

# 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

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

### 3 **3.2.1. Introduction**

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

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

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

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

### 19 **3.2.2. Environmental Setting**

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

31 Currently, renewable energy sources account for approximately one-third of LADWP's  
32 capacity (Table 3.2-1). This is expected to increase over time based on Senate Bill (SB)  
33 100 which established that 100 percent of all electricity in California must be obtained  
34 from renewable and zero-carbon energy resources by 2045 through the Renewables  
35 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
<b>Renewable</b>		
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%
<b>Eligible Renewable Total</b>	<b>39.5%</b>	<b>36.9%</b>
<b>Nonrenewable</b>		
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%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

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

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

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

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

### 9 **State CEQA Guidelines**

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

## 18 **3.2.3.3. Local Regulations**

### 19 **Sustainable City pLAN/Green New Deal**

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

- 25 • Reduce VMT per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050.
- 26 • Reduce port related GHG emissions by 80% by 2050.
- 27 • Reduce industrial emissions by 38% by 2035; and 82% by 2050.

### 28 **Port of Los Angeles Green Building Policy**

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

## 34 **3.2.4. Impacts and Mitigation Measures**

### 35 **3.2.4.1. Methodology**

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

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

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

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

### 15 **3.2.4.2. CEQA Baseline**

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

### 26 **3.2.4.3. Thresholds of Significance**

27 State CEQA Guidelines Appendix G (California Code of Regulations, Title 14, Division  
28 6, Chapter 3, Sections 15000-15387) CEQA Checklist suggests two criteria for  
29 determining the significance of impacts related to energy:

30 Would the Project:

- 31 (a) Result in potentially significant environmental impact due to wasteful, ineffi-  
32 cient, or unnecessary consumption of energy resources, during construction or  
33 operation?
- 34 (b) Conflict with or obstruct a state or local plan for renewable energy or energy  
35 efficiency?

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

41 **EN-1:** Result in potentially significant environmental impacts due to wasteful, inefficient,  
42 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<sub>2</sub>e) emissions estimated as 3,291 metric tons of CO<sub>2</sub>e (see Section 3.3, *Greenhouse Gas Emissions*), approximately 322,442 gallons of diesel fuel is estimated to be used for Proposed Project construction over approximately 24 months.<sup>1</sup>

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 gallons or 7,677 barrels) would represent about 0.6 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, and up to 105 employees in the buildout year (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 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 metric tons of CO<sub>2</sub>e per year, for the opening year (from Section 3.3, *Greenhouse*

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

1 *Gas Emissions*), amortized construction plus Project operations would require  
2 approximately 898,939 gallons or 21,403 barrels of diesel fuel annually. This annual  
3 amount represents about 1.7 percent of California's typical weekly production of diesel.

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

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

#### 14 ***Impact Determination***

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

#### 17 ***Mitigation Measures***

18 While no mitigation is required to reduce energy impact, the Proposed Project would  
19 require the use of zero-emission operational equipment by January 1, 2030 per the  
20 following Project Feature, which would improve energy efficiency.

21 **PF AQ-1: Zero-Emission Operational Equipment.** All yard equipment would be  
22 required to be zero emissions by January 1, 2030. Any diesel operations would cease  
23 by December 31, 2029, and would be tracked and enforced once an entitlement is  
24 issued. A 100 percent transition to zero emissions by January 1, 2030 shall be  
25 required, and any non-conforming equipment would be a breach of the Permit/Lease.

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

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

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

38 In the event an Applicable Law comes into effect that requires the cargo-handling  
39 equipment used on site to be zero-emission equipment, the Applicable Law would  
40 govern.

#### 41 ***Residual Impacts***

42 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 acres, 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*). 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 <b>PF AQ-1:</b> Zero-Emission Operational Equipment <b>MM AQ-1:</b> Zero-Emission Cargo-Handling Equipment	Less Than Significant
Alt 1 – No Project		No Impact	Mitigation Not Required	No Impact
Alt 2 – Reduced Project		Less Than Significant	Mitigation Not Required <b>PF AQ-1:</b> Zero-Emission Operational Equipment	Less Than Significant

**3.2.5.5. Mitigation Monitoring**

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 as a condition of approval. PF AQ-1 would also be applied to Alternative 2 (Reduced Project Alternative) as a condition of approval. Mitigation is not applicable to Alternative 1 (No Project) or Alternative 2 (Reduced Project Alternative).

<b>Project Feature</b>	<b>PF AQ-1: Zero-Emission Operational Equipment.</b> 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 would be a breach of the Permit/Lease.
<b>Timing</b>	Prior to January 1, 2030.
<b>Methodology</b>	LAHD will include this Project Feature in lease agreements with Tenant(s).

<b>Mitigation Measure</b>	<b>MM AQ-1: Zero-Emission Cargo-Handling Equipment.</b> 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 Applicable Law comes into effect that requires the cargo-handling equipment used on site to be zero-emission equipment, the Applicable Law would govern.
<b>Timing</b>	At the start of operations or no later than January 1, 2030 depending on feasibility.
<b>Methodology</b>	LAHD will include this mitigation measure in the permit 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.