Section 3.2
Energy

Section Summary

Section 3.2, *Energy*, provides the following:

- The environmental setting with respect to energy-consumption at the Port of Los Angeles (Port);
- A list of local, state, and federal regulations and policies that apply to the Terminal Island Maritime Support Facility (MSF) Project (Proposed Project) and alternatives;
- A discussion of the methodology used to determine whether the Proposed Project or alternatives would result in a significant adverse impact regarding energy consumption; and
- An impact analysis of the Proposed Project and alternatives.

Key Points of Section 3.2

Energy would be consumed by the Proposed Project and the Reduced Project Alternative (Alternative 2) in the form of electricity and liquid fossil fuels during construction and operation of the facility; however, energy consumption would not be wasteful or done in an inefficient manner such that impacts would be less than significant. There would be no new energy consumption under the No Project Alternative (Alternative 1).

Construction-Related Impacts

During construction, liquid fuels (diesel and gasoline) would be used to power construction vehicles and off-road equipment. Electricity usage during construction would be negligible. Construction would be required by means of a Project Feature to comply with the *Port of Los Angeles Sustainable Construction Guidelines.* The Proposed Project and alternatives would not use non-renewable energy resources in a wasteful or inefficient manner during construction, and impacts related to energy use and conservation would be less than significant.

Operations-Related Impacts

During operations, with the Project Feature (PF) AQ-1 and mitigation measure (MM) AQ-1 electricity would be used to power several on-site electric forklifts, utility tractor rigs (UTRs), and for general facility lighting and operations. Diesel would be used by visiting heavy duty trucks. Operational energy use by the Proposed Project and alternatives is projected to become slightly more efficient over time in response to increasing energy costs and the transition to zero-emission technologies, which can be expected to encourage additional conservation, and also in relation to compliance with federal, state, and local energy regulations and programs, which can be expected to result in the introduction of more energy-efficient equipment and transport. The Proposed Project and alternatives would not use

non-renewable energy resources in a wasteful or inefficient manner during operation, and impacts would be less than significant.

3.2.1. Introduction

This section describes the energy consumption and conservation elements of the Proposed Project and identifies potential impacts related to energy use that would occur as a result of implementation of the Proposed Project or alternatives. The alternatives include the No Project Alternative (Alternative 1) and the Reduced Project Alternative (Alternative 2).

The Proposed Project would develop an approximately 89.2-acre site for use as a chassis support facility. The chassis support facility may be operated by multiple operators, with up to 3,682 truck trips per day in the opening year (2029) and up to 6,838 truck trips per day at full buildout (2049) and on-site equipment including up to 28 electric forklifts and two utility tractor rigs (UTRs).

The three features related to energy are: (1) energy used to construct the facility, (2) energy from truck travel and worker vehicle trips during operation, (3) energy used by onsite equipment and occupation of the refurbished office during operation.

No comments related to energy were received on the Notice of Preparation/Initial Study (NOP/IS) during the scoping period.

3.2.2. Environmental Setting

The Los Angeles Department of Water and Power (LADWP) provides electrical services to a service territory of approximately 473 square miles that is home to four million residents, the Port, and the Proposed Project. Pursuant to Senate Bill 350 (De León, Chapter 547, Statutes of 2015), LADWP must develop and maintain an integrated resource plan (IRP) that describes how the utility will meet their energy and capacity resource needs while achieving policy goals and mandates. The IRP relies on electricity system planning studies, which ensure that LADWP has adequate generation capacity to serve the Port's current load requirements. The IRP also shows how LADWP will meet certain requirements, targets, and goals, including greenhouse gas (GHG) emission reduction targets and renewable energy procurement requirements identified in Public Utilities Code (PUC) Section 9621.

Currently, renewable energy sources account for approximately one-third of LADWP's capacity (Table 3.2-1). This is expected to increase over time based on Senate Bill (SB) 100 which established that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by 2045 through the Renewables Portfolio Standard (RPS).

Table 3.2-1: Energy Sources of Electricity Supplied to Customers (Power Content)

Energy Resources	LADWP (2023)	2023 California-wide Power Mix
Renewable		
Biomass & biowaste	0.1%	2.1%
Geothermal	9.5%	4.8%
Eligible hydroelectric	2.4%	1.8%
Solar	14.0%	17.0%
Wind	13.5%	11.2%
Eligible Renewable Total	**39.5%**	**36.9%**
Nonrenewable		
Coal	10.3%	1.8%
Large Hydroelectric	3.9%	11.7%
Natural Gas	32.4%	36.6%
Nuclear	13.9%	9.3%
Other	0.0%	0.1%
Unspecified sources of power *	0.0%	3.7%
Total	**100.0%**	**100.0%**

Sources: CEC, 2024.
* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

3.2.3. Applicable Regulations

Numerous federal, State, and local laws have been established to regulate energy conservation and efficiency. Responsibilities for enforcing or executing these laws and regulations are governed by various state and local agencies, as described below.

3.2.3.1. Federal Regulations

Federal energy policy sets standards for energy and conservation through efficiency standards applicable to appliances and products, fuel economy standards, and fuel production standards. No federal regulations concerning wasteful, inefficient, or unnecessary consumption of energy resources were identified to specifically apply to the Project.

3.2.3.2. State Regulations

California Building Energy Efficiency Standards (Energy Code)

New construction, along with additions or alterations to existing buildings, is subject to the Energy Code (California Code of Regulations, Title 24, Part 6). The Energy Code applies to building products and designs, including mechanical systems and lighting, and serves to reduce wasteful and unnecessary uses of energy statewide. Voluntary energy efficiency provisions appear in the California Green Building Standards Code, also known as CALGreen (Title 24, Part 11). The Building Energy Efficiency Standards are

updated every three years. These energy conservation standards mandate energy-efficient building and infrastructure requirements that apply to the Project.

Senate Bill 350, Clean Energy and Pollution Reduction Act of 2015

Senate Bill 350, enacted on October 7, 2015, provides a new set of objectives in clean energy, clean air, and pollution reduction. The objectives include increasing the procurement of California's electricity from renewable sources from 33 percent to 50 percent by December 31, 2030, and doubling the energy efficiency savings in electricity and natural gas final end uses of retail customers by 2030.

State CEQA Guidelines

The California Natural Resources Agency adopted certain amendments to the State CEQA Guidelines effective in 2019, to change how CEQA Lead Agencies consider the environmental impacts of energy use. CEQA Guidelines Section 15126.2(b) and Appendix F require analysis of a project's energy use, in order to assure that energy implications are considered in project decisions. CEQA requires a discussion of the potential environmental effects of energy resources used by projects, with particular emphasis on avoiding or reducing the "wasteful, inefficient, and unnecessary consumption of energy" (see Public Resources Code section 21100(b)(3)).

3.2.3.3. Local Regulations

Sustainable City pLAn/Green New Deal

The Port has adopted the City of Los Angeles Sustainable City pLAn (City of Los Angeles, 2019). The Plan contains goals for the city in areas including local solar, energy efficient buildings, carbon and climate leadership, green jobs, preparedness and resiliency, air quality, and environmental justice. The following targets from the pLAn would be applicable to the Project:

- 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.

Port of Los Angeles Green Building Policy

In 2007, the Los Angeles Board of Harbor Commissioners (BHC) adopted the Green Building Policy requiring Leadership in Energy and Environmental (LEED) Gold Rating as the minimum standard for new construction of most buildings of at least 7,500 square feet as well as the incorporation of solar power and best available technology for energy efficiency for all new Port buildings.

3.2.4. Impacts and Mitigation Measures

3.2.4.1. Methodology

Equipment used during construction and operation would consume various forms of energy (e.g., electricity, propane, gasoline, diesel). This analysis presents a quantitative discussion of the Project's energy use for construction and operation components, relative

to energy supplies. As set forth in the State CEQA Guidelines, Appendix F: Energy Conservation, the goal of conserving energy implies the wise and efficient use of energy including:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

The energy impact analysis emphasizes avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy resources, and whether the Project would result in a potentially significant environmental impact due to inefficient, wasteful, and unnecessary consumption of energy resources. State CEQA Guidelines, Section 15126.2(b) requires the analysis to focus on energy use that is caused by the project. If analysis of the project's energy use reveals that the project may result in significant environmental effects due to inefficient, wasteful, or unnecessary use of energy, then the analysis must identify ways to mitigate that energy use.

3.2.4.2. CEQA Baseline

State CEQA Guidelines, Section 15125, subdivision (a), provides that an EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation and Initial Study (NOP/IS) is published (Final EIR Appendix A). Since the NOP/IS was released in December 2023, the LAHD has determined that 2023 is the baseline year for the CEQA analysis. In 2023, the baseline conditions for the Proposed Project include the existing conditions of the site, which consist of an unoccupied, unused parcel. No construction or operations currently occur. The Proposed Project would represent a new use at the site and generate new chassis storage/support and/or wheeled empty container storage activities at the site, which would result in increased energy consumption.

3.2.4.3. Thresholds of Significance

State CEQA Guidelines Appendix G (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387) CEQA Checklist suggests two criteria for determining the significance of impacts related to energy:

Would the Project:

(a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?

(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The NOP/IS (Final EIR Appendix A) eliminated criteria (b) from further consideration on the basis that the Proposed Project's compliance with applicable standards, regulations, and policy guidance would mean that it would likely not conflict with or obstruct state or local plans or policies related to energy efficiency. Accordingly, the Proposed Project and alternatives would have a significant impact if it would:

EN-1: Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation.

3.2.5. Impact Analysis

3.2.5.1. Proposed Project

The Proposed Project would result in energy consumption associated with construction activities and operation as a chassis storage/support and/or wheeled empty container storage facility.

Impact EN-1: Would the Proposed Project result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?

Construction

Construction activities would consume nonrenewable energy resources, primarily petroleum-based transportation fuels (diesel and gasoline), and grid electricity where available, to power construction equipment and vehicles. The short-term use of fuels by equipment and motor vehicle trips during construction would be necessary to install the facility. The total energy requirements during construction are not quantified within the Project Description. However, the use of nonrenewable resources can be estimated in terms of the volumes of diesel and gasoline, by reviewing the products of combustion of these fuels (e.g., the quantities of greenhouse gases would be directly proportional to the volumes of fuels used). Based on the anticipated quantities of carbon dioxide-equivalent (CO_2e) emissions estimated as ~~3,291~~ 7,046 metric tons (MT) of CO_2e (see Section 3.3, *Greenhouse Gas Emissions*), approximately ~~322,442~~ 690,346 gallons of diesel fuel is estimated to be used for Proposed Project construction over approximately 24 months.[1]

To put these volumes into perspective, data from the California Energy Commission (CEC) indicates that California's refineries normally produce around 1.3 million barrels per week of diesel and 6.0 million barrels per week of gasoline (CEC, 2023). In comparison, the total diesel fuel volume used during the entirety of Proposed Project construction (~~322,442~~ 690,346 gallons or ~~7,677~~ 16,437 barrels) would represent about ~~0.6~~ 1.3 percent of California's typical weekly production of diesel. Consumption of energy resources during construction facilitates achieving the Project objectives, including those relating to increasing the efficiency of goods movement, and therefore, would not be wasteful, inefficient, or unnecessary.

Operation

Maintenance and normal operations of the Proposed Project would require use of fossil fuels (diesel and gasoline) for motor vehicle trips. Transportation fuels would be used for 80 employees in the opening year (2029), and up to 105 employees in the buildout year (2049~~2046~~), commuting to the Project site. Overall use of energy for operation-phase truck trips would be caused by the Proposed Project diverting truck trips to the site. The equivalent volume of diesel fuel that would be consumed per year can be estimated from the peak yearly rate of GHG emissions, ~~excluding~~ although the electricity supply~~, which~~ is derived from a mix of resources that does not include diesel, as shown in Table 3.2-1. Based on ~~9,175~~ 15,630 ~~metric tons of~~ MTCO_2e per year~~,~~ for the ~~opening~~ full buildout

[1] The volume of diesel fuel used can be approximated from an emission factor of 10.2 kg CO_2 per gallon, based on the fuel heating value (0.138 million British thermal units per gallon) multiplied by the default CO_2 emission factor (73.96 kg CO_2 per million British thermal unit), in Table 2-3 of Title 17, California Code of Regulations, Section 95115.

year (from Section 3.3, *Greenhouse Gas Emissions*, Table 3.3-1), amortized construction plus Project operations, including electricity use, would require approximately ~~898,939~~ 1,531,400 gallons or ~~21,403~~ 36,460 barrels of diesel fuel annually. This annual amount represents about ~~1.7~~ 2.8 percent of California's typical weekly production of diesel.

The forklifts, UTRs, and any other support equipment used onsite would initially use diesel and/or propane until 100 percent of yard equipment is transitioned to zero emissions (by January 1, 2030) as required by Project Feature (PF) AQ-1 (*Zero-Emissions Operational Equipment*). Approximately 80 to 105 employees would consume minor amounts of electrical energy at the facility, including the refurbished office, and no induced population growth would occur. Accordingly, no notable change in long-term consumption of non-renewable energy resources would occur with the Proposed Project.

The consumption of energy resources during operation of the Proposed Project would not be wasteful, inefficient, or unnecessary. Proposed Project operation would have a less-than-significant impact on local or regional energy supplies and energy resources.

Impact Determination

The Proposed Project would not result in wasteful or inefficient consumption of energy resources. This impact would be less than significant, and no mitigation is required.

Mitigation Measures

While no mitigation is required to reduce the energy impact, the Proposed Project would require the use of zero-emission operational equipment to reduce air pollutant emissions ~~by January 1, 2030~~ per the following Project Feature and mitigation measure introduced in Section 3.1, *Air Quality and Health Risk*. ~~, which would improve energy efficiency.~~ Furthermore, LAHD identified a mitigation measure for GHG emissions (MM GHG-1, see~~in~~ Section 3.3, *Greenhouse Gas Emissions*); however, implementing a Project requirement to purchase and retire carbon offsets would not likely change the Project's consumption of energy resources.

PF AQ-1: Zero-Emission Operational Equipment. All yard equipment would be required to be zero emissions by January 1, 2030. Any diesel operations would cease by December 31, 2029, and would be tracked and enforced once an entitlement is issued. A 100 percent transition to zero emissions by January 1, 2030 shall be required, and any non-conforming equipment used or acquired after this date would be considered a breach of the Permit/Lease conditions.

Additionally, MM AQ-1 identified for air quality impacts in Section 3.1, *Air Quality and Health Risk*, would ~~provide for~~require early electrification of cargo-handling equipment, depending on feasibility, which may also improve the energy efficiency of operations.

MM AQ-1: Zero-Emission Cargo-Handling Equipment. At the start of operation, Tenant shall utilize zero-emission ~~off-road~~ cargo-handling equipment (CHE) for Project operations. If the Tenant determines that specific CHE types cannot feasibly be deployed due to operational or infrastructure constraints, the Tenant shall provide a written report detailing the evidence and supporting documentation concerning feasibility and other relevant factors within 90 calendar days. The feasibility determination shall be subject to mutual agreement between the Board of Harbor Commissioners and Tenant, which shall not be unreasonably withheld by Tenant.

All CHE operated on site shall be zero emissions starting January 1, 2030.

In the event an a~~A~~pplicable l~~L~~aw comes into effect that requires the cargo-handling equipment used on site to be zero-emission equipment, the a~~A~~pplicable l~~L~~aw would govern.

Residual Impacts

Impacts would be less than significant.

3.2.5.2. Alternative 1 – No Project Alternative

Under this alternative, the Project site would remain unused. Like the CEQA baseline, the activities under the No Project Alternative (Alternative 1) are considered negligible in the foreseeable future as no future development has been permitted or approved.

Impact EN-1: Would the No Project Alternative (Alternative 1) result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?

In the No Project Alternative (Alternative 1), the Project would not be constructed. Construction and operation emissions and energy use would not occur. The Project objectives, including those relating to increasing the efficiency of goods movement would not be achieved.

Impact Determination

Since no construction phase emissions would occur under the No Project Alternative (Alternative 1), there would be no impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

3.2.5.3. Alternative 2 – Reduced Project Alternative

In the Reduced Project Alternative (Alternative 2), the Project site area would be reduced from 89.2 acres to ~~52.7~~ 51.7 acres (71 acres [usable space]/2 + 16.2 acres other/outside loop), essentially utilizing half of the usable space. Construction and operational activities would be identical to the Proposed Project, but with reduced intensity. Less asphalt concrete, stall striping, lighting, and fencing would be installed due to the reduced Project footprint.

Impact EN-1: Would the Reduced Project Alternative (Alternative 2) result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation?

In the Reduced Project Alternative (Alternative 2), the usable site area would decrease by half. Since the area of the Reduced Project Alternative (Alternative 2) is half that of the

Proposed Project and since construction activities would be the same, with reduced intensity, the total energy use associated with construction of the Reduced Project Alternative (Alternative 2) would be less than the Proposed Project. Operational energy use would also be reduced when compared to the Proposed Project.

Impact Determination

Since construction energy use would be slightly less than the Proposed Project, and operation energy use would be reduced, impacts would be less than the Proposed Project. Neither construction nor operation would result in wasteful or inefficient consumption of energy resources, and impacts would be less than significant.

Mitigation Measures

No mitigation is required for the Reduced Project Alternative (Alternative 2); however, energy efficiency would be improved with implementation of Project Feature PF AQ-1 (*Zero-Emission Operational Equipment*) and MM AQ-1 (*Zero-Emission Cargo-Handling Equipment*). See Section 3.2.5.1, *Proposed Project*, under Impact EN-1, for the full text of this measure.

Residual Impacts

Impacts would be less than significant.

3.2.5.4. Summary of Impact Determinations

Table 3.2-2 summarizes the CEQA impact determinations of the Proposed Project and alternatives related to Energy. This table is meant to allow easy comparison of the potential impacts of the Proposed Project and alternatives. Identified potential impacts may be based on federal, state, or City of Los Angeles significance criteria, LAHD criteria, and the scientific judgment of the report preparers.

For each potential impact, the table provides the CEQA impact determinations, applicable mitigation, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table.

Table 3.2-2: Summary Matrix of Potential Impacts and Mitigation Measures for Energy

Alternative	Environmental Impacts	Impact Determination	Applied Project Features/Mitigation Measures	Residual Impacts
Proposed Project	**EN-1:** Wasteful, inefficient, or unnecessary consumption of energy resources	Less Than Significant	Mitigation Not Required **PF AQ-1:** Zero-Emission Operational Equipment **MM AQ-1:** Zero-Emission Cargo-Handling Equipment	Less Than Significant
Alt 1 – No Project		No Impact	Mitigation Not Required	No Impact

Alternative	Environmental Impacts	Impact Determination	Applied Project Features/Mitigation Measures	Residual Impacts
Alt 2 – Reduced Project		Less Than Significant	Mitigation Not Required **PF AQ-1:** Zero-Emission Operational Equipment **MM AQ-1:** Zero-Emission Cargo-Handling Equipment	Less Than Significant

3.2.5.5. Mitigation Monitoring

No mitigation is required to reduce the energy impact. However, PF AQ-1 would improve energy efficiency by requiring a 100 percent transition to zero-emissions yard equipment by January 1, 2030. To further improve energy efficiency, MM AQ-1 would provide for early electrification of cargo-handling equipment, depending on feasibility.

PF AQ-1 and MM AQ-1 would be applied to the Proposed Project and Alternative 2 (Reduced Project Alternative) as a condition of approval. ~~PF AQ-1 would also be applied to Alternative 2 (Reduced Project Alternative) as a condition of approval.~~ The Project Feature and ~~Mitigation~~ mitigation is not applicable to Alternative 1 (No Project) ~~or Alternative 2 (Reduced Project Alternative)~~.

Project Feature	**PF AQ-1: Zero-Emission Operational Equipment.** All yard equipment would be required to be zero emissions by January 1, 2030. Any diesel operations would cease by December 31, 2029, and would be tracked and enforced once an entitlement is issued. A 100 percent transition to zero emissions by January 1, 2030 shall be required, and any non-conforming equipment used or acquired after this date would be considered a breach of the Permit/Lease conditions.
Timing	Prior to January 1, 2030.
Methodology	LAHD will include this Project Feature in ~~lease agreements~~Permit(s) with Tenant(s).

Mitigation Measure	**MM AQ-1: Zero-Emission Cargo-Handling Equipment.** At the start of operation, Tenant shall utilize zero-emission ~~off-road~~ cargo-handling equipment (CHE) for Project operations. If the Tenant determines that specific CHE types cannot feasibly be deployed due to operational or infrastructure constraints, the Tenant shall provide a written report detailing the evidence and supporting documentation concerning feasibility and other relevant factors within 90 calendar days. The feasibility determination shall be subject to mutual agreement between the Board and Tenant, which shall not be unreasonably withheld by Tenant. All CHE operated on site shall be zero emissions starting January 1, 2030. In the event an a~~A~~pplicable l~~L~~aw comes into effect that requires the cargo-handling equipment used on site to be zero-emission equipment, the a~~A~~pplicable l~~L~~aw would govern.
Timing	At the start of operations or no later than January 1, 2030 depending on feasibility.
Methodology	LAHD will include this mitigation measure in ~~the permit~~Permit(s) with Tenant(s).

3.2.6. Significant Unavoidable Impacts

No significant unavoidable impacts related to energy would occur during construction or operation of the Proposed Project or alternatives.