

5.5 Energy

5.5.1 INTRODUCTION

This section assesses the significance of the use of energy, including electricity, natural gas and gasoline, and diesel fuels, that would result from implementation of the Proposed Project. It discusses existing energy use patterns and examines whether the Proposed Project (including development and operation) would result in the consumption of large amounts of fuel or energy or use such resources in a wasteful manner.

Refer to Section 5.7, *Greenhouse Gas Emissions*, for a discussion of the relationship between energy consumption and greenhouse gas (GHG) emissions, and the Initial Study included as EIR Appendix A, for a discussion of water consumption. This section includes data from the following Port of Los Angeles documents and reports prepared by LSA and are included in EIR Appendix B:

- *Port Master Plan*, Port of Los Angeles, Adopted September 2018
- *Air Quality, Health Risk, Greenhouse Gas, and Energy Impact Report John S. Gibson Trailer Lot Project*, (LSA, 2024a), EIR Appendix B

5.5.2 REGULATORY SETTING

5.5.2.1 Federal Regulation

Energy Independence and Security Act, Corporate Average Fuel Efficiency Standards

On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law, requiring an increased Corporate Average Fuel Economy (CAFE) standard of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by the 2020 model year.

In addition to setting increased CAFE standards for motor vehicles, the Energy Independence and Security Act includes the following additional provisions:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

Additional provisions of the Act address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.

5.5.2.2 State Regulations

California Code of Regulations (CCR) Title 13, Motor Vehicles

CCR Title 23, Motor Vehicles, Section 2449(d)(3) states that no vehicle or engines subject to this regulation may idle for more than five consecutive minutes. The idling limit does not apply to:

- Idling when queuing;
- Idling to verify that the vehicle is in safe operating condition;
- Idling for testing, servicing, repairing or diagnostic purposes;

- Idling necessary to accomplish work for which the vehicle was designed (such as operating a crane);
- Idling required to bring the machine system to operating temperature; and
- Idling necessary to ensure safe operation of the vehicle.

Assembly Bill 1279

Assembly Bill (AB) 1279 requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter. The bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels and directs the California Air Resources Board to work with relevant state agencies to achieve these goals.

California Code of Regulations Title 24 Energy Efficiency Standards and California Green Building Standards

CCR Title 24 Part 6: The California Energy Code (CALGreen) is updated every three years. The most recent update was the 2022 California Green Building Code Standards that became effective on January 1, 2023.

The 2022 CALGreen standards that reduce GHG emissions and are applicable to the Proposed Project include, but are not limited to, the following:

- **Outdoor light pollution reduction.** Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (5.106.8).
- **Construction waste management.** Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- **Excavated soil and land clearing debris.** 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- **Recycling by occupants.** Provide readily accessible areas that are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- **Water conserving plumbing fixtures and fittings.** Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - **Water closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
 - **Urinals.** The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
 - **Faucets and fountains.** Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- **Outdoor potable water uses in landscaped areas.** Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWEL0), whichever is more stringent (5.304.1).

The CALGreen Building Standards Code has been adopted by the City of Los Angeles by reference in Municipal Code Article 9.

5.5.2.3 Local Regulations

City of Los Angeles Sustainable City pLAN

The Port is committed to responsible growth through the implementation of the three tenets of sustainability: environment, economy, and equity. As such, the Port has adopted the City of Los Angeles Sustainable City pLAN (City of Los Angeles, 2019). The Plan contains goals for the City, especially in areas of local solar, energy efficient buildings, carbon and climate leadership, green jobs, preparedness and resiliency, air quality, and environmental justice. In addition, the Plan advances the City's environment, economy, and social equity in 14 various categories with short term, near term (2025), and long-term (2035) targets. The following municipal targets from the Plan would be applicable to the Proposed Project:

- Recycle 100 percent of all wastewater for beneficial reuse by 2035.
- Reduce potable water use per capita by 22.5 percent by 2025; and 25 percent by 2035; and maintain or reduce 2035 per capita water use through 2050.
- Reduce VMT per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050.
- Reduce port related GHG emissions by 80% by 2050.
- Reduce industrial emissions by 38% by 2035; and 82% by 2050.
- Increase tree canopy in areas of greatest need by at least 50% by 2028.

Community Emissions Reduction Plan Wilmington, Carson, West Long Beach

The Community Emissions Reduction Plan (CERP) outlines the actions and commitments by the Community Steering Committee (CSC), the SCAQMD, and CARB to reduce air pollution in the Wilmington, Carson, and West Long Beach community (SCAQMD, 2019). The CERP is a critical part of implementing AB 617, which is a California law that addresses the disproportionate impacts of air pollution in environmental justice communities. The CERP includes targeted actions using many strategies, including developing and enforcing regulations, providing incentives to accelerate the adoption of cleaner technologies, and conducting outreach to provide useful information to support the public in making informed choices. Additionally, air monitoring strategies are used in implementation of the CERP to help provide critical information to help guide investigations or provide public information.

City of Los Angeles General Plan

The City of Los Angeles General Plan Air Quality (AQ) Element (City of Los Angeles, 1992)(City of Los Angeles, contains the following policies, goal, and objective related to air quality that are applicable to the Proposed Project:

Policy AQ 4.2.5 Emphasize trip reduction, alternative transit, and congestion management measures for discretionary projects.

Goal AQ 5 Energy efficiency through land use and transportation planning, the use of renewable resources and less polluting fuels, and the implementation of conservation measures including passive methods such as site orientation and tree planting.

Objective AQ 5.1 It is the objective of the City of Los Angeles to increase energy efficiency of City facilities and private developments.

Policy AQ 5.1.2 Effect a reduction in energy consumption and shift to non-polluting sources of energy in its buildings and operations.

Policy AQ 5.1.4 Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.

5.5.3 ENVIRONMENTAL SETTING

Electricity

The Los Angeles Department of Water and Power (LADWP) is the electricity provider for the City of Los Angeles. LADWP serves an area that totals 465 square miles with over 1.54 million residents receiving electricity in Los Angeles. In 2021, 35 percent of the electricity provided by LADWP came from renewable energy resources, 26 percent came from natural gas resources, 14 percent came from nuclear resources, 6 percent came from hydroelectric resources, and 19 percent came from coal resources (LADWP, 2022). According to the California Energy Commission (CEC), total electricity consumption in the LADWP service area in 2021 was 22,852 gigawatt hours (GWh) (7,954 GWh for the residential sector and 14,898 GWh for the non-residential sector) (CEC, 2023). Total electricity consumption in Los Angeles County in 2021 was 65,374.7 GWh (65,374,721,369 kilowatt-hours [kWh] (CEC, 2023)).

The Project site is currently served by the electricity distribution systems that exist along the roadways adjacent to the property.

Natural Gas

The Southern California Gas Company (SoCalGas) is the natural gas purveyor in the City of Los Angeles and is the principal distributor of natural gas in Southern California. SoCalGas estimates that gas demand will decline at an annual rate of one percent each year through 2035 due to modest economic growth, mandated energy efficiency standards and programs, renewable electricity goals, and conservation savings linked to advanced metering infrastructure (SoCalGas, 2020). The gas supply available to SoCalGas is regionally diverse and includes supplies from California sources (onshore and offshore), southwestern U.S. supply sources, the Rocky Mountains, and Canada (SoCalGas, 2020). SoCalGas designs its facilities and supplies to provide continuous service during extreme peak demands and has identified the ability to meet peak demands through 2035 in its 2020 report (SoCalGas, 2020).

The Project site is adjacent to the natural gas distribution system that exists within the roadways that are adjacent to the property.

5.5.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the State CEQA Guidelines, a project could have a significant adverse effect on energy resources if it were to:

- E-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- E-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.5.5 METHODOLOGY

A number of factors are considered when weighing whether a project would use a proportionately large amount of energy or whether the use of energy would be wasteful in comparison to other projects. Factors such as the use of on-site renewable energy features, energy conservation features or programs, and relative use of transit are considered.

According to Appendix F of the State CEQA Guidelines, conserving energy is defined as decreasing overall per capita energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. Neither Appendix F of the CEQA Guidelines nor Public Resources Code Section 21100(b)(3) offer a numerical threshold of significance that might be used to evaluate the potential significance of energy consumption of a project. Rather, the emphasis is on reducing “the wasteful, inefficient, and unnecessary consumption of energy.”

Construction activities would result in wasteful, inefficient, or unnecessary use of energy if construction equipment is old or not well maintained, if equipment is left to idle when not in use, if travel routes are not planned to minimize vehicle miles traveled, or if excess lighting or water is used during construction activities. Energy usage during project operation would be considered “wasteful, inefficient, and unnecessary” if the project were to violate federal, state, and/or local energy standards, including Title 24 of the California Code of Regulations, inhibit pedestrian or bicycle mobility, inhibit access to transit, or inhibit feasible opportunities to use alternative energy sources, such as solar energy, or otherwise inhibit the conservation of energy.

5.5.6 ENVIRONMENTAL IMPACTS

IMPACT E-1: WOULD THE PROJECT RESULT IN A POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACT DUE TO WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES, DURING PROJECT CONSTRUCTION OR OPERATION?

Construction

Less-than-Significant Impact. During construction of the Proposed Project, energy would be consumed in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment, construction worker travel to and from the Project site, as well as delivery truck trips;
2. Electricity associated with providing temporary power for lighting and electric equipment; and
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction activities related to the Proposed Project and the associated infrastructure are not expected to result in demand for fuel greater on a per-unit-of-development basis than other development projects in Southern California. Also, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. The energy analysis modeling for construction of the Proposed Project (included as EIR Appendix B), details that the construction of the Proposed Project is estimated to result in the need for 37,841.6 gallons of diesel fuel and 3,561.6 gallons of gasoline (LSA, 2024a). Construction contractors are required to demonstrate compliance with applicable California Air Resources Board (CARB) regulations governing the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. In addition, compliance with existing CARB idling restrictions and the use of newer engines and equipment would reduce fuel combustion and energy consumption.

Based on fuel consumption obtained from EMFAC2021, approximately 3,921.8 million gallons of gasoline and approximately 608.6 million gallons of diesel will be consumed from vehicle trips in Los Angeles County in 2023. Construction of the Proposed Project would increase the annual construction generated fuel use in Los Angeles County by approximately 0.01 percent for diesel fuel usage and by approximately less than 0.01 percent for gasoline fuel usage. As such, Proposed Project construction would have a negligible effect on local and regional energy supplies. Furthermore, impacts related to energy use during construction would be temporary and relatively small in comparison to Los Angeles County's overall use of the state's available energy resources. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the Proposed Project.

Overall, construction activities would require limited energy consumption, would comply with all existing regulations, and would therefore not be expected to use large amounts of energy or fuel in a wasteful manner. Thus, impacts related to construction energy usage would be less than significant.

Operation

Less-than-Significant Impact. Once operational, the Proposed Project would generate demand for electricity and gasoline or diesel for motor vehicle trips. The Proposed Project would not use natural gas during operations. Operational use of energy includes the parking lot and outdoor lighting, and the transport of electricity and water to the areas where they would be consumed. This use of energy is typical for urban development, and no operational activities or land uses would occur that would result in extraordinary energy consumption.

The Proposed Project would provide additional short-term truck and chassis parking space to alleviate truck traffic congestion and reduce the distance required for trucks to access shipping containers. The Proposed Project would allow trucks to avoid driving further into or from the Port to pick up or drop off chassis with containers. As detailed in Table 5.5-1, operation of the Proposed Project is estimated to annually use 721.6 gallons of gasoline and approximately 309,905.5 gallons of diesel fuel. CCR Title 13, Motor Vehicles, Section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes. The idling restrictions would preclude unnecessary and wasteful consumption of fuel due to unproductive idling of trucks. In addition, as shown in Table 5.5-1, operation of the Proposed Project is estimated to use approximately 711,085 kilowatt-hours (kWh) of electricity per year for on-site electrical charging infrastructure and lighting.

Table 5.5-1: Estimated Annual Operational Energy Consumption

Energy Type	Annual Energy Consumption
Electricity Consumption (kWh/year)	711,085.0
Gasoline (gallons/year)	721.6
Diesel Fuel (gallons/year)	407,596.2

Source: LSA, 2024a (EIR Appendix B).

Acronyms: kWh = kilowatt-hours

Total electricity consumption in Los Angeles County in 2021 was 65,374.7 GWh (65,374,721,369 kWh). Therefore, operation of the Proposed Project would increase the annual electricity consumption in Los Angeles County by less than 0.01 percent. Based on fuel consumption obtained from EMFAC2021, approximately 3,921.8 million gallons of gasoline and approximately 608.6 million gallons of diesel will be consumed from vehicle trips in Los Angeles County in 2023. Conservatively assuming all trips resulting from the Proposed Project would be new to Los Angeles County, vehicle and truck trips associated with the Proposed Project

would increase the annual fuel use in Los Angeles County by approximately less than 0.01 percent for gasoline fuel usage and approximately 0.07 percent for diesel fuel usage. However, as described further in Section 5.11, *Transportation*, the truck trips associated with the Proposed Project would not necessarily be new trips within the POLA complex, but would likely be diverted trips by trucks that are already accessing terminals within the POLA to pick up or drop off containers. Therefore, the Proposed Project would only result in an increase of 3.8 miles traveled on average for trucks accessing the Project site over existing conditions. Because this use of energy is typical for urban development, no operational activities or land uses would occur that would result in wasteful or inefficient energy consumption. Further, through City permitting assurance would be provided that existing regulations related to energy efficiency and consumption, such as Title 24 regulations and CCR Title 13, Motor Vehicles, Section 2449(d)(3) related to idling, would be implemented. Therefore, impacts related to operational energy consumption would be less than significant.

IMPACT E-2: WOULD THE PROJECT CONFLICT WITH OR OBSTRUCT A STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY?

Less-than-Significant Impact. As described previously, the Proposed Project would be required to meet the CCR Title 24 energy efficiency standards in effect during permitting of Proposed Project. The City of Los Angeles's administration of the CCR Title 24 requirements includes review of design components and energy conservation measures that occurs during the permitting process, which ensures that all requirements are met. In line with standard City of Los Angeles Building & Safety conditions of approval, Proposed Project plans and specifications shall require signs onsite that identify the anti-idling regulations. Thus, the Proposed Project would not conflict with the idling limits imposed by CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling. In addition, the Proposed Project would be consistent with the priorities set forth by the CERP as it would provide zero-emission cargo-handling equipment onsite. Furthermore, the Proposed Project would not conflict with or obstruct opportunities to use renewable energy, such as solar energy. The Proposed Project would not require the removal of any existing renewable energy infrastructure, such as solar panels or wind turbines. Thus, the Proposed Project would not obstruct use of renewable energy or energy efficiency. Overall, the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.5.7 CUMULATIVE IMPACTS

The geographic context for analysis of cumulative impacts regarding energy includes past, present, and future development within southern California because energy supplies (including electricity, natural gas, and petroleum) are generated and distributed throughout the southern California region.

All development projects throughout the region would be required to comply with the energy efficiency standards in the Title 24 requirements. Additionally, some of the developments could provide for additional reductions in energy consumption by use of solar panels, sky lights, or other LEED type energy efficiency infrastructure. With implementation of the existing energy conservation regulations, cumulative electricity and natural gas consumption would not be cumulatively wasteful, inefficient, or unnecessary.

Petroleum consumption associated with the Proposed Project would be primarily attributable to transportation, especially vehicular use. However, state fuel efficiency standards and alternative fuels policies (per AB 1007 Pavely) would contribute to a reduction in fuel use, and the federal Energy Independence and Security Act and the state Long Term Energy Efficiency Strategic Plan would reduce reliance on non-renewable energy resources. Further, the Proposed Project would provide additional short-term truck and chassis parking space to alleviate truck traffic congestion and reduce the distance required for trucks to access shipping containers. The Proposed Project would allow trucks to avoid driving further into or from the Port to pick up or drop off chassis with containers. For these reasons, the consumption of petroleum would not occur in a wasteful, inefficient, or unnecessary manner and would not be cumulatively considerable.

5.5.8 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Compliance with regulatory requirements ensures Impacts E-1 and E-2 would be less than significant.

5.5.9 MITIGATION MEASURES

Impacts related to energy would be less than significant and no mitigation measures are required.

5.5.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to energy would be less than significant and no mitigation measures are required.

5.5.11 REFERENCES

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