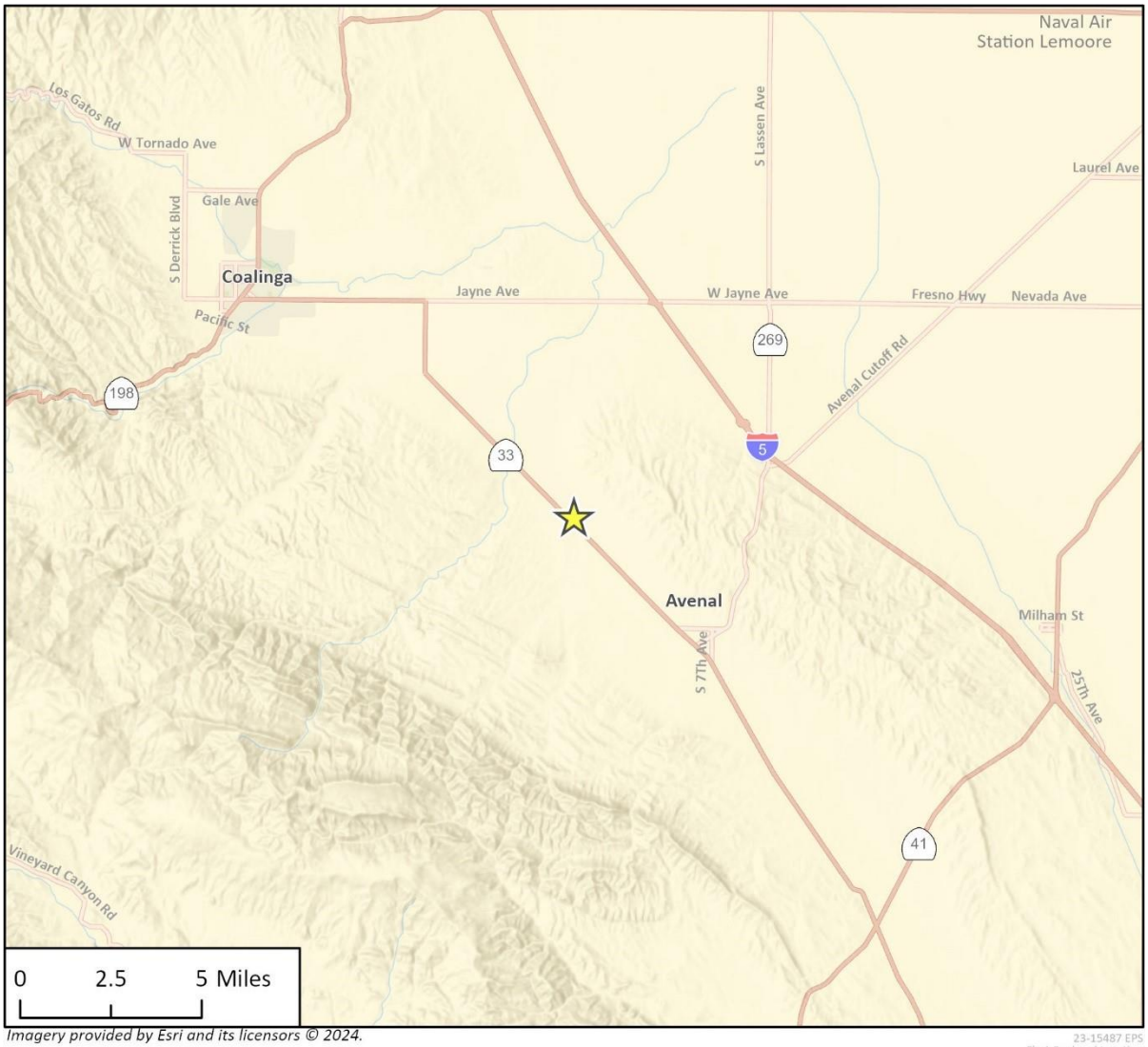
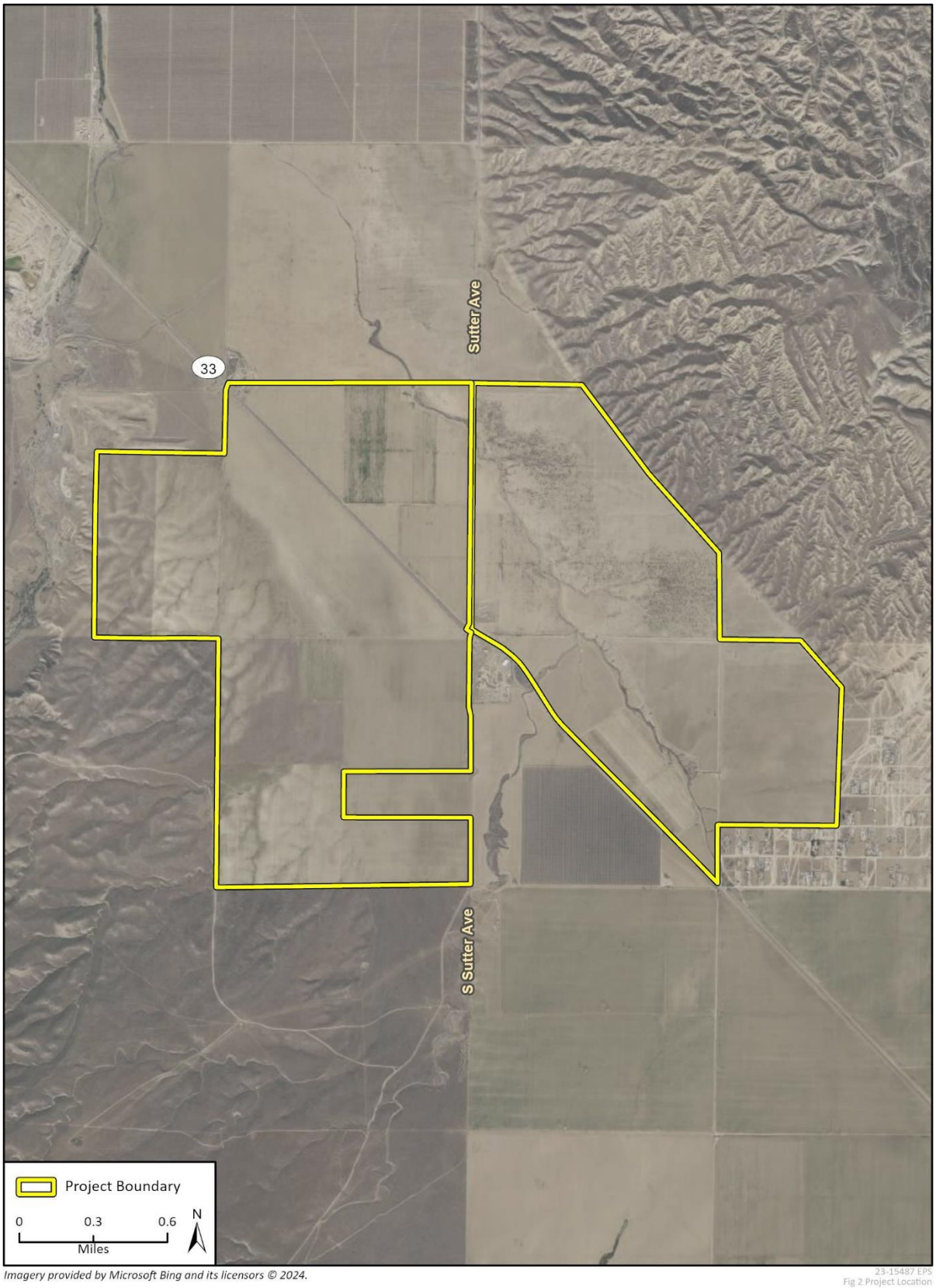


Figure 2 Project Location



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23-15487 EPS
Fig 2 Project Location

1.3 Project Description

The proposed Cornucopia Hybrid Project (Project) would include the development of a new utility-scale, 300-megawatt (MW) solar facility consisting of approximately 686,880 solar modules, a 300-megawatt alternating current (MWac) battery energy storage system (ESS), and two prefabricated structures for maintenance, operation, and control services. Figure 3 shows a preliminary site plan for the project. Equipment quantities and specifications are subject to change based on technological improvement that may occur between Project approval and construction.

The key components of the proposed Project currently include:

- 686,880 photovoltaic (PV) solar modules rated at 585 watts (W), mounted on tracking devices and organized as rows in a uniform grid pattern (solar array). The PV modules would be connected to 74 power inverters.
- Substations to interconnect the Project to the grid, including equipment such as breakers, switches, relays, meters, lightning protection, transformers, grounding, and a control enclosure.
- An ESS capable of storing up to 300 MW of electricity and conducting energy to the regional electrical grid. The ESS would consist of battery banks housed in electrical enclosures and buried electrical conduit.
- Connection to Pacific Gas and Electric Company (PG&E) Switching Station's existing 230 kV transmission lines.
- Two prefabricated structures, of which one would be used for maintenance and operation service and one for control services.
- Access road network to be constructed throughout the Project site, with entrances proposed on SR 33 and Sutter Avenue.
- Revegetation of Project site with a blend of native grasses and pollinator species.
- Laydown area located at the southeast corner of the site to be used for material and equipment staging.
- Potential partnership with a local shepherd to utilize sheep grazing for vegetation management during Project operation.

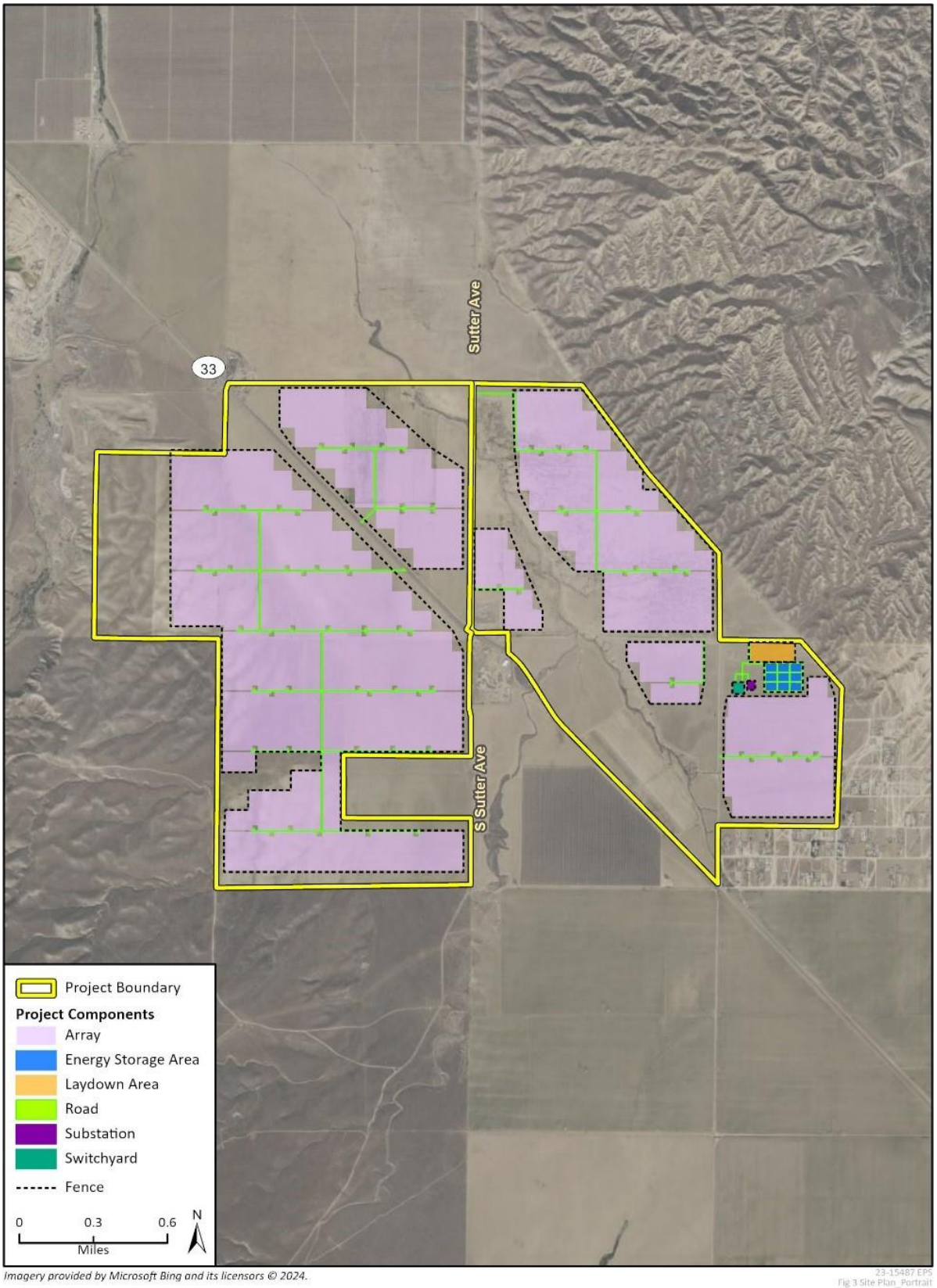
1.3.1 Construction

Construction of the Project is anticipated to involve the following three main project components:

- **Solar Facility -** Construction of the solar facility will be broken into three phases: site preparation, installation of the PV system, and installation of the inverters, transformers, substation, switching station, and the gen-tie line.
- **ESS -** Construction of the ESS will be broken into three phases: site preparation, installation of foundations, structures, and DC electrical system, and installation of inverters, substation, and AC electrical system.
- **PG&E Improvements -** Construction of PG&E improvements will be broken into two phases: site work and electrical work.

Construction of the project is anticipated to begin in the fourth quarter of 2026 and last approximately 39 months, with a commercial operation date of the fourth quarter of 2029.

Figure 3 Preliminary Site Plan



1.3.2 Operation

The Project is anticipated to be operational in the fourth quarter of 2029 and would operate 24 hours per day, seven days a week, and 365 days per year. Once completed, the Project would generate power from the solar facility during daylight hours and the energy storage system could distribute power to the grid, seven-days a week, year-round. The planned project life is 35 years.

Due to the remote nature of the Project site, operation and maintenance activities would be carried out by approximately six full-time employees and occur on a scheduled and as-needed basis; therefore, regular onsite staff would not be required. When technical support is needed, a small crew of technicians would enter the Project site during typical business hours and complete any required operation and maintenance activities.

1.4 Project Status and Schedule

Environmental planning efforts are underway. The Applicant is working closely with Fresno County as the California Environmental Quality Act (CEQA) lead agency. A Notice of Preparation of an Environmental Impact Report (EIR) was released on May 3, 2024, and the Draft EIR is anticipated to be released in August 2024. The Fresno County Board of Supervisors is expected to consider certification of the Final EIR whether to adopt the Project by May 2025.

2 Consistency with Statutory Requirements for Streamlining Under SB 149

This chapter summarizes each applicable section of the California Public Resources Code (PRC) (PRC §§21189.80 – 21189.91) as amended by Senate Bill (SB) 149 and describes how the Project complies with the requirements in the section. The table on the following page includes the text of SB 149 in full along with responses by the Applicant to each specific requirement, thereby providing evidence that the Cornucopia Hybrid Project would meet the criteria set forth in SB 149 to qualify as an Infrastructure Project.

Additional supporting information is provided in attachments, as warranted.

Table 1 Project Consistency with Eligibility Criteria

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
Chapter 7. Infrastructure Projects			
PRC § 21189.80	The Legislature finds and declares all of the following: (a) This division requires that the environmental impacts of development projects be identified and mitigated. (b) This division also guarantees the public an opportunity to review and comment on the environmental impacts of a project and to participate meaningfully in the development of mitigation measures for potentially significant environmental impacts. (c) Historic federal and state investments in infrastructure will lead to the development of numerous transportation-related, water-related, technology, and energy facilities across the state that would further California's commitments to reducing emissions of greenhouse gases and protecting its people from the worst extremes of climate change while also leveraging federal resources to increase access to quality jobs in our communities. (d) These projects will further generate full-time jobs during construction and additional jobs once the projects are constructed and operating. (e) The transportation-related projects would help state, regional, and local agencies more quickly meet the goals of advancing safety, rehabilitating the aging transportation infrastructure, and addressing the impacts of climate change. (f) The transportation-related projects will accelerate critical state, regional, and local "fix it first" projects supported by a historic federal and state partnership through Chapter 5 of the Statutes of 2017, and the federal Infrastructure Investment and Jobs Act (Public Law 117-58). (g) The purpose of this chapter is to provide unique streamlining benefits under this division for critical state, regional, and local investments in climate resiliency, safety, and infrastructure maintenance while maintaining the environmental and public engagement benefits of this division for projects that provide the public benefits, including environmental and climate-related benefits, described above and to both achieve those benefits and put people to work as soon as possible.	☐ Yes ☐ No ☒ n/a	Noted; no response required.

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
PRC § 21189.81	For purposes of this chapter, the following definitions apply: (a) "Applicant" means a public or private entity or its affiliates, or a person or entity that undertakes a public works project, that proposes a project and its successors, heirs, and assignees.	☐ Yes ☐ No ☒ n/a	Noted; no response required.
	(b) "Disadvantaged community" means an area identified by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code or an area identified as a disadvantaged unincorporated community pursuant to Section 65302.10 of the Government Code.	☐ Yes ☐ No ☒ n/a	Noted; no response required.
	(c) "Electrical transmission facility project" means a project for the construction and operation of an electrical transmission facility the meets either of the following: (1) An electrical transmission facility project identified by the Independent System Operator in its annual transmission planning process that meets either of the following criteria: (A) The project will facilitate delivery of electricity from renewable energy resources or zero-carbon resources. (B) The project will facilitate delivery of electricity from energy storage projects. (2) An electrical transmission facility project identified by a local publicly owned electric utility that would satisfy a transmission expansion need approved by the governing body of the local publicly owned electric utility and that meets either of the following criteria: (A) The project will facilitate delivery of electricity from renewable energy resources or zero-carbon resources. (B) The project will facilitate delivery of electricity from energy storage projects.	☐ Yes ☐ No ☒ n/a	Noted; the Project is not an electrical transmission facility project.
	(d) (1) "Energy infrastructure project" means any of the following: (A) An eligible renewable energy resource, as defined in Section 399.12 of the Public Utilities Code, excluding resources that utilize biomass fuels. (B) New energy storage systems of 20 megawatts or more, that are capable of discharging for at least two hours, provided that a pumped hydro facility may qualify	☒ Yes ☐ No ☐ n/a	The Cornucopia Hybrid Project qualifies as an Infrastructure Project as an "energy infrastructure project" under Section 21189.91(d)(1). The Project is a proposed 300 MW solar photovoltaic facility with a 300-

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
	only if it is less than or equal to 500 megawatts and has been directly appropriated funding by the state before January 1, 2023. (C) A project for which the applicant has certified that a capital investment of at least two hundred fifty million dollars ($250,000,000) made over a period of five years and the project is for either of the following: (i) The manufacture, production, or assembly of an energy storage system or component manufacturing, wind system or component manufacturing, and solar photovoltaic energy system or component manufacturing. (ii) The manufacture, production, or assembly of specialized products, components, or systems that are integral to renewable energy or energy storage technologies. (D) An electric transmission facility project, provided that nothing in this chapter affects the jurisdiction of the California Coastal Commission pursuant to Division 20 (commencing with Section 30000) to regulate such projects if located in the coastal zone. (E) An energy infrastructure project does not include projects utilizing hydrogen as a fuel. (2) Any project to develop a facility within the meaning of subdivision (b) of Section 25545 shall meet the requirements of Sections 25545.3.3 and 25545.3.5, except that those requirements shall also apply to solar photovoltaic and terrestrial wind electrical generating power plants with a generating capacity of between 20 and 50 megawatts and energy storage projects capable of storing between 80 and 200 megawatt hours of electrical energy.		megawatt alternating current (MWac) energy storage system (ESS). The project does not involve utilizing hydrogen as a fuel. As discussed on Attachment A, pursuant to PRC section 21189.81(d)(2)); the project would meet the prevailing wage and skilled workforce requirements set forth in PRC Sections 25545.3.3 and 25545.3.5. Please see Attachment A for additional information.
	(e) "Infrastructure project" means a project that is certified pursuant to Sections 21189.82 and 21189.83 as any of the following: (1) An energy infrastructure project. (2) A semiconductor or microelectronic project. (3) A transportation-related project.	☒ Yes ☐ No ☐ n/a	Noted; the project is an energy infrastructure project. See above discussion under Section 21189.91(d).

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
	(4) A water-related project.		
	(f) "Semiconductor or microelectronic project" means a project that meets the requirements related to investment in new or expanded facilities and is awarded funds under the federal Creating Helpful Incentives to Produce Semiconductors Act of 2022 (Public Law 117-167), commonly known as the CHIPS Act of 2022, and the requirements of Section 21183.5.	☐ Yes ☐ No ☒ n/a	Noted; the project is not a semiconductor or microelectronic project.
	(g) (1) "Transportation-related project" means a transportation infrastructure project that advances one or more of, and does not conflict with, the following goals related to the Climate Action Plan for Transportation Infrastructure adopted by the Transportation Agency: (A) Build toward an integrated, statewide rail and transit network. (B) Invest in networks of safe and accessible bicycle and pedestrian infrastructure. (C) Include investments in light-, medium-, and heavy-duty zero-emission vehicle infrastructure. (D) Develop a zero-emission freight transportation system. (E) Reduce public health and economic harms and maximize community benefits. (F) Make safety improvements to reduce fatalities and severe injuries of all users towards zero. (G) Assess and integrate assessments of physical climate risk. (H) Promote projects that do not significantly increase passenger vehicle travel. (I) Promote compact infill development while protecting residents and businesses from displacement. (J) Protect natural and working lands. (2) Transportation-related projects are public works for the purposes of Section 1720 of the Labor Code and shall comply with the applicable provisions of Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 of the Labor Code.	☐ Yes ☐ No ☒ n/a	Noted; the project is not a transportation-related project.

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
	(h) (1) "Water-related project" means any of the following: (A) A project that is approved to implement a groundwater sustainability plan that the Department of Water Resources has determined is in compliance with Sections 10727.2 and 10727.4 of the Water Code or to implement an interim groundwater sustainability plan adopted pursuant to Section 10735.6 of the Water Code. (B) (i) A water storage project funded by the California Water Commission pursuant to Chapter 8 (commencing with Section 79750) of Division 26.7 of the Water Code. (ii) In addition to clause (i), the applicant shall demonstrate that the project will minimize the intake or diversion of water except during times of surplus water and prioritizes the discharge of water for ecological benefits or to mitigate an emergency, including, but not limited to, dam repair, levee repair, wetland restoration, marshland restoration, or habitat preservation, or other public benefits described in Section 79753 of the Water Code. (C) Projects for the development of recycled water, as defined in Section 13050 of the Water Code. (D) Contaminant and salt removal projects, including groundwater desalination and associated treatment, storage, conveyance, and distribution facilities. This shall not include seawater desalination. (E) Projects exclusively for canal or other conveyance maintenance and repair. (2) Water-related projects are public works for the purposes of Section 1720 of the Labor Code and shall comply with the applicable provisions of Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 of the Labor Code. (3) "Water-related project" does not include the design or construction of through-Delta conveyance facilities of the Sacramento-San Joaquin Delta.	☐ Yes ☐ No ☒ n/a	Noted; the project is not a water-related project.

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
PRC § 21189.82	(a) (1) (A) The Governor may certify a project as an energy infrastructure project for purposes of this chapter if the project meets the requirements of subdivision (d) of Section 21189.81. (B) In addition to subparagraph (A), if the applicant is not the lead agency, the Governor shall ensure all of the following: (i) The applicant agrees to pay the costs of the trial court and the court of appeal in hearing and deciding any case challenging a lead agency's action on a certified project under this division, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner as provided in the rule of court adopted by the Judicial Council under Section 21189.85. (ii) The applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with the review and consideration of the project under this division, in a form and manner specified by the lead agency for the project. (iii) For a project for which environmental review has commenced, the applicant demonstrates that the record of proceedings is being prepared in accordance with Section 21189.86. (2) (A) The Governor may certify a project as a semiconductor or microelectronic project for purposes of this chapter if the project meets the requirements of subdivision (f) of Section 21189.81. (B) In addition to subparagraph (A), if the applicant is not the lead agency, the Governor shall ensure all of the following: (i) The applicant agrees to pay the costs of the trial court and the court of appeal in hearing and deciding any case challenging a lead agency's action on a certified project under this division, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner as provided in the rule of court adopted by the Judicial Council under Section 21189.85. (ii) The applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with the review and consideration of the project	☒ Yes ☐ No ☐ n/a	Pursuant to Section 21189.82(a)(1)(B), the Applicant is not the lead agency. As discussed in Attachment B: ▪ Pursuant to Section 21189.82(a)(1)(B)(i), the Applicant commits to pay these costs, should they occur. ▪ Pursuant to Section 21189.82(a)(1)(B)(ii), the Applicant commits to pay these costs. Pursuant to Section 21189.82(a)(1)(B)(iii), the record of proceedings is being prepared in accordance with Section 21189.86. See additional information under Section 21189.86 criteria. Sections 21189.82(a)(2) through 21189.82(a)(4) are not applicable to the Project. Please see Attachment B for additional information.

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
	under this division, in a form and manner specified by the lead agency for the project. (iii) For a project for which environmental review has commenced, the applicant demonstrates that the record of proceedings is being prepared in accordance with Section 21189.86. (3) The Governor may certify up to 20 transportation-related projects for purposes of this chapter, including up to 10 state projects proposed by the Department of Transportation and up to 10 local or regional projects, that meet the requirements of subdivision (g) of Section 21189.81. (4) (A) The Governor may certify a project as a water-related project for purposes of this chapter if the project meets the requirements of subdivision (h) of Section 21189.81. (B) In addition to subparagraph (A), the Governor shall ensure all of the following: (i) The applicant agrees to pay the costs of the trial court and the court of appeal in hearing and deciding any case challenging a lead agency's action on a certified project under this division, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner as provided in the rule of court adopted by the Judicial Council under Section 21189.85. (ii) The applicant agrees to pay the costs of preparing the record of proceedings for the project concurrent with the review and consideration of the project under this division, in a form and manner specified by the lead agency for the project. (iii) For a project for which environmental review has commenced, the applicant demonstrates that the record of proceedings is being prepared in accordance with Section 21189.86. (C) In addition to subparagraphs (A) and (B), the Governor may certify a project as a water-related project for purposes of this chapter only if the Governor finds that greenhouse gas emissions resulting from the project will be mitigated to the extent feasible.		

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
	(b) The Office of Planning and Research may consult with other state agencies on and may issue guidelines regarding applications for and the certification of projects under this chapter. Any guidelines issued under this subdivision are not subject to the rulemaking provisions of the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).	☐ Yes ☐ No ☒ n/a	Noted; no response required.
	(c) An applicant for certification of an infrastructure project under this chapter shall do all of the following: (1) Avoid or minimize significant environmental impacts in any disadvantaged community. (2) If measures are required pursuant to this division to mitigate significant environmental impacts in a disadvantaged community, mitigate those impacts consistent with this division, including Section 21002. Mitigation measures required under this subdivision shall be undertaken in, and directly benefit, the affected community. (3) Enter into a binding and enforceable agreement to comply with this subdivision in its application to the Governor and to the lead agency prior to the agency's certification of the environmental impact report for the project.	☒ Yes ☐ No ☐ n/a	Please see Attachment B stating Applicant's commitment to comply with these requirements.
	(d) The Office of Planning and Research shall make evidence and materials submitted for the certification of a project available to the public on its internet website at least 15 days before the certification of the project.	☐ Yes ☐ No ☒ n/a	Noted; no response required.
	(e) The Governor's decision to certify a project shall not be subject to judicial review.	☐ Yes ☐ No ☒ n/a	Noted; no response required.
PRC § 21189.83	(a) In addition to the requirements of Section 21189.82, with respect to any energy infrastructure project or semiconductor or microelectronic project proposed by a private entity, the Governor may certify the project pursuant to this chapter only if the project does not result in any net additional emission of greenhouse gases, including greenhouse gas	☒ Yes ☐ No ☐ n/a	The Project is an energy infrastructure project as defined in Section 21189.91(d)(1). As quantified in the Greenhouse Gas Analysis (see Attachment C), the Project would not result in any net additional emission of

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
	emissions from employee transportation. For purposes of this section, a project is deemed to meet the requirements of this section if the applicant demonstrates to the satisfaction of the Governor that the applicant has a binding commitment that it will mitigate impacts resulting from the emission of greenhouse gases, if any, in accordance with Section 21183.6.		greenhouse gases. The Project would result in a net reduction of an estimated 3,166,366 metric tons of CO_2e emissions over the project's lifespan. Please see Attachment C for additional information. The Project will comply with the greenhouse gas emissions quantification and mitigation in Section 21183.6.
	(b) In addition to the requirements of Section 21189.82, with respect to any transportation-related project, the Governor may certify the project pursuant to this chapter only if the project does not result in any net additional emission of greenhouse gases, excluding greenhouse gas emissions from employee transportation. For purposes of this section, a project is deemed to meet the requirements of this section if the applicant demonstrates to the satisfaction of the Governor that the applicant has a binding commitment that it will mitigate impacts resulting from the emission of greenhouse gases, if any, preferably through direct emissions reductions where feasible, but where not feasible, then through the use of offsets that are real, permanent, verifiable, and enforceable, and that provide a specific, quantifiable, and direct environmental and public health benefit to the same air pollution control district or air quality management district in which the project is located, but if all of the project impacts cannot be feasibly and fully mitigated in the same air pollution control district or air quality management district, then remaining unmitigated impacts shall be mitigated through the use of offsets that provide a specific, quantifiable, and direct environmental and public health benefit to the region in which the project is located.	☐ Yes ☐ No ☒ n/a	The project is not a transportation-related project.
	(c) The applicant shall be responsible for the costs of preparing an analysis of the emission of greenhouse gases resulting from the project.	☒ Yes ☐ No ☐ n/a	The applicant has committed to pay the costs for preparing an analysis of GHG emissions resulting from the project. The GHG Analysis is provided in Attachment C.
PRC § 21189.84	(a) This chapter applies to a project that is certified by the Governor as an infrastructure project.	☒ Yes ☐ No ☐ n/a	Noted and accepted.

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
	(b) An applicant may apply to the Governor for certification and shall provide evidence and materials deemed necessary by the Governor in making a decision on the application for certification.	☒ Yes ☐ No ☐ n/a	Noted and accepted.
	(c) The Governor shall submit the Governor's proposed certification, and any supporting information, to the Joint Legislative Budget Committee for review and concurrence or nonconcurrence. Within 30 days of receiving the determination, the Joint Legislative Budget Committee shall concur or nonconcur in writing on the certification. If the Joint Legislative Budget Committee fails to concur or nonconcur on a certification within 30 days of the submittal, the project is deemed to be certified.	☒ Yes ☐ No ☐ n/a	Noted and accepted.
	(d) The Office of Planning and Research may charge a fee to an applicant seeking certification under this chapter for the costs incurred by the Governor's office in implementing this chapter.	☒ Yes ☐ No ☐ n/a	Noted and accepted.
PRC § 21189.85	(a) An action or proceeding brought to attack, review, set aside, void, or annul the certification of an environmental impact report for an infrastructure project subject to this chapter or the granting of any project approvals, including any potential appeals to the court of appeal or the Supreme Court, shall be resolved, to the extent feasible, within 270 days of the filing of the certified record of proceedings with the court.	☐ Yes ☐ No ☒ n/a	Noted; no response required.
	(b) On or before December 31, 2023, the Judicial Council shall adopt a rule of court to implement this section.	☐ Yes ☐ No ☒ n/a	Noted; no response required.
PRC § 21189.86	Notwithstanding any other law, the preparation and certification of the record of proceedings for an infrastructure project shall be performed in the following manner: (a) The lead agency for the project shall prepare the record of proceedings under this division concurrently with the administrative process.	☒ Yes ☐ No ☐ n/a	Fresno County, as CEQA Lead Agency, will maintain a record of proceedings. Applicant is coordinating with Fresno County to ensure compliance with these requirements.

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
	(b) All documents and other materials placed in the record of proceedings shall be posted on, and be downloadable from, an internet website maintained by the lead agency commencing with the date of the release of the draft environmental impact report.	☒ Yes ☐ No ☐ n/a	Fresno County, as CEQA Lead Agency, will maintain a record of proceedings, and will post all documents and other materials in the record of proceedings in downloadable form on the County Project website. Applicant is coordinating with Fresno County to ensure compliance with these requirements.
	(c) The lead agency shall make available to the public in a readily accessible electronic format the draft environmental impact report and all other documents submitted to, or relied on by, the lead agency in preparing the draft environmental impact report.	☒ Yes ☐ No ☐ n/a	Fresno County, as CEQA Lead Agency, will maintain a record of proceedings, and will post the Draft EIR and all other documents relied on in preparing the Draft EIR on the County Project website. Applicant is coordinating with Fresno County to ensure compliance with these requirements.
	(d) Any document prepared by the lead agency or submitted by the applicant after the date of the release of the draft environmental impact report that is a part of the record of proceedings shall be made available to the public in a readily accessible electronic format within five days after the document is released or received by the lead agency.	☒ Yes ☐ No ☐ n/a	Fresno County, as CEQA Lead Agency, will maintain a record of proceedings, and will post the any document prepared by the lead agency or submitted by the Applicant after release of the Draft EIR in electronic format within 5 days of receipt on the County Project website at [insert link]. Applicant is coordinating with Fresno County to ensure compliance with these requirements.
	(e) The lead agency shall encourage written comments on the project to be submitted in a readily accessible electronic format, and shall make any comment available to the public in a readily accessible electronic format within five days of its receipt.	☒ Yes ☐ No ☐ n/a	Fresno County, as CEQA Lead Agency, will make public comments available to the public in an accessible format within 5 days of receipt on the County Project website at [insert link]. Applicant is coordinating with Fresno County to ensure compliance with these requirements.

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
	(f) Within seven days after the receipt of any comment that is not in an electronic format, the lead agency shall convert that comment into a readily accessible electronic format and make it available to the public in that format.	☒ Yes ☐ No ☐ n/a	Fresno County, as CEQA Lead Agency, will convert any comment received that is not electronic into an electronic format and post on the County Project website at [insert link] within 7 days of receipt. Applicant is coordinating with Fresno County to ensure compliance with these requirements.
	(g) Notwithstanding subdivisions (b) to (f), inclusive, documents submitted to or relied on by the lead agency that were not prepared specifically for the project and are copyright protected are not required to be made readily accessible in an electronic format. For those copyright-protected documents, the lead agency shall make an index of these documents available in an electronic format no later than the date of the release of the draft environmental impact report, or within five days if the document is received or relied on by the lead agency after the release of the draft environmental impact report. The index shall specify the libraries or lead agency offices in which hardcopies of the copyrighted materials are available for public review.	☒ Yes ☐ No ☐ n/a	Fresno County, as CEQA Lead Agency, will maintain an electronic index of copyright-protected documents and where materials are available and post the index on the County Project website at [insert link]. Applicant is coordinating with Fresno County to ensure compliance with these requirements.
	(h) The lead agency shall certify the final record of proceedings within five days of its approval of the project.	☒ Yes ☐ No ☐ n/a	Fresno County, as CEQA Lead Agency, will maintain a record of proceedings defined and will certify the record of proceedings within 5 days of approval of the project.
	(i) Any dispute arising from the record of proceedings shall be resolved by the superior court. Unless the superior court directs otherwise, a party disputing the content of the record of proceedings shall file a motion to augment the record of proceedings at the time it files its initial brief.	☒ Yes ☐ No ☐ n/a	Noted and accepted.
	(j) The contents of the record of proceedings shall be as set forth in subdivision (e) of Section 21167.6.	☒ Yes ☐ No ☐ n/a	Fresno County, as CEQA Lead Agency, will maintain a record of proceedings defined in section 21167.6(e), and will post all

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
			documents and other materials in the record of proceedings on the County Project website.
	(k) The applicant shall pay the costs of preparing the record of proceedings for the project concurrent with review and consideration of the project under this division, in a form and manner specified by the lead agency for the project. The cost of preparing the record of proceedings for the project shall not be recoverable from the plaintiff or petitioner before, during, or after any litigation.	☒ Yes ☐ No ☐ n/a	Pursuant to Section 21189.86(k), the applicant commits to pay these costs.
PRC § 21189.87	(a) Within 10 days of the certification of a project pursuant to Section 21189.82, the lead agency shall, at the applicant's expense, if applicable, issue a public notice in no less than 12-point type stating the following: "THE APPLICANT HAS ELECTED TO PROCEED UNDER CHAPTER 7 (COMMENCING WITH SECTION 21189.80) OF DIVISION 13 OF THE PUBLIC RESOURCES CODE, WHICH PROVIDES, AMONG OTHER THINGS, THAT ANY JUDICIAL ACTION CHALLENGING THE CERTIFICATION OF THE ENVIRONMENTAL IMPACT REPORT (EIR) OR THE APPROVAL OF THE PROJECT DESCRIBED IN THE EIR IS SUBJECT TO THE PROCEDURES SET FORTH IN SECTIONS 21189.85 AND 21189.86 OF THE PUBLIC RESOURCES CODE. A COPY OF CHAPTER 7 (COMMENCING WITH SECTION 21189.80) OF DIVISION 13 OF THE PUBLIC RESOURCES CODE IS INCLUDED BELOW." b) The public notice shall be distributed by the lead agency as required for public notices issued under paragraph (3) of subdivision (b) of Section 21092.	☒ Yes ☐ No ☐ n/a	Upon certification of the Project, Fresno County will issue the required public notice to: ▪ All organizations and individuals who have previously requested notice, ▪ Internet website of the lead agency, ▪ At least one of the following procedures: – Newspaper of general circulation in Project area – On- and off-site at Project – Direct mailing to owners and occupants of contiguous properties on latest equalized assessment roll.
PRC § 21189.88	Except as otherwise provided expressly in this chapter, this chapter does not affect the duty of any party to comply with this division.	☐ Yes ☐ No ☒ n/a	Noted; no response required.
PRC § 21189.89	The provisions of this chapter are severable. If any provision of this chapter or its application is held invalid, that invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.	☐ Yes ☐ No ☒ n/a	Noted; no response required.

PRC Section	Eligibility Criteria	Meets Criteria? (Yes/No)	Applicant Response
PRC § 21189.90	If before January 1, 2033, a lead agency fails to approve an infrastructure project, then the certification is no longer valid.	☐ Yes ☐ No ☒ n/a	Approval deadline noted; no response required.
PRC § 21189.91	This chapter shall remain in effect only until January 1, 2034, and as of that date is repealed.	☐ Yes ☐ No ☒ n/a	Schedule noted; no response required.

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Attachment A

Prevailing Wage and Labor Certification

August 16, 2024

Ms. Natalie Kuffel
Judicial Streamlining Program Manager
Governor's Office of Planning and Research
1400 10th St # 100
Sacramento, CA 95814

Dear Ms. Kuffel,

In connection with its application for certification of the Cornucopia Hybrid Project in Fresno County, California as an Energy Infrastructure Project under SB 149, Cornucopia Hybrid LLC certifies that it will comply with the prevailing wage and workforce requirements referenced in Public Resources Code section 21189.81(d)(2), including that (1) all construction workers employed on the project will be paid at least the general prevailing rate of per diem wages or apprenticeship wages, as applicable, in accordance with Public Resources code section 25545.3.3, and (2) a skilled and trained workforce will be used to perform all construction work on the project, in accordance with Public Resources code section 25545.3.5.

Specifically, Cornucopia Hybrid LLC certifies as follows:

1. Prevailing Wages:
    a. The prevailing wage requirement of Public Resources code section 25545.3.3 will be included in all contracts for the performance of all construction work.
    b. All contractors and subcontractors will be required to pay to all construction workers employed in the construction of the project at least the general prevailing rate of per diem wages or the applicable apprentice prevailing rate, as applicable.
    c. All contractors and subcontractors performing construction work on the project will be required to employ apprentices at no less than the ratio required in Section 1777.5 of the Labor Code.
    d. All contractors and subcontractors performing construction work will maintain and verify payroll records pursuant to Section 1776 of the Labor Code, make those records available for inspection and copying as provided therein, and furnish those payroll records to the Labor Commissioner pursuant to Section 1771.4 of the Labor Code.
    e. The obligation of the contractors and subcontractors to pay prevailing wages and employ apprentices may be enforced by the Labor Commissioner through the issuance of a civil wage and penalty assessment pursuant to Section 1741 of the Labor Code, which may be reviewed pursuant to Section 1742 of the Labor Code, within 18 months after the completion of the project, or by an underpaid worker through an administrative complaint or civil action, or by a joint labor-management committee though a civil action under

Section 1771.2 of the Labor Code. If a civil wage and penalty assessment is issued, the contractor, subcontractor, and surety on a bond or bonds issued to secure the payment of wages covered by the assessment will be liable for liquidated damages pursuant to Section 1742.1 of the Labor Code.

f. Alternatively, all contractors and subcontractors performing construction work on the project may be subject to a project labor agreement, which would include the following. If the project is subject to such a project labor agreement, then sections 1.d and 1.e, above, do not apply:
    i. Provisions requiring payment of prevailing wages to all construction workers employed in the construction of the project and for enforcement of that obligation through an arbitration procedure.
    ii. Targeted hiring provisions, including a targeted hiring plan, on a craft-by-craft basis to address job access for local, disadvantaged, or underrepresented workers, as defined by a relevant local agency.
    iii. Apprenticeship utilization provisions that commit all parties to increasing the share of work performed by state-registered apprentices above the state-mandated minimum ratio required in Section 1777.5 of the Labor Code.
    iv. Apprenticeship utilization provisions that commit all parties to hiring and retaining a certain percentage of state-registered apprentices that have completed the Multi-Craft Core pre-apprenticeship training curriculum referenced in subdivision (t) of Section 14005 of the Unemployment Insurance Code.

2. <u>Skilled and Trained Workforce:</u>
    a. All contracts for the performance of work will require that every contractor and subcontractor at every tier will individually use a skilled and trained workforce to construct the project.
    b. Every contractor and subcontractor will be required to use a skilled and trained workforce to construct the project.
    c. Contractors and subcontractors that fail to use a skilled and trained workforce will be subject to the penalties provided in Section 2603 of the Public Contract Code. Penalties for a contractor's or subcontractor's failure to comply with the requirement to use a skilled and trained workforce may be assessed by the Labor Commissioner within 18 months of completion of the project using the same procedures for issuance of civil wage and penalty assessments pursuant to Section 2603 of the Public Contract Code. Penalties shall be paid to the State Public Works Enforcement Fund.
    d. Cornucopia Hybrid LLC will retain records, including copies of monthly reports, that demonstrate compliance with Chapter 2.9 (commencing with Section 2600) of Part 1 of Division 2 of the Public Contract Code while the project or contract is being performed and for three years after completion of the project or contract. Cornucopia Hybrid LLC will submit these records immediately upon request of the commission. When submitted to the commission, these records shall be a public record under the California Public Records Act

(Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) and shall be open to public inspection.

e. Alternatively, all contractors and subcontractors performing work on the project may be subject to a project labor agreement, which would include the following. If the project is subject to such a project labor agreement, then sections 2.c and 2.d, above, do not apply:
    i. Provisions requiring compliance with the skilled and trained workforce requirement and for enforcement of that obligation through an arbitration procedure.
    ii. Targeted hiring provisions, including a targeted hiring plan, on a craft-by-craft basis to address job access for local, disadvantaged, or underrepresented workers, as defined by a local agency.
    iii. Apprenticeship utilization provisions that commit all parties to increasing the share of work performed by state-registered apprentices above the state-mandated minimum ratio required in Section 1777.5 of the Labor Code.
    iv. Apprenticeship utilization provisions that commit all parties to hiring and retaining a certain percentage of state-registered apprentices that have completed the Multi-Craft Core pre-apprenticeship training curriculum referenced in subdivision (t) of Section 14005 of the Unemployment Insurance Code.

Cornucopia Hybrid LLC looks forward to working with you regarding its application for certification of the Cornucopia Hybrid Project as an Energy Infrastructure Project under SB 149.

Sincerely,

Mike Stanton

Mike Stanton
Authorized Signatory
Cornucopia Hybrid LLC

Cornucopia Hybrid prevailing wage and labor cert 08-16-24

Final Audit Report 2024-08-19

Created:	2024-08-16
By:	William Geoghegan (Will.Geoghegan@baywa-re.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAcgBYeaxPg9pPuxd7X8BoveQtmYgb6tG0

"Cornucopia Hybrid prevailing wage and labor cert 08-16-24" History

Document created by William Geoghegan (Will.Geoghegan@baywa-re.com)
2024-08-16 - 4:20:07 PM GMT- IP address: 35.149.17.45

Document emailed to Michael Stanton (mike.stanton@baywa-re.com) for signature
2024-08-16 - 4:20:46 PM GMT

Email viewed by Michael Stanton (mike.stanton@baywa-re.com)
2024-08-16 - 4:29:26 PM GMT- IP address: 216.126.34.22

Document e-signed by Michael Stanton (mike.stanton@baywa-re.com)
Signature Date: 2024-08-19 - 1:34:00 PM GMT - Time Source: server- IP address: 216.126.34.22

Agreement completed.
2024-08-19 - 1:34:00 PM GMT

Attachment B

Commitment Letter

BayWa r.e.

r.e.think energy

October 25, 2024

Mr. Chris Motta, Mr. William Kettler and Mr. Steven E. White, PE, PLS
Fresno County Department of Public Works and Planning
2220 Tulare Street
Fresno, California 93721

Re: Cornucopia Hybrid Project: Energy Infrastructure Project Mitigation, Administrative Record, and Court Cost Obligations under SB 149

Dear Mr. Motta, Mr. Kettler and Mr. White:

Cornucopia Hybrid, LLC ("Cornucopia") applied to the Governor of California for certification of the Cornucopia Hybrid Project (the "Project") as an Energy Infrastructure Project under Public Resources Code section 21189.80 et. seq ("SB 149"). If so certified, the Project would be subject to streamlining benefits under the California Environmental Quality Act ("CEQA"), and as the lead agency for the Project, Fresno County ("County") would be subject to certain administrative record and other requirements set forth in SB 149. By this letter, Cornucopia acknowledges and agrees to meet its obligations under Public Resources Code Section 21189.82, subdivisions (a)(1)(B) and (c) and Public Resources Code Section 21189.83, subdivision (a).

Cornucopia hereby agrees to the following:

1. Cornucopia acknowledges that the Project has not yet been approved by the County, and this letter does not, and will not, obligate the County to recommend or approve any discretionary permits that are necessary for the Project to move forward, including Variances, Conditional Use Permits, Director's Review and Approvals, Amendment Applications, or the certification of an Environmental Impact Report.

2. As required by Public Resources Code Section 21189.82(c), should the Project ultimately be approved, Cornucopia agrees to avoid or minimize significant environmental impacts in any disadvantaged community. If measures are required under CEQA to mitigate significant environmental impacts in a disadvantaged community, Cornucopia will mitigate those impacts in compliance with CEQA and will implement any necessary mitigation

measures within the affected disadvantaged community, in a way that directly benefits that community.

3. As required by Public Resources Code Section 21189.82(a)(1)(B)(i), Cornucopia also agrees to pay the costs of the trial court and the Court of Appeal in hearing and deciding any case challenging the County's action on the Project, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner as provided in the Rules of Court adopted by the Judicial Council.

4. As required by Public Resources Code Section 21189.82(a)(1)(B)(ii), Cornucopia also agrees to pay the costs of preparing the record of proceedings for the Project concurrent with County review and consideration of the Project under CEQA, in a form and manner specified by the County.

5. As required by Public Resources Code Section 21189.83(a), should the Project ultimately be approved, Cornucopia also agrees to mitigate greenhouse gas emission impacts, if any, in accordance with Public Resources Code Section 21183.6.

Cornucopia hereby agrees to be bound by the commitments set forth in this letter.

Sincerely,

Cornucopia Hybrid LLC

By: Michael Stanton
Michael Stanton (Oct 28, 2024 14:44 EDT)

Name: Michael Stanton

Title: Authorized Representative

Acknowledged by Fresno County

By: _____

Name: _____

Title: _____

Attachment C

Greenhouse Gas Analysis

Rincon Consultants, Inc.
4589 North Marty Avenue, Unit 102
Fresno, California 93722
559-228-9925

September 4, 2024
Rincon Project No: 23-15487

John Crosby, Senior Permitting Manager
BayWa r.e. Solar Projects, LLC
18575 Jamboree Road, Suite 850
Irvine, California 92612
Via email: john.crosby@baywa-re.com

Subject: Cornucopia Hybrid Project, Greenhouse Gas Analysis for Senate Bill 149 Application Unincorporated Fresno County, California

Dear Mr. Crosby:

This study analyzes the greenhouse gas (GHG) emissions impacts of the proposed Cornucopia Hybrid Project (proposed project) in unincorporated Fresno County, California. The purpose of this study is to analyze the proposed project's GHG impacts related to both temporary construction activity and long-term operation of the proposed project with respect to Senate Bill (SB) 149 requirements. For Private Energy Infrastructure projects such as the proposed project, the project must not result in any net additional emissions of GHGs, including GHGs from employee transportation.

Project Description

Project Location

The project site is located in an unincorporated portion of Fresno County, California, situated between the unincorporated communities of Coalinga and Avenal. Interstate 5 (I-5) is located approximately 4 miles east of the project site. The project site is bifurcated north to south by Sutter Avenue and northwest to southeast by State Route (SR) 33 (South Lost Hills Road). The project includes approximately 2,446.46 acres of land (of which 1,618 will be disturbed/developed as part of the proposed project) at the base of the eastern slope of the Diablo Range. The project site is located within portions of eight parcels associated with Assessor's Parcel Numbers (APN) 090-030-06S, 090-030-04S, 090-030-02S, 090-030-03, 090-040-01, 085-110-23S, 085-110-12, and 085-110-13S (totaling approximately 2,905.80 acres). Figure 1 shows the regional location and Figure 2 shows the project site location and boundary.

The project site consists mostly of fallow agricultural land. The site is mostly surrounded by vacant agricultural land to the north, west, and south with residential uses to the southeast. There is a small residential area which lies just north of the northernmost portion of the project site along SR 33 and a commercial barn that borders the project site to the east of SR 33 at the junction of SR 33 with Sutter Avenue.

Figure 1 Regional Location

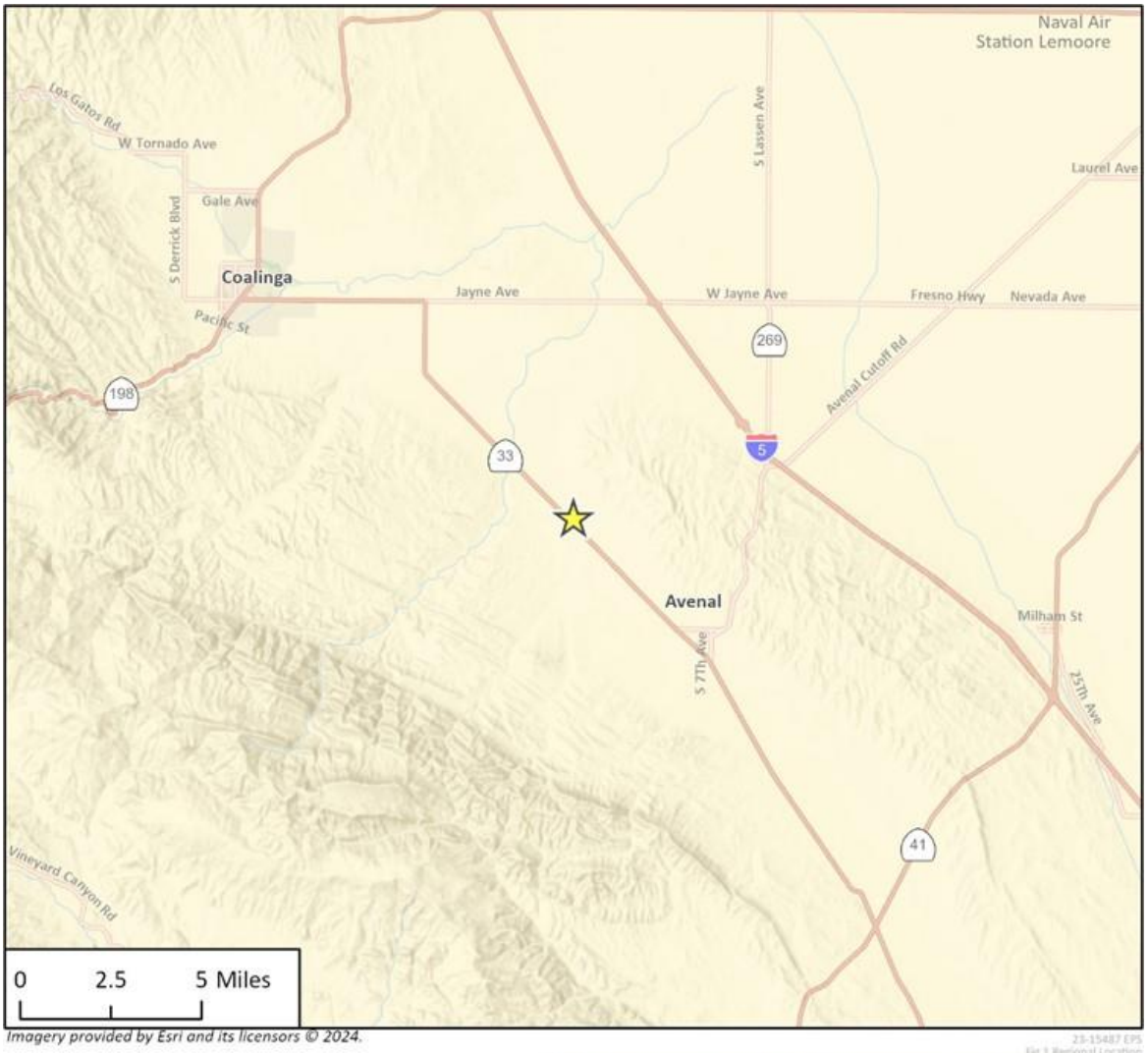
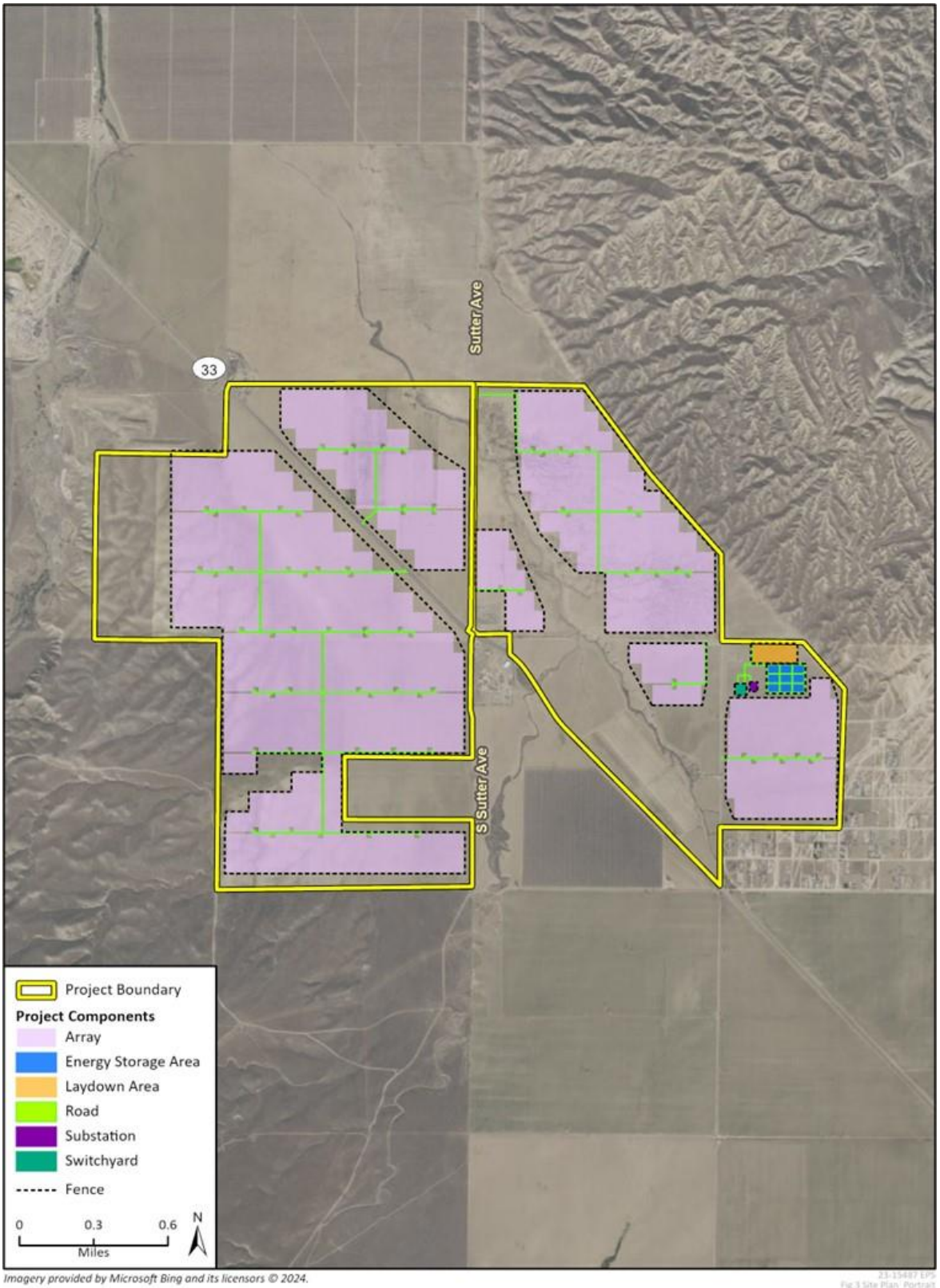


Figure 2 Project Site Plan



Project Description

The proposed project involves the construction and operation of a utility- scale 300-megawatt (MW) solar project, including a battery energy storage system (ESS), a substation, a Pacific Gas & Electric (PG&E) Switching Station and two prefabricated structures which would be used for maintenance and operation service and control services. The energy storage facility would consist of batteries with the potential to store approximately 300 megawatts of alternating current (MWac) energy. Figure 2 shows a preliminary site plan for the project.

The proposed project could use any commercially available battery technology or similar technology; however, lithium ion, iron flow, and sodium sulfur are the three options being considered at this time. Regardless of the battery type, battery cells form the core of the energy storage system. Multiple self-contained storage system enclosures would house the batteries with buried electrical conduits. The ESS would be located on approximately 12 acres of the project site. The EES enclosure would also house required heating, ventilation, and air conditioning (HVAC) and fire protection systems.

The substation would use high voltage transformers to step up the voltage received from the collector system to 230 kV. The substation would tie into PG&E's high voltage 230 kV Switching Station via a new transmission line located directly adjacent to the Switching Station. The footprint of the on-site project substation would be approximately 1 acre, and the Switching Station would be approximately 2 acres.

The energy would be transported to and from the project substation to/from the existing PG&E Gates Substation through a proposed approximately 200-foot long gen-tie line.

Setting

Local Climate and Meteorology

The project site is located in the San Joaquin Valley Air Basin (SJVAB) and is within the jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD), which has jurisdiction over San Joaquin County. The SJVAB is approximately 250 miles long and 35 miles in width (on average) and is bordered by the Coast Range Mountains on the west, the Sierra Nevada mountains on the east, and the Tehachapi Mountains to the south. On the valley floor, the SJVAB is open only to the north, which heavily influences prevailing winds.[1]

Although marine air generally flows into the SJVAB from the San Francisco Bay Area through the Carquinez Strait (a gap in the Coast Range Mountains) and low mountain passes such as Altamont Pass and Pacheco Pass (low mountain passes in the Diablo Range), the mountain ranges restrict air movement through the SJVAB. Additionally, most of the surrounding mountains are above the normal height of summer inversion layers (1,500 to 3,000 feet). These topographic features result in weak airflow and poor dispersion of pollutants and, as a result, the SJVAB is highly susceptible to pollutant accumulation.

[1] SJVAPCD. 2015. *Guide for Assessing and Mitigating Air Quality Impacts*, March 19, 2015. https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF (accessed March 2024)

Greenhouse Gases

Gases that trap heat in the atmosphere are known as GHGs. GHGs allow sunlight to enter the atmosphere but trap a portion of the outward-bound infrared radiation that warms the air. The process is similar to the effect greenhouses have in raising the internal temperature of the structure. Both natural processes and human activities emit GHGs. The accumulation of GHGs in the atmosphere regulates the Earth's temperature, but emissions from human activities (such as fossil fuel-based electricity production and the use of motor vehicles) have elevated the concentration of GHGs in the atmosphere. Scientists agree that this accumulation of GHGs has contributed to an increase in the temperature of the Earth's atmosphere and to global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most scientists agree there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

GHGs are emitted by natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are usually by-products of fossil fuel combustion, and CH_4 results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases and SF_6.

The use of SF_6 in electric utility systems and switchgear, including circuit breakers, poses a concern because this pollutant has an extremely high GWP (one pound of SF_6 is the equivalent warming potential of approximately 24,600 pounds of CO_2).[2,3] SF_6 is inert and non-toxic, and is encapsulated in circuit breaker assemblies. SF_6 is a GHG with substantial global warming potential because of its chemical nature and long residency time within the atmosphere. However, under normal conditions, it would be completely contained in the equipment and SF_6 would only be released in the unlikely event of a failure, leak, or crack in the circuit breaker housing. New circuit breaker designs have been developed over the past several years to minimize the potential for leakage, compared to that of past designs.

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally 100 years).[4] Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a

[2] Intergovernmental Panel on Climate Change (IPCC). 2021. Climate Change 2021 The Physical Science Basis. August. https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf (accessed March 2024)

[3] A global warming potential of 23,900 was used to convert emissions to CO_2e. This value is based on the global warming potential in the USEPA Mandatory Reporting Program Regulations (40 Code of Federal Regulations Part 98, Subpart A), and deviates from the use of GWPs from the IPCC 6th Assessment Report which was used for the conversion of CH4 and N20.

[4] USEPA . 2021. Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gases. Last updated April 2021. https://www.epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases (accessed March 2024).

100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis.[5]

Emissions Inventories

Global Emissions Inventory

Worldwide anthropogenic GHG emissions totaled 47,000 million metric tons (MMT) of CO_2e in 2015, which is a 43 percent increase from 1990 GHG levels.[6] Specifically, 34,522 MMT of CO_2e of CO_2, 8,241 MMT of CO_2e of CH_4, 2,997 MMT of CO_2e of N_2O, and 1,001 MMT of CO_2e of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy production and fuel use from vehicles and buildings, which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively. Waste sources contributed three percent and international transportation sources contributed two percent. These sources account for approximately 98 percent because there was a net sink of two percent from land use change (including afforestation/reforestation and emissions removals by other land use activities).[7]

United States Emissions Inventory

Total U.S. GHG emissions were 6,558 MMT of CO_2e in 2019. Emissions decreased by 1.7 percent from 2018 to 2019. Since 1990, total U.S. emissions have increased by an average annual rate of 0.06 percent for a total increase of 1.8 percent between 1990 and 2019. The decrease from 2018 to 2019 reflects the combined influences of several long-term trends, including population changes, economic growth, energy market shifts, technological changes such as improvements in energy efficiency, and decrease carbon intensity of energy fuel choices. In 2019, the industrial and transportation end-use sectors accounted for 30 percent and 29 percent, respectively, of nationwide GHG emissions; while the commercial and residential end-use sectors accounted for 16 percent and 15 percent of nationwide GHG emissions, respectively, with electricity emissions distributed among the various sectors.[8]

California Emissions Inventory

Based on the CARB California GHG Inventory for 2000-2019, California produced 418.2 MMT of CO_2e in 2019, which is 7.2 MMT of CO_2e lower than 2018 levels. The major source of GHG emissions in California is the transportation sector, which comprises 40 percent of the State's total GHG emissions. The industrial sector is the second largest source, comprising 21 percent of the State's GHG emissions, while electric power accounts for approximately 14 percent.[9] The magnitude of California's

[5] The IPCC's (2021) Sixth Assessment Report determined that methane has a GWP of 30. However, the 2022 Climate Change Scoping Plan published by the CARB uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) Fourth Assessment Report. Therefore, this analysis utilizes the GWPs from the Fourth Assessment Report.

[6] USEPA. 2023. "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019." Last updated: January 25, 2023. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019 (accessed March 2024).

[7] IBID

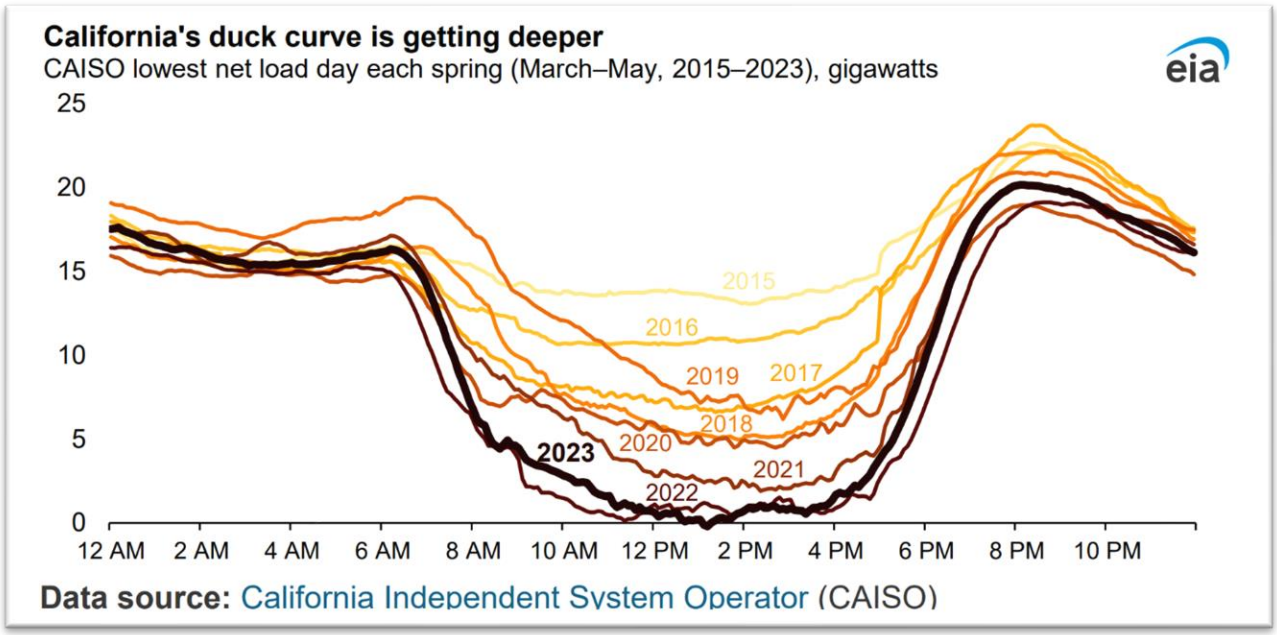
[8] USEPA. 2023c. "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act." Last updated: April 4, 2023. https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a (accessed March 2024).

[9] CARB. 2021. California Greenhouse Gas Emissions for 2000 to 2019 Trends of Emissions and Other Indicators. July 28. https://ww2.arb.ca.gov/sites/default/files/classic/cc/ca_ghg_inventory_trends_2000-2019.pdf (accessed March 2024).

total GHG emissions is due in part to its large size and large population compared to other states. However, its relatively mild climate is a factor that reduces California's per capita fuel use and GHG emissions as compared to other states. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels, as emissions fell below 431 MMT of CO_2e.[10]

California's demand for electricity is anticipated to increase 26 percent by 2030 and 76 percent by 2045.[11] This growth is a direct result of the effort to decarbonize buildings and transportation. Demand for electricity varies throughout the day with peak demand times from 8 PM to 6 AM as is demonstrated by Figure 3. California's net load demand during the off-peak demand times when solar projects, such as the proposed project, generate electricity is low. Therefore, there is an increased need for storage such as the ESS facility that is being constructed as part of the proposed project. ESS facilities store electricity from the grid during off-peak hours and release that electricity to the grid during peak demand times, thus reducing the need to ramp-up generation from non-renewable sources during peak demand hours.

Figure 3 California's Duck Curve



Methodology

This section presents the methodology used for the analysis of existing site, construction, operational, decommissioning, and displaced emissions for the proposed project. Criteria pollutant and GHG emissions for project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod) version 2022.1.22. CalEEMod is a statewide land use emissions

[10] IBID

[11] CARB. 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. November 16. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp.pdf (accessed March 2024).

computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices A, D, and E.[12] The input data and construction and operation emission estimates for the proposed project are discussed below and provided in Attachment 1. CalEEMod output files for the proposed project are included in Attachment 2.

Existing Site Emissions

The proposed project consists of mostly fallowed, idle agricultural land. The project site contains 110.41 acres of irrigated wheat fields, 10.81 acres of wild oat and Annual Brome Grasslands, 1,582.90 acres of fallow agriculture land, and 25.29 acres of access roads. CalEEMod was used to determine the current sequestration onsite from agricultural use and grasslands.[13]

Construction and Decommissioning Emissions

Construction emissions of GHGs include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips, as well as GHG emissions from water supplied to the site for dust suppression. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors.

Construction equipment was estimated to operate between two and eight hours per day, with the exception of generator sets, which were assumed to operate 24 hours per day as a conservative assumption. Construction equipment inputs in CalEEMod used default horsepower information and load factor. Construction is estimated to occur Monday through Friday from 6:00 AM to 6:00 PM. Although construction activity could occur daily over a 12-hour period, it is unlikely that diesel-powered equipment would operate for more than 8 hours in a given day of construction. Based on the project-specific Water Supply Assessment prepared by Rincon Consultants, Inc. (June 2024), project construction would require approximately 1,080 acre-feet (351,972,000 gallons) of water for dust suppression over the course of the construction period.[14] Vendor and haul trips were modeled as exclusively heavy heavy-duty truck trips. The project is anticipated to generate a maximum of 1,200 daily vehicle trips (600 round trips) between workers and deliveries of equipment during the peak phase of construction (Photovoltaic Array Installation). Soils excavated during construction are assumed to be balanced on-site. Material import would be required for construction of approximately 10.75 miles of access roads. This analysis assumes that the proposed project would comply with all applicable regulatory standards. In particular, the proposed project would comply with SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions), Rule 2201 (New and Modified Stationary Source Review Rule), and Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving

[12] California Air Pollution Control Officers Association (CAPCOA). 2022. California Emissions Estimator Model User's Guide Version 2022.1. April. https://caleemod.com/documents/user-guide/01_User%20Guide.pdf (accessed March 2024).
[13] First Carbon Solutions. 2024. Biological Resources Technical Report Cornucopia Hybrid Project. County of Fresno, California.
[14] Rincon Consultants, Inc. 2024. Cornucopia Hybrid Project Water Supply Assessment. June 2024.

Activities). Detailed Assumptions are included in Attachment 1 for construction schedule and equipment usage.

At the end of the useful life of the proposed project (anticipated as 35 years), the proposed project shall be decommissioned. Decommissioning and site restoration would consist of the removal of all above and below ground structures and the restoration of topsoil, where applicable. Because decommissioning is a minimum of 35 years from the beginning of operations, the exact nature of the decommissioning activities and the equipment used is unknown. However, based on equipment, hauling, and labor estimates found in the Project's Reclamation Plan, decommissioning emissions were quantified using CalEEMod. CalEEMod does not include emission factors for years beyond 2050; therefore, it was assumed that decommissioning would occur over 12 months in 2050. Due to the increasing efficiency of vehicles, it is anticipated that the actual deconstruction activities would result in less emissions than are projected in this analysis.

Operational Emissions

In CalEEMod, operational sources of criteria pollutant and GHG emissions include area, energy, and mobile sources. The first full year of operation was assumed to be 2030. The ESS facility was modeled as 95,000 square feet of refrigerated warehouses to account for the energy and refrigerant requirements for maintaining a stable temperature for optimum battery effectiveness, although this energy consumption is anticipated to be offset by the power generated at the site.

CalEEMod defaults were conservatively used to estimate emissions from annual architectural coating and consumer products use for the site. The project would not involve the consumption of natural gas. The solar portion of the project would not involve consumption of electricity from the grid during operation. On-site electrical needs from the solar portion of the project would be offset by the proposed project and no connection to the grid for operational use is necessary. As a conservative estimate of electrical emissions, the ESS facility is anticipated to be charged from the grid. The 300 MW system would be charged once per day during off-peak hours. The system is estimated to draw 438,000 MWh per year.[15]

Based on the project-specific Water Supply Assessment prepared by Rincon Consultants, Inc., project operation is estimated to require approximately 30.97 acre-feet (10,091,604 gallons) per year.[16]

During operations and maintenance, one of the sources of GHG emissions would come from sheep deployed onsite for vegetation management. CH_4 is produced as part of normal digestive processes in animals, particularly ruminant animals such as sheep. This digestive process, referred to as enteric fermentation, produces CH_4 as a byproduct, which can be exhaled or eructated by the animal. The amount of CH_4 produced and emitted by an individual animal depends primarily upon the animal's digestive system, and the amount and type of feed it consumes.[17] A 2023 study on prediction of enteric CH_4 published in the Journal of Cleaner Production indicated that an adult sheep emits, on average, approximately 19.7 grams per day of CH_4.[18] Vegetation management during project operation would require deployment of approximately 2,000 sheep to the site. Although grazing seasons would vary

[15] The 300 MW system is anticipated to be charged one time per day. For calculating kWhs, an average of 1,200 MWh per day was used. 1,200 MWh x 365 = 438,000 MWh/year.

[16] Rincon Consultants, Inc. 2024. Cornucopia Hybrid Project Water Supply Assessment June 2024.

[17] USEPA. 2023. "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019." Last updated: January 25, 2023. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019 (accessed March 2024).

[18] Belanche, et.al. Prediction of Enteric Methane Emissions by Sheep using an Intercontinental Database. January 2023. Journal of Cleaner Production, vol. 184. https://www.sciencedirect.com/science/article/pii/S0959652622050971#bib13 (accessed May 2024).

based on weather conditions and precipitation, it is assumed that sheep would be deployed seasonally for approximately six months from February through June of each operational year. Therefore, total enteric CH_4 emissions would be approximately 7.2 MT. The GWP of CH_4 is 30, therefore the 7.2 MT per year from enteric fermentation would result in annual emissions of approximately 216 MT CO_2e.

The proposed project would re-seed the site and establish grasslands throughout. The grasslands will act as a carbon sink and will sequester GHG emissions in both the biomass of the plant as well as storing in the soil. The sequestration from the grasslands was quantified in CalEEMod for the disturbed areas minus the acres associated with the access roads.

Another main source of GHG emissions during operations and maintenance would be refrigerants for battery cooling and fugitive emissions from equipment containing SF_6 gas installed at the proposed collector substation. The project would have six circuit breakers that contain SF_6. However, new circuit breaker designs have been developed over the past several years to minimize the potential for leakage, compared to that of past designs.[19] In addition, the equipment would comply with CARB's Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear regulations. Based on experience with similar projects, it is conservatively assumed that the proposed project would require approximately six circuit breakers containing SF_6 gas at the substation. It is estimated that the project would maintain a total of 124 pounds (lbs) of SF_6 gas at the substation. Although leakage is unlikely, for the purposes of the project's emissions inventory, it was assumed that the breakers would have a maximum annual leak rate of 0.5% in accordance with the Institute of Electrical and Electronics (IEEE).[20] Assuming SF_6 leakage would not exceed 0.5 percent annually, total maximum annual SF_6 leakage would be up to 0.62 lbs (<0.01 metric ton [MT]). The GWP of SF_6 is 24,600, therefore the 0.62 lbs per year of annual leakage would result in annual emissions of approximately 7 MT CO_2e.

It is anticipated that up to 2 workers would be required for each operation and maintenance visit (assumed to occur daily). Assuming 2.5 one-way trips per day per employee, on average the proposed project would result in an additional 5 trips per day, or 1,835 per year. Approximately 7 days per year an additional 20 workers per day would visit the site for major maintenance and inspections. Therefore, with a maximum of 22 employees on site and assuming 2.5 trips per employee, for 7 days a year the maximum number of worker trips would be 55 daily one-way trips, total of up to 2,175 trips worker trips per year.

Displaced Emissions

The proposed project is incorporating a 300 MW battery energy storage system. The ESS would be charged daily from the grid during times of low demand when the solar generation is highest. The ESS would be discharged during peak demand hours to limit the need to increase production of electricity from non-renewable sources in order to meet peak demand. The ESS system is anticipated to be both charged and discharged daily. Because the ESS system will directly eliminate the need for non-renewable generation of energy, the annual throughput of the ESS system would count as displaced emissions. GHG emissions offsets from the operation of the ESS system were quantified outside of CalEEMod and the quantifications are provided in Attachment 1.

[19] CARB. 2020. 2020 SF_6 Initial Statement Of Reasons: Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear. July 2020. https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/sf6/isor.pdf (accessed March 2024).

[20] Institute of Electrical and Electronics Engineers (IEEE). 2018. PC37.122 – Standard for High Voltage Gas Insulated Substations Rated Above 52 kV. March 8, 2018. https://standards.ieee.org/project/C37_122.html (accessed March 2024).

Results

Existing Sequestration

The project site is currently fallow agricultural land with some active agriculture, active grasslands, and the remaining site is access roads. Based on 110.41 acres of irrigated wheat fields, 10.81 acres of wild oat and Annual Brome Grasslands, 1,582.90 acres of fallow agriculture land, the site currently sequesters approximately 1,314 MT CO_2e annually. Over the course of the 35-year project, that would result in the sequestration of approximately 45,990 MT CO_2e sequestered if the site remained as it currently is.

Construction and Decommissioning Emissions

Project-related construction and decommissioning emissions are confined to a relatively short period in relation to the overall life of the proposed project. Table 1 shows that project construction would result in a total of approximately 6,792 MT CO_2e for the 39-month construction period. Decommissioning would result in a total of approximately 1,678 MT CO_2e. However, this assumption is conservative as it is likely additional carbon neutral technologies for construction equipment used in decommissioning will be implemented within the project lifespan.

Table 1 Estimated Construction GHG Emissions

Source	Project Emissions (MT CO_2e)
Total Construction[1]	6,792
Total Decommissioning	1,678
Total Construction and Decommissioning Emissions	**8,470**

[1]In order to quantify emissions from water supplied to the site for dust suppression, construction water consumption was input in CalEEMod as an operational use, then added to the total reported construction emissions.
MT = metric tons
CO_2e = carbon dioxide equivalents
Source: Attachment 2. See also Methodology, for a description of modeling assumptions.

Operational Emissions

The proposed project would generate GHG emissions during operation from minimal area source, energy consumption, and mobile emissions.[21] As shown in Table 2, the proposed project would generate approximately 639 MT of CO_2e per year from operation of the solar facility, gen-tie, substation, and ESS for total project lifetime operational emissions of 22,365 MT CO_2e before accounting for sequestration from grasslands. Accounting for the sequestration from the re-seeding of the site with grasslands results in a reduction of 2,390 MT CO_2e annually or 83,650 over the lifetime of the project. Overall, project operational GHG emissions would result in a net reduction in GHG emissions of 1,751 MT CO_2e annually or 61,285 MT CO_2e over the life of the project.

[21] Area sources for this project refer to consumer products (such as aerosol cleaners), and architectural coating (maintenance re-coating activities for battery storage).

Table 2 Estimated Operational GHG Emissions

Source	Project Emissions MT CO_2e
Mobile	60
Area	1
Energy	117
Water	17
Refrigerant	221
SF_6	7
Enteric CH_4 (Sheep Grazing)	216
Operational Emissions (annual)	**639**
Grassland sequestration (annual)	(2,390)
Project Total (annual)	**(1,751)**
Operational Emissions (35-year total)	**22,365**
Grassland sequestration (35-year total)	(83,650)
Project Total (35-year total)	**(61,285)**

Note: Parenthetical notation represents negative numbers.
SF_6 = Sulphur hexafluoride; MT = Metric Tons; CO_2e = carbon dioxide equivalent
Source: Attachment 1 and 2. See also Methodology, for a description of modeling assumptions.

Total Project Emissions

As detailed above in Table 1 and Table 2, the proposed project would generate GHG emissions during construction, operation, and decommissioning activities. Construction activities would result in the generation of 6,792 MT CO_2e, operations 22,365 MT CO_2e, and decommissioning 1,678 MT CO_2e over the 35-year life of the project. Total, the project would result in a combined project emissions of 30,835 MT CO_2e, as shown on Table 3.

Taking into account the removal and replacement of vegetation on the project site, the project would remove an estimated 45,990 MT CO_2e of potential sequestration from existing land uses by removal of existing vegetation. However, the project site would be re-seeded with grasslands resulting in sequestration of approximately 2,390 MT CO_2e per year or 83,650 MT CO_2e over the 35-year lifetime of the project (see Table 2).

As summarized in Table 3, the proposed project would emit 30,835 MT CO_2e over the life-time of the project and would remove 45,990 MT CO_2e of potential sequestration from existing land uses. Nonetheless, the proposed project would offset GHG emissions by both replacing grasslands as well as replacing electricity from fossil-fueled power plants with renewable sources. The ESS facility would directly offset 90,272 MT CO_2e annually or 3,159,511 MT CO_2e over the 35-year project life (see Attachment 1). Therefore, the net generation of GHG emissions would be an estimated -3,166,366 MT CO_2e. As such, the project would be consistent with SB 149's requirement for no net additional GHG Emissions.

Table 3 Estimated Project GHG Emissions over 35-year Project Lifetime

Source	Project Emissions MT CO_2e
Construction	6,792
Operation	22,365
Decommissioning	1,678
Combined Project Emissions	**30,835**
Removed Sequestration	45,990
Grassland Sequestration	(83,650)
Displaced Emissions	(3,159,511)
Net Total	**(3,166,366)**

Note: Parenthetical notation represents negative numbers.
SF_6 = Sulphur hexafluoride; MT = Metric Tons; CO_2e = carbon dioxide equivalent
Source: Attachment 1 and 2. See also Methodology, for a description of modeling assumptions.

Conclusion

The proposed project would emit a total of 30,835 MT CO_2e over the 35 years of anticipated project operation. The removal of existing vegetation would eliminate 45,990 MT CO_2e of potential sequestration over the lifetime of the project. The re-establishment of grasslands on the site would result in sequestration of 83,650 MT CO_2e over 35-years and the operation of the ESS facility implemented as a part of the proposed project would offset 3,159,511 MTCO_2e over the 35 years of project operation. Therefore, overall, the proposed project would result in a net reduction of 3,166,366 MT CO_2e over the lifetime of the project. The proposed project would offset the entire 35-years' worth of project construction and operational emissions in less than 1 year of ESS operation. The proposed project would not result in any net additional emissions of GHGs.

Sincerely,
Rincon Consultants, Inc.

Heather M. Dubois
Senior Air Quality Specialist

Attachments

Attachment 1 Assumptions and Calculations
Attachment 2 California Emissions Estimator Model Output

Attachment 1

Analysis Assumptions and Calculations

Cornucopia Hybrid Solar Project
General Assumptions

CalEEMod Inputs that are not modeling defaults:

Project Location	County	Fresno
	City	Uninc.
Address	36.040°/-120.2138°	
Climate Zone	Default	
Air District	SJVAPCD	
Urbanization	Rural	
Operational Year (Buildout)	2029	
Construction Start	Jan-26	
Utility Company	PG&E	

Project Land Use

	Land Use Subtype	Size	Unit	BSF	Total Size		Acres
Solar PV Facility	Other Non-Asphalt	1593	AC				1593
BESS*	Refrigerated Warehouse*	12	AC	50,000**			
Substation	General Light Industry	0.78	AC	1,770			
Gen-tie line**	Other Non-Asphalt	140	linear feet		2,800	sf	
Switchyard	General Light Industry	1.43	AC				
Access Road**	Other Non-Asphalt	56760	linear feet		1,135,200	sf	
			(10.75 mi)				1,618

*Refrigerated warehouse used as proxy for BESS. Building square footage based on similar sized BESS project (400 MW).

**Assumes 20 ft width for linear uses

Cornucopia Hybrid Solar Project
Construction Assumptions

Construction Activities: 31-Months

Project Schedule: ***Source: Client Provided Data needs*** 6:00 AM to 6:00 PM

Project Component	Construction Phase	Start Date	End Date	Days/Week	Duration (Months
Solar PV Facility	Site Preparation/Grading	*1/1/2026*	*1/31/2026*	5	1
	PV System Installation	*2/1/2026*	*1/31/2027*	5	12
	Substation/Gen-Tie/Switchyard	*2/1/2027*	*8/30/2027*	5	6
BESS	Site Preparation/Grading	*9/1/2027*	*9/30/2027*	5	1
	ESS System Installation	*10/1/2027*	*8/30/2028*	5	11
Access Road	Access Road	*1/1/2026*	*8/30/2027*	5	19

Cut and Fill	Grading	Balanced	Miles	Total (CY)	
	Access Roads	Assumes 1,000 CY per mile.	10.75	10,750	
	Source	EPA gravel road manual: https://www.epa.gov/sites/default/files/2015-10/documents/2003_07_24_nps_gravelro			

Offroad Equipment

Note See Construction Equipment Tab

Trips and VMT From Data Requests

CalEEMod defaults, except for "PV Array" phase. Assumes maximum of 1200 one-way worker trips during PV Array (Grading) Phase

Water for Dust Suppression

1,080 AF

351,972,000 Gallons

Source Cornucopia Hybrid Project Water Supply Assessment prepared by Rincon Consultants (June 2024)

Cornucopia Hybrid Solar Project
Operational Emissions

Operational Schedule: Assumes daily O&M and one major maintenance per year.

O&M	365	*days per year*	2	workers per day	730	workers per year
Major Maintenance/inspection	*7*	*days per year*	20	workers per day	140	workers per year
Total	*365*	*days per year*	*22*	workers per day	*870*	workers per year

Vehicle Trips: estimated each with own crew truck. MDV assumed for all trips

Phase	# Workers	Vehicles/employee	# Vehicles	# 1-way trip	VMT/trip	Daily VMT	Trips/year	
O&M	2	1	2	5	20	100	7300	146000
Major Maintenance/inspection	20	1	20	50	20	1000	140	2800
Total				55		1100	**7440**	**148800**

*Assumes 2.5 trips per employee per day.

Area Sources

Not Applicable

Hearths:

ads ***Consumer Products:*** Default

Architectural Coating: Default

Landscape Equipment: Default

Energy Use Source:

Electricity Default Electrical

Natural Gas & Propane There is no natural gas or propane for the project

Cornucopia Hybrid Solar Project
Operational Emissions

Water/Wastewater	30.97	acre-feet per year
Water:	10,091,604	gallons per year
	Source	Cornucopia Hybrid Project Water Supply Assessment prepared by Rincon Consultants (June 2024)
Wastewater:	Default	
Solid Waste	0	tons/year
SF6		
	6	circuit breakers
	124	lbs/project
	20.67	lbs/circuit breaker

Phase Name	Type	Equipment Type	No. per Day (Imerys)	No. per Day (Cornucopia)	Fuel Type	Engine Tier	Hours Per Day	Horsepow	Load Factor	Notes:	Based on Imerys Solar project assumptions (9,500 acres PV).
Grading	Grading	Graders	2	1	Diesel	Average	8	148	0.41		Conservatively scaled down by 50%.
Grading	Grading	Excavators	1	1	Diesel	Average	8	36	0.38		Decimals rounded up to the nearest whole number.
Grading	Grading	Tractors/Loaders/Backhoes	3	2	Diesel	Average	8	84	0.37		
Grading	Grading	Scrapers	0	0	Diesel	Average	8	423	0.48		
Grading	Grading	Rubber Tired Dozers	1	1	Diesel	Average	8	367	0.4		
Grading	Grading	Bore/Drill Rigs	3	2	Diesel	Average	8	83	0.5		
Grading	Grading	Air Compressors	2	1	Diesel	Average	8	37	0.48		
Grading	Grading	Crawler Tractors	2	1	Diesel	Average	8	87	0.43		
Grading	Grading	Dumpers/Tenders	2	1	Diesel	Average	8	16	0.38		
Grading	Grading	Generator Sets	1	1	Diesel	Average	8	14	0.74		
Grading	Grading	Trenchers	1	1	Diesel	Average	8	40	0.5		
Grading	Grading	Other Construction Equipment	1	1	Diesel	Average	8	49	0.42		
			Total	10							

Phase Name		Equipment Type	No. per Day (Imerys)	No. per Day (Cornucopia)	Fuel Type	Engine Tier	Hours Per Day	Horsepow	Load Factor	Notes:	Forty pieces total. Adapted from Imerys Solar project assumptions (9,500 acres PV).
Solar Array Installation	Grading	Forklifts	8	8	Diesel	Average	8	82	0.2		
Solar Array Installation	Grading	Generator Sets	1	1	Diesel	Average	8	14	0.74		
Solar Array Installation	Grading	Cranes	1	1	Diesel	Average	7		0.29		
Solar Array Installation	Grading	Welders	0	0	Diesel	Average	8		0.45		
Solar Array Installation	Grading	Tractors/Loaders/Backhoes	2	2	Diesel	Average	7		0.37		
Solar Array Installation	Grading	Bore/Drill Rigs	3	3	Diesel	Average	8	1,618	0.5		
Solar Array Installation	Grading	Cement and Mortar Mixers	1	1	Diesel	Average	8	10	0.56		
Solar Array Installation	Grading	Air Compressors	2	2	Diesel	Average	8	37	0.48		
Solar Array Installation	Grading	Dumpers/Tenders	4	4	Diesel	Average	8	16	0.38		
Solar Array Installation	Grading	Off-Highway Tractors	4	4	Diesel	Average	8	38	0.44		
Solar Array Installation	Grading	Rough Terrain Forklifts	2	2	Diesel	Average	8	96	0.4		
Solar Array Installation	Grading	Trenchers	1	1	Diesel	Average	8	40	0.5		
Solar Array Installation	Grading	Other Construction Equipment	3	3	Diesel	Average	8	49	0.42		
			Total	32							

Phase Name		Equipment Type	No. per Day (Dos Palm	No. per Day (Cornucopia)	Fuel Type	Engine Tier	Hours Per Day	Horsepow	Load Factor	Notes:	Six pieces total. Adapted from Dos Palmas BESS project assumptions.
Substation/Gen Tie	BC I	Forklifts	2	1	Diesel	Average	6	82	0.2		
Substation/Gen Tie	BC I	Generator Sets	4	1	Diesel	Average	24	14	0.74		
Substation/Gen Tie	BC I	Cranes	2	0	Diesel	Average	6	367	0.29		
Substation/Gen Tie	BC I	Welders	0	0	Diesel	Average	8	46	0.45		
Substation/Gen Tie	BC I	Tractors/Loaders/Backhoes	5	1	Diesel	Average	6	84	0.37		
Substation/Gen Tie	BC I	Plate Compactors	2	0	Diesel	Average	6	8	0.43		
Substation/Gen Tie	BC I	Air Compressors	4	1	Diesel	Average	8	37	0.48		
Substation/Gen Tie	BC I	Excavators	2	1	Diesel	Average	6	36	0.38		
Substation/Gen Tie	BC I	Graders	1	1	Diesel	Average	8	148	0.41		
Substation/Gen Tie	BC I	Rollers	2	0	Diesel	Average	6	36	0.38		
		Total		6							

Phase Name		Equipment Type	No. per Day (Dos Palm	No. per Day (Cornucopia)	Fuel Type	Engine Tier	Hours Per Day	Horsepow	Load Factor	Notes:	Three pieces total for switchyard. Adapted from Dos Palmas BESS project assumptions.
Switchyard	BC III	Forklifts	2	1	Diesel	Average	6	82	0.2		
Switchyard	BC III	Generator Sets	4	0	Diesel	Average	24	14	0.74		
Switchyard	BC III	Cranes	2	0	Diesel	Average	6	367	0.29		
Switchyard	BC III	Welders	0	0	Diesel	Average	8	46	0.45		
Switchyard	BC III	Tractors/Loaders/Backhoes	5	1	Diesel	Average	6	84	0.37		
Switchyard	BC III	Plate Compactors	2	0	Diesel	Average	6	8	0.43		
Switchyard	BC III	Air Compressors	4	1	Diesel	Average	8	37	0.48		
Switchyard	BC III	Excavators	2	0	Diesel	Average	6	36	0.38		
Switchyard	BC III	Graders	1	0	Diesel	Average	8	148	0.41		
Switchyard	BC III	Rollers	2	0	Diesel	Average	6	36	0.38		
		Total		3							

Phase Name		Equipment Type	No. per Day (Dos Palm	No. per Day (Cornucopia)	Fuel Type	Engine Tier	Hours Per Day	Horsepow	Load Factor	Notes:	Six pieces total. Adapted from Dos Palmas
BESS	BC II	Forklifts	2	1	Diesel	Average	4	82	0.2		
BESS	BC II	Generator Sets	4	1	Diesel	Average	24	14	0.74		
BESS	BC II	Cranes	2	1	Diesel	Average	6	367	0.29		
BESS	BC II	Welders	0	0	Diesel	Average	8	46	0.45		
BESS	BC II	Tractors/Loaders/Backhoes	6	1	Diesel	Average	6	84	0.37		
BESS	BC II	Plate Compactors	2	0	Diesel	Average	4	8	0.43		
BESS	BC II	Air Compressors	4	1	Diesel	Average	6	37	0.48		
BESS	BC II	Excavators	2	0	Diesel	Average	2	36	0.38		
BESS	BC II	Rollers	2	1	Diesel	Average	2	36	0.38		
			Total	6							

Phase Name		Equipment Type	No. per Day	No. per Day (Cornucopia)	Fuel Type	Engine Tier	Hours Per Day	Horsepow	Load Factor	Notes:	CalEEMod Defaults for Grading phase type. Gravel road.
Access Roads	Grading	Excavators	N/A	2	Diesel	Average	8	36	0.38		
Access Roads	Grading	Graders	N/A	1	Diesel	Average	8	148	0.41		
Access Roads	Grading	Rubber Tired Dozers	N/A	1	Diesel	Average	8	367	0.4		
Access Roads	Grading	Scrapers	N/A	2	Diesel	Average	8	423	0.48		
Access Roads	Grading	Tractors/Loaders/Backhoes	N/A	2	Diesel	Average	8	84	0.37		
			Total	8							

Original Construction Schedule

Project Component	Construction Phase	Start Date	End Date	Days/Week	Duration (Months)	Modeled As	Notes
Solar PV Facility	Site Preparation/Grading	*1/1/2026*	*1/31/2026*	5	1	Grading	Based on Imerys
	PV System Installation	*2/1/2026*	*1/31/2027*	5	12	Building Construction	Based on Imerys
	Substation/Gen-Tie/Switchyard	*2/1/2027*	*8/30/2027*	5	7	Building Construction	Based on Dos Palmas
				Solar PV Total	**20**		
BESS	Site Preparation/Grading	*9/1/2027*	*9/30/2027*	5	1	Grading	Based on Dos Palmas
	ESS System Installation	*10/1/2027*	*8/30/2028*	5	11	Building Construction	Based on Dos Palmas
				BESS Total	**12**		
Access Road	Access Road	*1/1/2026*	*8/30/2027*	5	20	Grading	CalEEMod Default equipment. Phase assumed to overlap with PV facility construction
				Access Road Total	**20**		

REVISED Construction Schedule

Project Component	Construction Phase	Start Date	End Date	Days/Week	Duration (Months)	Modeled As	Equipment Notes
Solar PV Facility	Site Preparation/Grading	*10/1/2026*	*10/31/2026*	5	1	Grading	Based on Imerys
	PV System Installation	*11/1/2026*	***12/31/2029***	5	38	Building Construction	Based on Imerys
	Substation/Gen-Tie	*1/1/2027*	***12/31/2027***	5	12	Building Construction	Based on Dos Palmas
	Switchyard	*1/1/2027*	***3/31/2028***	5	15	Building Construction	
				Solar PV Total	**18**		
BESS	ESS System Installation	*11/1/2027*	***12/31/2029***	5	26	Building Construction	1,618
				BESS Total	**26**		
Access Road	Access Road	*11/1/2027*	***12/31/2029***	5	26	Grading	CalEEMod Default equipment.
				Access Road Total	**26**		

Original Construction Schedule

Overall Construction Schedule (start and completion date for entire project)	**First quarter of 2026**	**Third quarter of 2028**
Solar PV Facility	**First quarter of 2026**	**Third Quarter of 2027**
BESS	**Third quarter of 2027**	**Third quarter of 2028**
Project Substation	**First Quarter of 2026**	**Third Quarter of 2027**
Gen-tie Line	**First quarter of 2026**	**Third Quarter of 2027**
Utility Switchyard	**First quarter of 2026**	**Third Quarter of 2027**
Access Road	**First quarter of 2026**	**Third Quarter of 2027**

REVISED Construction Schedule

Overall Construction Schedule (start and completion date for entire project) Total of 55 pieces	**Fourth quarter 2026**	**Fourth quarter of 2029**
Solar PV Facility (Forty Pieces)	**Fourth quarter 2026**	**Fourth quarter of 2029**
BESS (Six Pieces)	**Third quarter of 2027**	**First quarter of 2029**
Project Substation (Three Pieces)	**First quarter of 2027**	**Fourth quarter of 2027**
Gen-tie Line (Three Pieces)	**First quarter of 2027**	**Fourth quarter of 2027**
Utility Switchyard (Three pieces)	**First quarter of 2027**	**First quarter of 2028**
Access Road (Included in Solar PV)	**Fourth quarter of 2026**	**Fourth quarter of 2029**

Cornucopia Hybrid Solar Project
Sheep Grazing Methane Emissions Quantifications

Sheep Grazing Enteric Fermentation Methane Emissions Quantification

2000	Quantity of Sheep
19.7	*Mean Methane Production per sheep (g/day) (1)*
39400	*Total Methane Production (g/day)*
0.039	*Total Methane Production(MT/day)*
182.5	*Days of Grazing per Year (2)*
7.1905	*Total Methane Production (MT/year)*
30	*GWP*
216	*Max MT CO_2 e/year*

1 Belanche, et.al. *Prediction of Enteric Methane Emissions by Sheep using an Intercontinental Database.* January 2023. Journal of Cleaner Production, vol. 184. https://www.sciencedirect.com/science/article/pii/S0959652622050971#bib13

2 Assumes active grazing from February to July (6 months)

Cornucopia Hybrid Solar Project
SF_6 Emissions Quantifications

SF_6 Emissions Quantification

6	HV circuit breakers (500 kV equipment)1
21	*SF_6 max lbs/per circuit breaker* [1]
0.50%	*SF_6 leakage percentage per year* [2]
124	*max lbs/project*
0.62	*SF_6 max lbs leakage per year*
0.000454	*lbs/MT*
0.000281	*SF_6 max MT leakage per year*
24,600	*GWP*
7	*Max MT CO_2 e/year*

1 Based on Dos Palmas BESS

2 IEEE (Institute of Electrical and Electronics Engineers). 2018. PC37.122 – Standard for High Voltage GasInsulated Substations Rated Above 52 kV. March 8, 2018. https://standards.ieee.org/project/C37_122.html

Decommissioning Assumptions

Construction Activities: 12-Months

Project Schedule: ***Source: Reclamation Plan***

Project Component	Construction Phase	Start Date*	End Date*	Days/Week	Duration (Months)
Demo, Decommissioning, and Site Restoration	Building Construction	*1/1/2050*	*12/31/2050*	5	12

Notes: With project completion anticipated in 2029, assumed decommissioning year would be 2064. However, CalEEMod does not include emission factors beyond 2050. Therefore, Construction is assumed to occur in 2050. Emission factors would be lower in future years, so this represnts a conservative scenario.

See Reclamation Plan Appendices; p. 21/24

Demolition - Material Hauling

Material	Total (Tons) Weight
Solar Panel Racking Vert	451
Solar Panel Racking Horiz	33,983
Solar Inverters	1,191
Solar Panel Above Ground Wire	179
Solar Panel Below Ground Wire	179
Battery Units	362
Battery Inverters	1,138
Perimeter Fencing	134
Gravel roads	21,368
Total	**58,983**

Source: Reclamation Plan Appendix B: Cost Estimate

Offroad Equipment

6	Forklift
1	Crane
4	Loader
2	Backhoe
3	Excavator
1	Dozer
6	Trencher Chain
13	Vibratory Hydraulic Extractor

Source: Reclamation Plan Appendix B: Cost Estimate

Trips and VMT

176	Workers
352	One-Way Trips

Source: Reclamation Plan Appendix B: Cost Estimate

Displaced Energy Production during 35-year Project life

Annual Energy Production		Annual Average Solar Radiation Hours/Day/Year
Grid Size (MW)	300	
Total hrs/year		
% Operational time [1]		
Operational hours/year		
KWh produced per year	438,000,000	
Assumed Heat Rate (Btu/KWh)	10,000	
Annual Fuel Equivalent (MMBtu)[2]	4,380,000	

Notes:

The BESS is 300MW of storage and it stores for 4 hours, making the system capable of 1,200 MWh per day. 365 x 1,200MWh x 1,000kWh/MWh = 438,000,000kWh/year for the maximum potential

#NAME?

CA Power Mix[3]		Annual Fuel Displacement (MMBtu)
Coal[4]	2.15%	94,170
Large Hydro	9.24%	404,712
Natural Gas[4]	36.38%	1,593,444
Nuclear	9.18%	402,084
Oil	0.00%	0
Other (petroleum coke/waste heat)	0.11%	4,818
Renewables	35.83%	1,569,354
Unspecified sources of Power	7.11%	311,418
Total	**100.0%**	**4,380,000**

Annual Pollutant Displacement[4]

Natural Gas Turbine Emissions

Pollutant	AP-42 Emission Factor (lb/MMBtu)[5]	Controlled Emission Factor (lb/MMBtu)	Controlled Emissions (lb)	Controlled Emissions (ton)	AP-42 Emission Factor Source Notes[5]
NO_2	0.099	0.099	157,751	78.88	Table 3.1-1, lean premix; Assume SCR Control Efficiency
CO	0.015	0.015	23,902	11.95	Table 3.1-1, lean premix; Assume Ox. Cat. Control Efficiency
PM_{10}	0.0047	0.0047	7,489	3.74	Table 3.1-2a, PM (condensible)
$PM_{2.5}$	0.0019	0.0019	3,028	1.51	Table 3.1-2a, PM (filterable)
SO_2	0.0034	0.0034	5,418	2.71	Table 3.1-2a
CO_2	110	110	175,278,840	87,639.42	Table 3.1-2a

Coal Combustion Emissions

Pollutant	AP-42 Emission Factor (lb/ton)[6]	Controlled Emission Factor (lb/ton)	Emissions (lb)[7]	Emissions (ton)	AP-42 Emission Factor Source Notes[6]
NOx	12	12	47085	23.54	Table 1.1-3 pulverized coal, wall fired, bituminous coal NSPS
CO	0.5	0.5	1962	0.98	Table 1.1-3 pulverized coal, wall fired, bituminous coal NSPS
PM_{10}[8]	0.46	0.084	330	0.16	Table 1.1-4, PC-fired dry bottom wall-fired, scrubber control
$PM_{2.5}$[8]	0.12	0.06	235	0.12	Table 1.1-4, PC-fired dry bottom wall-fired, scrubber control
SO_2[9]	2.85	0.57	2237	1.12	Table 1.1-3 pulverized coal, wall fired, bituminous coal NSPS
CO_2	6040	6040	23699450	11,849.73	Table 1.1-20
Total NMHC	0.06	0.06	235	0.12	Table 1.1-19; assumed all hydrocarbons are reactive
CH_4	0.04	0.04	157	0.08	Table 1.1-19
N_2O	0.03	0.03	118	0.06	Table 1.1-19

Total Displaced Emissions Associated With Direct Combustion

Pollutant	tons/year[8]	tons/lifetime (35 years)
ROG (NMHC)	0	4
NO_X	102	3,585
CO	13	453
PM_{10}	4	137
$PM_{2.5}$	2	57
SO_X	4	134
CO_2E (Metric Ton)	90,272	3,159,511

Notes:

1. Operational time is based on annual average solar radiation hours per day per year (5.38) for the project area. Source: solardirect.com (https://www.solardirect.com/archives/pv/systems/gts/gts-sizing-sun-hours.html)
2. The Project is assumed to displace existing power generation equivalent to the current power mix each year of operation.
3. CA Power Mix assumptions are based on data from the 2022 Total System Electric Generatin Table. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation
4. Combustion of natural gas and coal for power are of the greatest concern related to the generation of criteria pollutants and GHG emissions, therefore only fuel displacement of natural gas and coal due to electricty production from the Solar Scarlet facility are considered in this assessment.
5. EPA Air Pollution Emission Factors AP-42 Section 3.1, Stationary Gas Turbines
6. EPA Air Pollution Emission Factors AP-42 Section 1.1, Bituminous and Subbituminous Coal Combustion
7. Coal characteristics used for conversion: Assumed coal heat content = 24 MMBtu/ton
8. Total particulate matter (CPM-TOT) is expressed in terms of coal ash content therefore emission factor is determined by multiplying % ash content of coal (assumed to be 20% herein) by value listed in Table 1.1-4. Organic fraction of particulate matter is 20% of total CPM-TOT (Table 1.1-5) and listed as controlled emission factor.
9. SO_x emission factor calculated by multiplying the weight percent of sulfur (assumed to be 7.5%) by the value listed in Table 1.1-3
10. CO_2E volumes are in metric tons rather than short (US) tons

Attachment 2

California Emissions Estimator Model Output

Cornucopia Hybrid v8 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Cornucopia Hybrid v8
Construction Start Date	1/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	16.8
Location	36.04973174671923, -120.19815765059295
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2506
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.26

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Other Non-Asphalt Surfaces	1,618	Acre	1,618	0.00	0.00	0.00	—	PV Array, gen-tie line, and access roads.
General Light Industry	1.77	1000sqft	2.21	1,770	0.00	—	—	Substation and switchyard
Refrigerated Warehouse-No Rail	50.0	1000sqft	12.0	50,000	0.00	—	—	BESS

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.6	11.0	63.0	114	0.15	2.22	1,100	1,103	2.04	111	113	—	22,314	22,314	0.81	0.45	20.7	22,489
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.1	12.1	76.8	123	0.17	2.78	1,116	1,118	2.56	113	115	—	23,934	23,934	0.97	0.53	0.61	24,118
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.81	7.62	45.7	77.6	0.11	1.60	753	755	1.47	76.1	77.6	—	15,702	15,702	0.60	0.33	6.41	15,821
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.61	1.39	8.35	14.2	0.02	0.29	137	138	0.27	13.9	14.2	—	2,600	2,600	0.10	0.05	1.06	2,619

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	5.45	4.55	41.0	57.4	0.09	1.47	15.3	16.8	1.35	1.54	2.89	—	9,339	9,339	0.38	0.11	0.50	9,383
2028	12.6	11.0	63.0	114	0.15	2.22	1,100	1,103	2.04	111	113	—	22,314	22,314	0.81	0.45	20.7	22,489
2029	12.2	10.6	60.2	111	0.15	2.06	1,100	1,102	1.90	111	113	—	22,177	22,177	0.78	0.45	18.4	22,348
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.17	3.50	31.9	43.9	0.07	1.24	31.4	32.5	1.14	3.86	4.84	—	7,085	7,085	0.29	0.06	0.02	7,109
2027	14.1	12.1	76.8	123	0.17	2.78	1,116	1,118	2.56	113	115	—	23,934	23,934	0.97	0.53	0.61	24,118
2028	12.5	10.8	66.0	111	0.15	2.28	1,108	1,110	2.10	112	114	—	22,183	22,183	0.88	0.50	0.54	22,355
2029	11.7	10.1	60.8	105	0.15	2.06	1,100	1,102	1.90	111	113	—	21,428	21,428	0.86	0.48	0.48	21,592
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.70	0.59	5.26	7.02	0.01	0.21	1.81	2.03	0.20	0.22	0.42	—	1,137	1,137	0.05	0.01	0.02	1,141
2027	4.93	4.19	33.5	48.9	0.07	1.21	136	137	1.11	13.7	14.8	—	8,441	8,441	0.33	0.13	1.34	8,490
2028	8.81	7.62	45.7	77.6	0.11	1.60	753	755	1.47	76.1	77.6	—	15,702	15,702	0.60	0.33	6.41	15,821
2029	8.40	7.25	43.2	75.0	0.11	1.47	750	752	1.36	75.8	77.2	—	15,457	15,457	0.58	0.32	5.69	15,573
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.13	0.11	0.96	1.28	< 0.005	0.04	0.33	0.37	0.04	0.04	0.08	—	188	188	0.01	< 0.005	< 0.005	189
2027	0.90	0.76	6.12	8.92	0.01	0.22	24.8	25.0	0.20	2.50	2.71	—	1,397	1,397	0.06	0.02	0.22	1,406
2028	1.61	1.39	8.35	14.2	0.02	0.29	137	138	0.27	13.9	14.2	—	2,600	2,600	0.10	0.05	1.06	2,619
2029	1.53	1.32	7.88	13.7	0.02	0.27	137	137	0.25	13.8	14.1	—	2,559	2,559	0.10	0.05	0.94	2,578

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.6	12.5	0.09	3.43	< 0.005	0.01	0.28	0.29	< 0.005	0.07	0.08	45.9	1,590	1,636	4.83	0.08	1,334	3,114
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.2	12.2	0.09	0.82	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	45.9	1,547	1,593	4.83	0.08	1,333	3,071
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.4	12.3	0.09	2.00	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	45.9	1,562	1,607	4.83	0.08	1,333	3,085
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.26	2.25	0.02	0.37	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	7.59	259	266	0.80	0.01	221	511

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.08	0.07	0.07	1.18	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	—	385	385	0.01	0.01	0.94	388
Area	12.5	12.5	0.02	2.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.26	9.26	< 0.005	< 0.005	—	9.29
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	698	698	0.11	0.01	—	705
Water	—	—	—	—	—	—	—	—	—	—	—	19.3	498	518	2.06	0.06	—	586
Waste	—	—	—	—	—	—	—	—	—	—	—	26.5	0.00	26.5	2.65	0.00	—	92.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,333	1,333
Total	12.6	12.5	0.09	3.43	< 0.005	0.01	0.28	0.29	< 0.005	0.07	0.08	45.9	1,590	1,636	4.83	0.08	1,334	3,114

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.06	0.09	0.82	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	—	351	351	0.01	0.01	0.02	354
Area	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	698	698	0.11	0.01	—	705
Water	—	—	—	—	—	—	—	—	—	—	—	19.3	498	518	2.06	0.06	—	586
Waste	—	—	—	—	—	—	—	—	—	—	—	26.5	0.00	26.5	2.65	0.00	—	92.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,333	1,333
Total	12.2	12.2	0.09	0.82	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	45.9	1,547	1,593	4.83	0.08	1,333	3,071
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.06	0.08	0.89	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	—	361	361	0.01	0.01	0.41	364
Area	12.3	12.3	0.01	1.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.57	4.57	< 0.005	< 0.005	—	4.58
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	698	698	0.11	0.01	—	705
Water	—	—	—	—	—	—	—	—	—	—	—	19.3	498	518	2.06	0.06	—	586
Waste	—	—	—	—	—	—	—	—	—	—	—	26.5	0.00	26.5	2.65	0.00	—	92.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,333	1,333
Total	12.4	12.3	0.09	2.00	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	45.9	1,562	1,607	4.83	0.08	1,333	3,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.16	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	59.7	59.7	< 0.005	< 0.005	0.07	60.2
Area	2.24	2.24	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.76	0.76	< 0.005	< 0.005	—	0.76
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	116	116	0.02	< 0.005	—	117
Water	—	—	—	—	—	—	—	—	—	—	—	3.20	82.5	85.7	0.34	0.01	—	97.0
Waste	—	—	—	—	—	—	—	—	—	—	—	4.39	0.00	4.39	0.44	0.00	—	15.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	221	221
Total	2.26	2.25	0.02	0.37	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	7.59	259	266	0.80	0.01	221	511

3. Construction Emissions Details

3.1. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.19	2.67	24.0	28.6	0.04	1.06	—	1.06	0.98	—	0.98	—	4,658	4,658	0.19	0.04	—	4,674
Dust From Material Movement	—	—	—	—	—	—	1.98	1.98	—	0.91	0.91	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.45	1.72	< 0.005	0.06	—	0.06	0.06	—	0.06	—	281	281	0.01	< 0.005	—	282
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.03	0.26	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	46.5	46.5	< 0.005	< 0.005	—	46.6
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.08	0.90	0.00	0.00	29.5	29.5	0.00	2.96	2.96	—	171	171	0.01	0.01	0.02	174
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	1.69	1.69	0.00	0.17	0.17	—	10.7	10.7	< 0.005	< 0.005	0.02	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.31	0.31	0.00	0.03	0.03	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. PV Array (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.17	3.50	31.9	43.9	0.07	1.24	—	1.24	1.14	—	1.14	—	7,085	7,085	0.29	0.06	—	7,109
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.81	5.24	0.01	0.15	—	0.15	0.14	—	0.14	—	846	846	0.03	0.01	—	849
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.70	0.96	< 0.005	0.03	—	0.03	0.02	—	0.02	—	140	140	0.01	< 0.005	—	141

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. PV Array (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.96	3.31	30.5	43.8	0.07	1.08	—	1.08	1.00	—	1.00	—	7,082	7,082	0.29	0.06	—	7,107
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.96	3.31	30.5	43.8	0.07	1.08	—	1.08	1.00	—	1.00	—	7,082	7,082	0.29	0.06	—	7,107
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.83	2.37	21.8	31.3	0.05	0.77	—	0.77	0.71	—	0.71	—	5,059	5,059	0.21	0.04	—	5,076
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.43	3.98	5.71	0.01	0.14	—	0.14	0.13	—	0.13	—	838	838	0.03	0.01	—	840
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. PV Array (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.22	29.6	43.9	0.07	0.99	—	0.99	0.91	—	0.91	—	7,081	7,081	0.29	0.06	—	7,105
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.22	29.6	43.9	0.07	0.99	—	0.99	0.91	—	0.91	—	7,081	7,081	0.29	0.06	—	7,105
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.75	2.31	21.2	31.4	0.05	0.71	—	0.71	0.65	—	0.65	—	5,072	5,072	0.21	0.04	—	5,089

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.87	5.73	0.01	0.13	—	0.13	0.12	—	0.12	—	840	840	0.03	0.01	—	843
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. PV Array (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.75	3.14	28.9	43.8	0.07	0.91	—	0.91	0.84	—	0.84	—	7,080	7,080	0.29	0.06	—	7,104
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.75	3.14	28.9	43.8	0.07	0.91	—	0.91	0.84	—	0.84	—	7,080	7,080	0.29	0.06	—	7,104
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.68	2.24	20.7	31.3	0.05	0.65	—	0.65	0.60	—	0.60	—	5,057	5,057	0.21	0.04	—	5,074
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.77	5.71	0.01	0.12	—	0.12	0.11	—	0.11	—	837	837	0.03	0.01	—	840
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Access Roads (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.05	3.26	0.01	0.12	—	0.12	0.11	—	0.11	—	788	788	0.03	0.01	—	790
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.56	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	130	130	0.01	< 0.005	—	131
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.20	0.05	< 0.005	< 0.005	2.18	2.19	< 0.005	0.22	0.23	—	159	159	< 0.005	0.02	0.01	166
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.25	0.25	< 0.005	0.03	0.03	—	19.0	19.0	< 0.005	< 0.005	0.02	19.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05	0.05	< 0.005	< 0.005	< 0.005	—	3.14	3.14	< 0.005	< 0.005	< 0.005	3.29

3.13. Access Roads (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.43	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.43	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.45	2.06	17.4	19.5	0.04	0.71	—	0.71	0.65	—	0.65	—	4,726	4,726	0.19	0.04	—	4,742
Dust From Material Movement	—	—	—	—	—	—	1.71	1.71	—	0.68	0.68	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.38	3.18	3.55	0.01	0.13	—	0.13	0.12	—	0.12	—	782	782	0.03	0.01	—	785
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.18	0.05	< 0.005	< 0.005	2.18	2.19	< 0.005	0.22	0.23	—	155	155	< 0.005	0.02	0.32	163

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.19	0.05	< 0.005	< 0.005	2.18	2.19	< 0.005	0.22	0.23	—	155	155	< 0.005	0.02	0.01	162
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	1.49	1.49	< 0.005	0.15	0.16	—	111	111	< 0.005	0.02	0.10	116
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.27	0.27	< 0.005	0.03	0.03	—	18.4	18.4	< 0.005	< 0.005	0.02	19.3

3.15. Access Roads (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.32	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.32	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.99	16.2	19.2	0.04	0.65	—	0.65	0.60	—	0.60	—	4,712	4,712	0.19	0.04	—	4,728
Dust From Material Movement	—	—	—	—	—	—	1.71	1.71	—	0.68	0.68	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	2.96	3.50	0.01	0.12	—	0.12	0.11	—	0.11	—	780	780	0.03	0.01	—	783
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.18	0.05	< 0.005	< 0.005	2.18	2.19	< 0.005	0.22	0.23	—	151	151	< 0.005	0.02	0.29	158
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.19	0.05	< 0.005	< 0.005	2.18	2.19	< 0.005	0.22	0.23	—	151	151	< 0.005	0.02	0.01	158
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.13	0.03	< 0.005	< 0.005	1.49	1.49	< 0.005	0.15	0.16	—	108	108	< 0.005	0.02	0.09	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.27	0.27	< 0.005	0.03	0.03	—	17.8	17.8	< 0.005	< 0.005	0.02	18.7

3.17. BC I (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.14	0.95	7.73	9.68	0.02	0.31	—	0.31	0.29	—	0.29	—	1,496	1,496	0.06	0.01	—	1,502
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	0.95	7.73	9.68	0.02	0.31	—	0.31	0.29	—	0.29	—	1,496	1,496	0.06	0.01	—	1,502
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.68	5.53	6.92	0.01	0.22	—	0.22	0.21	—	0.21	—	1,070	1,070	0.04	0.01	—	1,074
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.01	1.26	< 0.005	0.04	—	0.04	0.04	—	0.04	—	177	177	0.01	< 0.005	—	178
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	125	125	< 0.005	0.02	0.25	131
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	126	126	< 0.005	0.02	0.01	132
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.18	0.08	< 0.005	< 0.005	5.23	5.24	< 0.005	0.52	0.53	—	89.7	89.7	< 0.005	0.01	0.08	94.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.96	0.96	< 0.005	0.10	0.10	—	14.8	14.8	< 0.005	< 0.005	0.01	15.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. BC II (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.92	7.18	0.02	0.26	—	0.26	0.24	—	0.24	—	1,517	1,517	0.06	0.01	—	1,522
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.83	0.86	< 0.005	0.03	—	0.03	0.03	—	0.03	—	181	181	0.01	< 0.005	—	182
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.0	30.0	< 0.005	< 0.005	—	30.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.11	3.80	2.76	30.8	0.00	0.00	1,088	1,088	0.00	109	109	—	6,194	6,194	0.26	0.31	0.58	6,294
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	126	126	< 0.005	0.02	0.01	132
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.48	0.30	3.73	0.00	0.00	124	124	0.00	12.4	12.4	—	766	766	0.03	0.04	1.15	779
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.87	0.87	< 0.005	0.09	0.09	—	15.0	15.0	< 0.005	< 0.005	0.01	15.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.05	0.68	0.00	0.00	22.6	22.6	0.00	2.27	2.27	—	127	127	< 0.005	0.01	0.19	129
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	2.48	2.48	< 0.005	< 0.005	< 0.005	2.60
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. BC II (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.64	7.17	0.02	0.24	—	0.24	0.22	—	0.22	—	1,517	1,517	0.06	0.01	—	1,523
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.64	7.17	0.02	0.24	—	0.24	0.22	—	0.22	—	1,517	1,517	0.06	0.01	—	1,523
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.57	4.75	5.13	0.01	0.17	—	0.17	0.16	—	0.16	—	1,087	1,087	0.04	0.01	—	1,091
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.10	0.87	0.94	< 0.005	0.03	—	0.03	0.03	—	0.03	—	180	180	0.01	< 0.005	—	181

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.40	4.12	1.96	35.4	0.00	0.00	1,088	1,088	0.00	109	109	—	6,841	6,841	0.19	0.28	20.1	6,950
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	122	122	< 0.005	0.02	0.23	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.93	3.62	2.50	28.5	0.00	0.00	1,088	1,088	0.00	109	109	—	6,076	6,076	0.24	0.31	0.52	6,175
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	122	122	< 0.005	0.02	0.01	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.85	2.63	1.59	20.8	0.00	0.00	744	744	0.00	74.6	74.6	—	4,507	4,507	0.15	0.20	6.22	4,577
Vendor	0.01	0.01	0.17	0.08	< 0.005	< 0.005	5.24	5.24	< 0.005	0.53	0.53	—	87.6	87.6	< 0.005	0.01	0.07	91.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.48	0.29	3.80	0.00	0.00	136	136	0.00	13.6	13.6	—	746	746	0.03	0.03	1.03	758
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.96	0.96	< 0.005	0.10	0.10	—	14.5	14.5	< 0.005	< 0.005	0.01	15.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. BC II (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.78	6.42	7.13	0.02	0.23	—	0.23	0.21	—	0.21	—	1,517	1,517	0.06	0.01	—	1,522
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.78	6.42	7.13	0.02	0.23	—	0.23	0.21	—	0.21	—	1,517	1,517	0.06	0.01	—	1,522
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	4.59	5.10	0.01	0.16	—	0.16	0.15	—	0.15	—	1,084	1,084	0.04	0.01	—	1,087
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.84	0.93	< 0.005	0.03	—	0.03	0.03	—	0.03	—	179	179	0.01	< 0.005	—	180
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.14	3.85	1.73	33.0	0.00	0.00	1,088	1,088	0.00	109	109	—	6,714	6,714	0.16	0.28	17.9	6,820
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	119	119	< 0.005	0.02	0.21	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.71	3.40	2.27	26.7	0.00	0.00	1,088	1,088	0.00	109	109	—	5,965	5,965	0.24	0.31	0.47	6,064
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	119	119	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.45	1.42	19.3	0.00	0.00	742	742	0.00	74.4	74.4	—	4,412	4,412	0.13	0.20	5.53	4,481
Vendor	0.01	0.01	0.17	0.08	< 0.005	< 0.005	5.23	5.23	< 0.005	0.52	0.53	—	85.1	85.1	< 0.005	0.01	0.06	89.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.45	0.26	3.52	0.00	0.00	135	135	0.00	13.6	13.6	—	731	731	0.02	0.03	0.92	742
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.95	0.95	< 0.005	0.10	0.10	—	14.1	14.1	< 0.005	< 0.005	0.01	14.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. BC III (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.27	2.32	3.71	0.01	0.07	—	0.07	0.06	—	0.06	—	510	510	0.02	< 0.005	—	512

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.27	2.32	3.71	0.01	0.07	—	0.07	0.06	—	0.06	—	510	510	0.02	< 0.005	—	512
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.20	1.66	2.65	< 0.005	0.05	—	0.05	0.04	—	0.04	—	364	364	0.01	< 0.005	—	366
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.30	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	60.3	60.3	< 0.005	< 0.005	—	60.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.24	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	125	125	< 0.005	0.02	0.25	131
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	126	126	< 0.005	0.02	0.01	132
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.18	0.08	< 0.005	< 0.005	5.23	5.23	< 0.005	0.52	0.53	—	89.6	89.6	< 0.005	0.01	0.08	93.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.95	0.95	< 0.005	0.10	0.10	—	14.8	14.8	< 0.005	< 0.005	0.01	15.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. BC III (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.24	3.70	0.01	0.06	—	0.06	0.05	—	0.05	—	510	510	0.02	< 0.005	—	512
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.06	0.05	0.40	0.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.8	90.8	< 0.005	< 0.005	—	91.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.0	15.0	< 0.005	< 0.005	—	15.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.25	0.11	< 0.005	< 0.005	7.67	7.67	< 0.005	0.77	0.77	—	122	122	< 0.005	0.02	0.01	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	1.30	1.30	< 0.005	0.13	0.13	—	21.8	21.8	< 0.005	< 0.005	0.02	22.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.24	0.24	< 0.005	0.02	0.02	—	3.60	3.60	< 0.005	< 0.005	< 0.005	3.78
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	11.7	11.7	< 0.005	< 0.005	—	11.9
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	686	686	0.11	0.01	—	693
Total	—	—	—	—	—	—	—	—	—	—	—	—	698	698	0.11	0.01	—	705
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	11.7	11.7	< 0.005	< 0.005	—	11.9

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	—	686	686	0.11	0.01	—	693
Total	—	—	—	—	—	—	—	—	—	—	—	—	698	698	0.11	0.01	—	705
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	1.94	1.94	< 0.005	< 0.005	—	1.96
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	114	114	0.02	< 0.005	—	115
Total	—	—	—	—	—	—	—	—	—	—	—	—	116	116	0.02	< 0.005	—	117

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.65	6.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.44	5.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.40	0.37	0.02	2.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.26	9.26	< 0.005	< 0.005	—	9.29
Total	12.5	12.5	0.02	2.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.26	9.26	< 0.005	< 0.005	—	9.29
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	6.65	6.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.44	5.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	12.1	12.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.21	1.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.99	0.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.04	0.03	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.76	0.76	< 0.005	< 0.005	—	0.76
Total	2.24	2.24	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.76	0.76	< 0.005	< 0.005	—	0.76

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	476	476	0.08	0.01	—	481
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	19.3	22.2	41.6	1.99	0.05	—	105
Total	—	—	—	—	—	—	—	—	—	—	—	19.3	498	518	2.06	0.06	—	586
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	476	476	0.08	0.01	—	481
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	19.3	22.2	41.6	1.99	0.05	—	105
Total	—	—	—	—	—	—	—	—	—	—	—	19.3	498	518	2.06	0.06	—	586
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	78.8	78.8	0.01	< 0.005	—	79.6
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	3.20	3.68	6.88	0.33	0.01	—	17.4
Total	—	—	—	—	—	—	—	—	—	—	—	3.20	82.5	85.7	0.34	0.01	—	97.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.18	0.00	1.18	0.12	0.00	—	4.14

Refrigerated Warehouse-No	—	—	—	—	—	—	—	—	—	—	—	25.3	0.00	25.3	2.53	0.00	—	88.6
Total	—	—	—	—	—	—	—	—	—	—	—	26.5	0.00	26.5	2.65	0.00	—	92.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.18	0.00	1.18	0.12	0.00	—	4.14
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	25.3	0.00	25.3	2.53	0.00	—	88.6
Total	—	—	—	—	—	—	—	—	—	—	—	26.5	0.00	26.5	2.65	0.00	—	92.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	0.00	—	0.69
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	4.19	0.00	4.19	0.42	0.00	—	14.7
Total	—	—	—	—	—	—	—	—	—	—	—	4.39	0.00	4.39	0.44	0.00	—	15.4

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,333	1,333
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,333	1,333
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,333	1,333
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,333	1,333
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	221	221
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	221	221

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	10/1/2026	10/31/2026	5.00	22.0	Grading
PV Array	Grading	11/1/2026	12/31/2029	5.00	826	PV Array
Access Roads	Grading	11/1/2027	12/31/2029	5.00	566	Access Road
BC I	Building Construction	1/1/2027	12/31/2027	5.00	261	Substation/Gen-Tie
BC II	Building Construction	11/1/2027	12/31/2029	5.00	566	BESS
BC III	Building Construction	1/1/2027	3/31/2028	5.00	326	Switchyard

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Bore/Drill Rigs	Diesel	Average	2.00	8.00	83.0	0.50
Grading	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Grading	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Grading	Other Construction Equipment	Diesel	Average	1.00	8.00	82.0	0.42
PV Array	Forklifts	Diesel	Average	8.00	8.00	82.0	0.20
PV Array	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
PV Array	Cranes	Diesel	Average	1.00	7.00	367	0.29
PV Array	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
PV Array	Bore/Drill Rigs	Diesel	Average	3.00	8.00	83.0	0.50
PV Array	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
PV Array	Air Compressors	Diesel	Average	2.00	8.00	37.0	0.48
PV Array	Dumpers/Tenders	Diesel	Average	4.00	8.00	16.0	0.38
PV Array	Off-Highway Tractors	Diesel	Average	4.00	8.00	38.0	0.44
PV Array	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
PV Array	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
PV Array	Other Construction Equipment	Diesel	Average	3.00	8.00	82.0	0.42
Access Roads	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Access Roads	Graders	Diesel	Average	1.00	8.00	148	0.41
Access Roads	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Access Roads	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Access Roads	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
BC I	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
BC I	Generator Sets	Diesel	Average	1.00	24.0	14.0	0.74
BC I	Cranes	Diesel	Average	0.00	6.00	367	0.29
BC I	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
BC I	Plate Compactors	Diesel	Average	0.00	6.00	8.00	0.43
BC I	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

BC I	Excavators	Diesel	Average	1.00	6.00	36.0	0.38
BC I	Graders	Diesel	Average	1.00	8.00	148	0.41
BC I	Rollers	Diesel	Average	0.00	6.00	36.0	0.38
BC II	Forklifts	Diesel	Average	1.00	4.00	82.0	0.20
BC II	Generator Sets	Diesel	Average	1.00	24.0	14.0	0.74
BC II	Cranes	Diesel	Average	1.00	6.00	367	0.29
BC II	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
BC II	Plate Compactors	Diesel	Average	0.00	4.00	8.00	0.43
BC II	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
BC II	Excavators	Diesel	Average	0.00	2.00	36.0	0.38
BC II	Rollers	Diesel	Average	1.00	2.00	36.0	0.38
BC III	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
BC III	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
BC III	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	32.5	7.70	LDA,LDT1,LDT2
Grading	Vendor	—	4.00	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
PV Array	—	—	—	—
PV Array	Worker	0.00	7.70	LDA,LDT1,LDT2
PV Array	Vendor	—	4.00	HHDT,MHDT

PV Array	Hauling	0.00	20.0	HHDT
PV Array	Onsite truck	—	—	HHDT
BC I	—	—	—	—
BC I	Worker	0.00	7.70	LDA,LDT1,LDT2
BC I	Vendor	8.49	4.00	HHDT
BC I	Hauling	0.00	20.0	HHDT
BC I	Onsite truck	—	—	HHDT
BC II	—	—	—	—
BC II	Worker	1,200	7.70	LDA,LDT1,LDT2
BC II	Vendor	8.49	4.00	HHDT
BC II	Hauling	0.00	20.0	HHDT
BC II	Onsite truck	—	—	HHDT
Access Roads	—	—	—	—
Access Roads	Worker	0.00	7.70	LDA,LDT1,LDT2
Access Roads	Vendor	—	4.00	HHDT,MHDT
Access Roads	Hauling	2.37	20.0	HHDT
Access Roads	Onsite truck	—	—	HHDT
BC III	—	—	—	—
BC III	Worker	0.00	7.70	LDA,LDT1,LDT2
BC III	Vendor	8.49	4.00	HHDT
BC III	Hauling	0.00	20.0	HHDT
BC III	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Apply dust suppressants to unpaved roads	84%	84%

Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	—	—	33.0	0.00	—
PV Array	—	—	0.00	0.00	—
Access Roads	10,750	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	1,618	0%
General Light Industry	0.00	0%
Refrigerated Warehouse-No Rail	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	20.4	20.4	20.4	7,440	408	408	408	148,800

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	77,655	25,885	4,228,805

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
General Light Industry	21,000	204	0.0330	0.0040	0.00
Refrigerated Warehouse-No Rail	1,228,007	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Other Non-Asphalt Surfaces	0.00	351,972,000
General Light Industry	0.00	0.00
Refrigerated Warehouse-No Rail	10,091,604	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Other Non-Asphalt Surfaces	0.00	—
General Light Industry	2.19	—
Refrigerated Warehouse-No Rail	47.0	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.2	annual days of extreme heat
Extreme Precipitation	1.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	18.4	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	57.1
AQ-PM	24.5
AQ-DPM	1.88
Drinking Water	68.2
Lead Risk Housing	25.2
Pesticides	84.5
Toxic Releases	26.5
Traffic	7.25
Effect Indicators	—
CleanUp Sites	90.3
Groundwater	92.6
Haz Waste Facilities/Generators	94.7
Impaired Water Bodies	43.8
Solid Waste	59.2
Sensitive Population	—
Asthma	68.5
Cardio-vascular	87.0
Low Birth Weights	28.4

Socioeconomic Factor Indicators	—
Education	94.0
Housing	2.99
Linguistic	64.1
Poverty	79.3
Unemployment	88.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	20.72372642
Employed	8.135506224
Median HI	41.6527653
Education	—
Bachelor's or higher	16.52765302
High school enrollment	100
Preschool enrollment	74.27178237
Transportation	—
Auto Access	89.83703323
Active commuting	36.50712178
Social	—
2-parent households	46.93956114
Voting	2.86154241
Neighborhood	—
Alcohol availability	97.0101373
Park access	6.852303349
Retail density	0.141152316

Supermarket access	2.399589375
Tree canopy	8.084178109
Housing	—
Homeownership	38.58591043
Housing habitability	79.30193764
Low-inc homeowner severe housing cost burden	96.59951238
Low-inc renter severe housing cost burden	96.17605543
Uncrowded housing	24.18837418
Health Outcomes	—
Insured adults	14.70550494
Arthritis	0.0
Asthma ER Admissions	41.4
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	3.7
Cognitively Disabled	5.8
Physically Disabled	5.2
Heart Attack ER Admissions	1.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	71.0
Physical Health Not Good	0.0
Stroke	0.0

Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.5
SLR Inundation Area	0.0
Children	45.9
Elderly	42.0
English Speaking	11.9
Foreign-born	69.9
Outdoor Workers	1.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	87.6
Traffic Density	7.6
Traffic Access	0.0
Other Indices	—
Hardship	75.8
Other Decision Support	—
2016 Voting	27.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	75.0
Healthy Places Index Score for Project Location (b)	24.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Solar PV Facility, Gen-tie line, and access roads modeled as non-asphalt surfaces. Substation and switchyard modeled as General Light Industry. BESS modeled as refrigerated warehouse.
Construction: Construction Phases	see CalEEMod assumptions and calculations sheet.
Construction: Off-Road Equipment	Based on prior experience with similar projects with similar scale. See CalEEMod assumptions worksheet for detail.
Operations: Energy Use	Does not account for onsite electricity generation. No natural gas consumption.
Operations: Fleet Mix	Assumes MDV for O&M and major maintenance trips. See assumptions spreadsheet.
Construction: Trips and VMT	per client provided data-max 600 worker trips (1200 one-way). Vendor and haul trips modeled exclusively as HHDT.
Construction: Dust From Material Movement	Site already level; no grading required
Operations: Water and Waste Water	Outdoor water use for non-asphalt surfaces used as proxy to estimate construction water consumption for dust suppression. Value based on Project WSA (Rincon Consultants 2024) and converted from acre-feet. Indoor water use for warehouse used as proxy for overall operational water consumption.
Construction: On-Road Fugitive Dust	Percentage of travel on paved roads assumes one mile of internal gravel road travel and is based on CalEEMod default trip lengths for each trip type. Mean vehicle speed would not exceed 15 mph per project applicant.
Operations: Road Dust	Assumes same rate of paved road travel as Construction worker trips.

Cornucopia Hybrid Decommissioning Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Cornucopia Hybrid Decommissioning
Construction Start Date	1/1/2049
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	16.8
Location	36.04068843056436, -120.18318897510218
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2530
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	1,618	Acre	1,618	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.07	3.42	34.3	62.8	0.13	0.47	7.34	7.80	0.44	2.21	2.64	—	14,094	14,094	0.48	0.53	0.44	14,265
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.06	3.41	34.5	62.5	0.13	0.47	7.34	7.80	0.44	2.21	2.64	—	14,050	14,050	0.48	0.53	0.01	14,220
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.90	2.43	24.5	44.5	0.09	0.33	5.22	5.55	0.31	1.57	1.88	—	10,016	10,016	0.34	0.38	0.14	10,138
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.53	0.44	4.47	8.13	0.02	0.06	0.95	1.01	0.06	0.29	0.34	—	1,658	1,658	0.06	0.06	0.02	1,678

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2050	4.07	3.42	34.3	62.8	0.13	0.47	7.34	7.80	0.44	2.21	2.64	—	14,094	14,094	0.48	0.53	0.44	14,265
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2050	4.06	3.41	34.5	62.5	0.13	0.47	7.34	7.80	0.44	2.21	2.64	—	14,050	14,050	0.48	0.53	0.01	14,220
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2050	2.90	2.43	24.5	44.5	0.09	0.33	5.22	5.55	0.31	1.57	1.88	—	10,016	10,016	0.34	0.38	0.14	10,138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2050	0.53	0.44	4.47	8.13	0.02	0.06	0.95	1.01	0.06	0.29	0.34	—	1,658	1,658	0.06	0.06	0.02	1,678

3. Construction Emissions Details

3.1. Site Preparation (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.23	30.8	60.5	0.10	0.42	—	0.42	0.39	—	0.39	—	10,855	10,855	0.44	0.09	—	10,893
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	3.24	3.24	—	0.49	0.49	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84	3.23	30.8	60.5	0.10	0.42	—	0.42	0.39	—	0.39	—	10,855	10,855	0.44	0.09	—	10,893
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	3.24	3.24	—	0.49	0.49	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.74	2.30	22.0	43.1	0.07	0.30	—	0.30	0.27	—	0.27	—	7,733	7,733	0.31	0.06	—	7,759
Dust From Material Movement	—	—	—	—	—	—	1.82	1.82	—	0.94	0.94	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	2.31	2.31	—	0.35	0.35	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.01	7.87	0.01	0.05	—	0.05	0.05	—	0.05	—	1,280	1,280	0.05	0.01	—	1,285
Dust From Material Movement	—	—	—	—	—	—	0.33	0.33	—	0.17	0.17	—	—	—	—	—	—	—
Demolition	—	—	—	—	—	—	0.42	0.42	—	0.06	0.06	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.06	1.33	0.00	0.00	0.49	0.49	0.00	0.11	0.11	—	428	428	0.01	< 0.005	0.04	429
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.11	0.07	3.36	0.92	0.03	0.05	1.05	1.10	0.05	0.29	0.34	—	2,811	2,811	0.03	0.44	0.40	2,943
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.07	1.03	0.00	0.00	0.49	0.49	0.00	0.11	0.11	—	380	380	0.01	0.01	< 0.005	382
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.10	0.07	3.60	0.94	0.03	0.05	1.05	1.10	0.05	0.29	0.34	—	2,814	2,814	0.03	0.44	0.01	2,946
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.76	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	281	281	< 0.005	< 0.005	0.01	282
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	0.05	2.50	0.66	0.02	0.04	0.74	0.78	0.04	0.20	0.24	—	2,003	2,003	0.02	0.31	0.12	2,097
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	46.4	46.4	< 0.005	< 0.005	< 0.005	46.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.46	0.12	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	332	332	< 0.005	0.05	0.02	347

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2050	12/31/2050	5.00	260	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Forklifts	Diesel	Average	6.00	8.00	82.0	0.20
Site Preparation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	6.00	8.00	84.0	0.37
Site Preparation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Site Preparation	Trenchers	Diesel	Average	6.00	8.00	40.0	0.50
Site Preparation	Other Construction Equipment	Diesel	Average	13.0	8.00	82.0	0.42

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	90.0	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	—	4.00	HHDT,MHDT
Site Preparation	Hauling	56.7	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Site Preparation	—	—	130	58,983	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	1,618	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2050	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.1	annual days of extreme heat
Extreme Precipitation	1.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	13.9	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—

AQ-Ozone	70.7
AQ-PM	48.8
AQ-DPM	26.4
Drinking Water	59.9
Lead Risk Housing	49.8
Pesticides	96.2
Toxic Releases	45.3
Traffic	18.3
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	51.0
Haz Waste Facilities/Generators	35.6
Impaired Water Bodies	23.9
Solid Waste	75.7
Sensitive Population	—
Asthma	57.8
Cardio-vascular	93.4
Low Birth Weights	7.66
Socioeconomic Factor Indicators	—
Education	99.8
Housing	21.1
Linguistic	97.3
Poverty	99.0
Unemployment	90.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	3.490311818
Employed	22.67419479
Median HI	30.43757218
Education	—
Bachelor's or higher	2.912870525
High school enrollment	100
Preschool enrollment	47.26036186
Transportation	—
Auto Access	15.01347363
Active commuting	6.493006544
Social	—
2-parent households	62.69729244
Voting	2.373925318
Neighborhood	—
Alcohol availability	61.81188246
Park access	30.59155653
Retail density	0.487617092
Supermarket access	26.24149878
Tree canopy	5.530604389
Housing	—
Homeownership	44.65546003
Housing habitability	50.54536122
Low-inc homeowner severe housing cost burden	62.17117926
Low-inc renter severe housing cost burden	96.58668035
Uncrowded housing	12.53689208

Health Outcomes	—
Insured adults	4.234569485
Arthritis	0.0
Asthma ER Admissions	30.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	4.9
Cognitively Disabled	46.5
Physically Disabled	33.4
Heart Attack ER Admissions	7.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	2.7
Elderly	42.6
English Speaking	3.0
Foreign-born	95.4
Outdoor Workers	0.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	71.3
Traffic Density	18.2
Traffic Access	0.0
Other Indices	—
Hardship	91.7
Other Decision Support	—
2016 Voting	17.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	75.0
Healthy Places Index Score for Project Location (b)	9.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Single Decommissioning Phase
Construction: Dust From Material Movement	per reclamation plan. Sum of all material under Hauling table.
Construction: Off-Road Equipment	per reclamation plan. Vibratory Extractors modeled as "Other Construction Equipment"
Construction: Demolition	Per reclamation plan.
Construction: Trips and VMT	per reclamation plan.

Cornucopia Hybrid Vegetation Sequestration - Project Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Cornucopia Hybrid Vegetation Sequestration - Project
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	16.8
Location	36.04973174671923, -120.19815765059295
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2506
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.26

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	1,618	Acre	1,618	0.00	0.00	0.00	—	PV Array, gen-tie line, and access roads.

General Light Industry	1.77	1000sqft	2.21	1,770	0.00	0.00	—	Substation and switchyard
Refrigerated Warehouse-No Rail	50.0	1000sqft	12.0	50,000	0.00	0.00	—	BESS

2. Emissions Summary

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	-14,433	-14,433	—	—	—	-14,433
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-14,433	-14,433	0.00	0.00	0.00	-14,433
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	-14,433	-14,433	—	—	—	-14,433

Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-14,433	-14,433	0.00	0.00	0.00	-14,433
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	-14,433	-14,433	—	—	—	-14,433
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-14,433	-14,433	0.00	0.00	0.00	-14,433
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	-2,390	-2,390	—	—	—	-2,390
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-2,390	-2,390	0.00	0.00	0.00	-2,390

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	-10,199	-10,199	—	—	—	-10,199
Total	—	—	—	—	—	—	—	—	—	—	—	—	-10,199	-10,199	—	—	—	-10,199
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	-10,199	-10,199	—	—	—	-10,199
Total	—	—	—	—	—	—	—	—	—	—	—	—	-10,199	-10,199	—	—	—	-10,199
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	-1,689	-1,689	—	—	—	-1,689
Total	—	—	—	—	—	—	—	—	—	—	—	—	-1,689	-1,689	—	—	—	-1,689

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-4,234	-4,234	—	—	—	-4,234
Total	—	—	—	—	—	—	—	—	—	—	—	—	-4,234	-4,234	—	—	—	-4,234
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-4,234	-4,234	—	—	—	-4,234
Total	—	—	—	—	—	—	—	—	—	—	—	—	-4,234	-4,234	—	—	—	-4,234
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-701	-701	—	—	—	-701

Total	—	—	—	—	—	—	—	—	—	—	—	—	-701	-701	—	—	—	-701

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Grazing	Aridisols	0.00	1,593

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Grassland	0.00	1,593

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Solar PV Facility, Gen-tie line, and access roads modeled as non-asphalt surfaces. Substation and switchyard modeled as General Light Industry. BESS modeled as refrigerated warehouse.
Construction: Construction Phases	see CalEEMod assumptions and calculations sheet.
Construction: Off-Road Equipment	Based on prior experience with similar projects with similar scale. See CalEEMod assumptions worksheet for detail.
Operations: Energy Use	Vegetation change only
Operations: Fleet Mix	Assumes MDV for O&M and major maintenance trips. See assumptions spreadsheet.
Construction: Trips and VMT	per client provided data-max 600 worker trips (1200 one-way). Vendor and haul trips modeled exclusively as HHDT.
Construction: Dust From Material Movement	Site already level; no grading required
Operations: Water and Waste Water	vegetation change only
Construction: On-Road Fugitive Dust	Percentage of travel on paved roads assumes one mile of internal gravel road travel and is based on CalEEMod default trip lengths for each trip type. Mean vehicle speed would not exceed 15 mph per project applicant.
Operations: Road Dust	Assumes same rate of paved road travel as Construction worker trips.
Operations: Consumer Products	vegetation change only
Operations: Architectural Coatings	Vegetation Change Only
Operations: Landscape Equipment	Vegetation change only
Operations: Solid Waste	vegetation change only
Operations: Refrigerants	vegetation change only

Cornucopia Hybrid Vegetation Sequestration -Existing Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Cornucopia Hybrid Vegetation Sequestration -Existing
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	16.8
Location	36.04973174671923, -120.19815765059295
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2506
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.26

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	1,618	Acre	1,618	0.00	0.00	0.00	—	PV Array, gen-tie line, and access roads.

General Light Industry	1.77	1000sqft	2.21	1,770	0.00	—	—	Substation and switchyard
Refrigerated Warehouse-No Rail	50.0	1000sqft	12.0	50,000	0.00	—	—	BESS

2. Emissions Summary

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	7,938	7,938	—	—	—	7,938
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,938	7,938	0.00	0.00	0.00	7,938
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	7,938	7,938	—	—	—	7,938

Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,938	7,938	0.00	0.00	0.00	7,938
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	7,938	7,938	—	—	—	7,938
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,938	7,938	0.00	0.00	0.00	7,938
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	1,314	1,314	—	—	—	1,314
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,314	1,314	0.00	0.00	0.00	1,314

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,840	7,840	—	—	—	7,840
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	69.2	69.2	—	—	—	69.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,909	7,909	—	—	—	7,909
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,840	7,840	—	—	—	7,840
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	69.2	69.2	—	—	—	69.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,909	7,909	—	—	—	7,909
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,298	1,298	—	—	—	1,298
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	11.5	11.5	—	—	—	11.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,309	1,309	—	—	—	1,309

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	28.7	28.7	—	—	—	28.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	28.7	28.7	—	—	—	28.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Grassla	—	—	—	—	—	—	—	—	—	—	—	—	28.7	28.7	—	—	—	28.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	28.7	28.7	—	—	—	28.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	4.76	4.76	—	—	—	4.76
Total	—	—	—	—	—	—	—	—	—	—	—	—	4.76	4.76	—	—	—	4.76

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Aridisols	1,583	0.00
Grazing	Aridisols	10.8	0.00

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

Grassland	10.8	0.00

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Solar PV Facility, Gen-tie line, and access roads modeled as non-asphalt surfaces. Substation and switchyard modeled as General Light Industry. BESS modeled as refrigerated warehouse.
Construction: Construction Phases	see CalEEMod assumptions and calculations sheet.
Construction: Off-Road Equipment	Based on prior experience with similar projects with similar scale. See CalEEMod assumptions worksheet for detail.
Operations: Energy Use	Vegetation change only
Operations: Fleet Mix	Assumes MDV for O&M and major maintenance trips. See assumptions spreadsheet.
Construction: Trips and VMT	per client provided data-max 600 worker trips (1200 one-way). Vendor and haul trips modeled exclusively as HHDT.
Construction: Dust From Material Movement	Site already level; no grading required
Operations: Water and Waste Water	vegetation change only
Construction: On-Road Fugitive Dust	Percentage of travel on paved roads assumes one mile of internal gravel road travel and is based on CalEEMod default trip lengths for each trip type. Mean vehicle speed would not exceed 15 mph per project applicant.
Operations: Road Dust	Assumes same rate of paved road travel as Construction worker trips.
Operations: Consumer Products	vegetation change only
Operations: Architectural Coatings	Vegetation Change Only
Operations: Landscape Equipment	Vegetation change only
Operations: Solid Waste	vegetation change only
Operations: Refrigerants	vegetation change only