

# Second-Party Opinion

## Port of Los Angeles Green Bond Framework



### Evaluation Summary

Sustainalytics is of the opinion that the Port of Los Angeles Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021. This assessment is based on the following:



**USE OF PROCEEDS** The eligible categories for the use of proceeds, Renewable Energy, is aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 7.



**PROJECT EVALUATION AND SELECTION** The Port has selected the eligible projects based on their commercial feasibility and alignment with their internal environmental management programme. The Port has confirmed that all projects have undergone an Environmental Impact Review, including stakeholder consultation where applicable, which must conclude negligible environmental disruption from the projects. Sustainalytics considers the Port's project selection process to be in line with market practice.



**MANAGEMENT OF PROCEEDS** The Port intends to refund outstanding bond amounts from previous bond issuances related to eligible projects. Net Proceeds will be applied to redeem the outstanding bonds immediately upon issuance. Sustainalytics considers this to be in line with market practice.



**REPORTING** The Port has reported amounts to be allocated to each eligible project along with details of impact indicators associated with each eligible project financed under the Framework. Sustainalytics views Port of Los Angeles's allocation and impact reporting as aligned with market practice.

**Evaluation Date** July XX, 2024

**Issuer Location** Los Angeles,  
United States

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## Introduction

The Port of Los Angeles (“the Port”, or the “Issuer”) is a department of the City of Los Angeles (also known as the Los Angeles Harbor Department), governed by the Los Angeles Board of Harbor Commissioners, and is one of the busiest seaports in North America. In terms of physical size, the Port covers approximately 7,500 acres of land and water along 43 miles of waterfront. The Port includes both passenger and cargo terminals, including cruise, container, automobile, breakbulk, dry and liquid bulk, and warehouse facilities. The Port is in San Pedro Bay in the San Pedro and Wilmington neighbourhoods of Los Angeles, California, and handles up to 16% of the total international trade volume moving in containers through the US seaports, as of 2023.<sup>1</sup>

The Port of Los Angeles has developed the Port of Los Angeles Green Bond Framework dated July 2024 (the “Framework”) under which it intends to issue green bonds to refund portions of bonds issued previously in 2014 (Series 2014A and Series 2014B), to finance expenditures related to selected green projects. The Framework defines eligibility criteria in the following area:

### 1. Renewable Energy

A list of eligible projects and projected allocations for the 2024 issuance is provided in Appendix 1.

Port of Los Angeles engaged Sustainalytics to review the Framework and provide a Second-Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2021 (GBP).<sup>2</sup> The Framework has been published in a separate document.<sup>3</sup>

### Scope of work and limitations of Sustainalytics’ Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent<sup>4</sup> opinion on alignment of the Framework with current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the Green Bond Principles 2021, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.17, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with representatives of Port of Los Angeles to understand the sustainability impact of its business processes and planned use of proceeds, as well as the management of proceeds and reporting aspects of the Framework. Port of Los Angeles representatives have confirmed that: (1) they understand it is the sole responsibility of Port of Los Angeles to ensure that the information provided is complete, accurate and up to date; (2) they have provided Sustainalytics with all relevant information; and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Framework and should be read in conjunction with it.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Port of Los Angeles.

Sustainalytics’ Second-Party Opinion assesses alignment of the Framework with market standards but provides no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics’ Second-Party Opinion addresses the anticipated impacts of eligible projects but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the issuer.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee their realized allocation towards eligible activities.

<sup>1</sup> Port, “Annual Facts and Figures Card”, at: <https://www.portoflosangeles.org/business/statistics/facts-and-figures>

<sup>2</sup> The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>.

<sup>3</sup> The Port of Los Angeles Green Bond Framework is available on Port of Los Angeles’s website at: <https://www.portoflabonds.org/port-of-los-angeles-bonds-ca/about/esg-program/i1683>

<sup>4</sup> When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument in favor or against the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Port of Los Angeles has made available to Sustainalytics for the purpose of this Second-Party Opinion.

## Sustainalytics' Opinion

### Section 1: Sustainalytics' Opinion on the Port of Los Angeles Green Bond Framework

Sustainalytics is of the opinion that the Port of Los Angeles Green Bond Framework is credible and impactful and aligns with the four core components of the GBP. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
  - The eligible category, Renewable Energy, is aligned with those recognized by the GBP.
  - The Port has communicated to Sustainalytics that refinancing activities under the Framework will be limited to capital expenditures. Therefore, the Framework does not establish a look-back period for refinancing activities.
  - Under the Renewable Energy category, the Port may finance or refinance the acquisition, construction, or installation that include:
    - Solar photovoltaic (PV) panels.
    - Alternative maritime power (AMP), including outlets, electrical distribution and control systems. While Sustainalytics notes that the AMP infrastructure may provide shore power to conventional shipping vessels that are powered by fossil fuels such as heavy fuel oil, low-sulphur heavy fuel oil, or marine diesel oil, Sustainalytics recognizes the positive environmental impact of providing electrical power to ships to reduce their dependence on fossil fuels while at berth, and considers that the investments in AMP infrastructure have the potential to reduce GHG emissions and contribute to the decarbonization of ports. The Issuer estimates that over 58,000 metric tons of carbon dioxide emission reductions were achieved in calendar year 2023 as a result of AMP utilization.
    - Sustainalytics considers expenditures under this category to be aligned with market practice.
- Project Evaluation and Selection:
  - The Port's Project Development Committee has selected projects based on the following: i) commercial feasibility (locational ease, land use, and availability of resources); ii) alignment with the Framework's eligibility criteria; and iii) alignment with the Port's internal environmental management programme, which ensures compliance with all applicable environmental laws and regulations. The Port has also confirmed that all projects are required to include an Environmental Impact Review (EIR), and stakeholder consultation where applicable, which must conclude negligible environmental disruption from the projects.
  - Sustainalytics considers the Port's project evaluation and selection process to be in line with market practice.
- Management of Proceeds:
  - The Port intends to refund the outstanding bond amounts related to eligible projects. Net proceeds will be applied to redeem the outstanding amounts immediately upon issuance.
  - Sustainalytics considers this to be in line with market practice.
- Reporting:
  - The Port has reported amounts to be allocated to each eligible project along with the associated impact indicators for the projects, within the Framework.
  - Sustainalytics considers the Port's allocation and impact reporting to be in line with market practice.

#### Alignment with Green Bond Principles 2021

Sustainalytics has determined that the Port of Los Angeles Green Bond Framework aligns with the four core components of the GBP.

## Section 2: Sustainability Strategy of Port of Los Angeles

### Contribution to Port of Los Angeles's sustainability strategy

The Port's sustainability strategy focuses on the following key environmental areas: i) commitment to environmental stewardship and reduction of air emissions; ii) improving water quality; iii) modernizing facilities; and iv) cultivating the development of new technologies.<sup>5</sup>

In 2006, the Harbor Department of the City of Los Angeles, in partnership with the Port of Long Beach, developed the Clean Air Action Plan (CAAP) with input from the US Environmental Protection Agency, California Air Resources Board (CARB) and South Coast Air Quality Management District (AQMD).<sup>6</sup> The CAAP identifies strategies to reduce pollution from all sources, including ships, trucks, trains, harbor craft and cargo handling equipment. Some of these strategies include an increase in renewable energy generation,<sup>7</sup> use of shore power to reduce emissions from ships at berth,<sup>8</sup> and use of low-emission cargo handling equipment.<sup>9</sup> Owing to the Port's initiatives, since 2005, there has been an 88% reduction in emissions of diesel particulate matter, a 62% reduction in nitrogen oxides emissions and a 97% reduction in sulfur oxides.<sup>10</sup> In 2009, the Port also adopted the Water Resources Action Plan (WRAP) which sets goals to: i) support the attainment of full beneficial uses of harbor waters and sediments by addressing the impacts of past, present and future port operations; and ii) prevent port operations from degrading existing water and sediment quality.<sup>11</sup> Additionally, the Port has adopted the Sustainable City pLAN, a collection of 14 social and environmental initiatives with short- and long-term targets. These targets include a commitment to achieve net zero and divert 100% of waste from landfills by 2050, generate 100% energy from renewable sources by 2045, and source 70% of all water from local sources.<sup>12</sup>

Sustainalytics is of the opinion that the Port of Los Angeles Green Bond Framework is aligned with the Port of Los Angeles's overall sustainability strategy and initiatives and will further its actions on its key environmental priorities.

### Approach to managing environmental and social risks associated with the projects

Sustainalytics recognizes that proceeds from the bonds issued under the Framework will be directed towards eligible projects expected to have positive environmental impact. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible projects may include issues involving land use and biodiversity issues associated with large-scale infrastructure development; emissions effluents and waste generated in construction; community relations and stakeholder participation; and occupational health and safety.

Sustainalytics is of the opinion that the Port is able to manage or mitigate potential risks through implementation of the following:

- To manage risks related to land use and biodiversity associated with large-scale infrastructure development, the Port has an Environmental Management System (EMS) in place, certified with ISO 14001:2015.<sup>13</sup> The EMS promotes continual growth through a step-by-step process: setting goals, implementing actions, monitoring progress and taking action based on progress.<sup>14</sup> Additionally, the Environmental Management Policy<sup>15</sup> has been put in place to ensure compliance with all environmental laws and regulations and to define and establish environmental objectives, targets and management practices. Further, the Port has confirmed that it has conducted an Environmental Impact Review, including stakeholder consultation, to identify and mitigate environmental impact of the selected projects.
- To manage risks associated with emissions, effluents and waste, the Port has implemented a Zero Waste Plan. Through this Plan, several strategies, policies and programmes have been put in place to encourage waste reduction, recycling and waste collection.<sup>16</sup> The Los Angeles Harbor Department Construction and Demolition Waste Management Specifications mandate that each project reuse or recycle a minimum of 80% of inert debris and 65% of the remaining waste generated by construction and demolition.<sup>17</sup>

<sup>5</sup> Port, "Environment", at: <https://www.portoflosangeles.org/environment>

<sup>6</sup> Port, "San Pedro Bay Ports Clean Air Action Plan (CAAP)", at: <https://www.portoflosangeles.org/environment/air-quality/san-pedro-bay-ports-clean-air-action-plan>

<sup>7</sup> Port, "Energy", at: <https://cleanairactionplan.org/strategies/energy/>

<sup>8</sup> Port, "Ships", at: <https://cleanairactionplan.org/strategies/ships/>

<sup>9</sup> Port, "Cargo-Handling Equipment", at: <https://cleanairactionplan.org/strategies/cargo-handling-equipment/>

<sup>10</sup> CAAP, "Strategies", at: <https://cleanairactionplan.org/strategies/>

<sup>11</sup> Port of Los Angeles and Port of Long Beach, "Water Resources Action Plan", at: [https://kentico.portoflosangeles.org/getmedia/d5b77f8e-46e0-46d1-a2b9-8cc15bca75cb/WRAP\\_Final](https://kentico.portoflosangeles.org/getmedia/d5b77f8e-46e0-46d1-a2b9-8cc15bca75cb/WRAP_Final)

<sup>12</sup> City of Los Angeles, "LA's Green New Deal", at: <https://plan.mayor.lacity.gov/>

<sup>13</sup> Port, "Environmental Management System", at: <https://www.portoflosangeles.org/environment/environmental-management-system>

<sup>14</sup> Ibid.

<sup>15</sup> Port, "Environmental Management Policy", at: [Environmental Management Policy | Environment | Port of Los Angeles | Port of Los Angeles](#)

<sup>16</sup> City of Los Angeles Harbor Department, "Zero Waste Plan", at: <https://kentico.portoflosangeles.org/getmedia/8c622c57-2dcb-4ed5-b618-3713d438303b/lahd-zero-waste-plan-2024>

<sup>17</sup> Ibid.

- To mitigate risks associated with community relations and stakeholder participation, the Port leverages its Public Relations division. This department conducts extensive community outreach through workshops, meetings and hearings to provide members of the community with a say in the decision-making process.<sup>18</sup> Moreover, the Port publishes an Annual Continuing Disclosure Report which provides updated financial and operating information for investors' transparency.<sup>19</sup>
- For risks associated with occupational health and safety, the Port has confirmed that it complies with all local laws and regulations with respect to working conditions, including the federally mandated Occupational Health and Safety Act.<sup>20</sup> Further, the Port has communicated that it shares best practices and safety tips regularly to mitigate health and safety hazards related to its operations.
- Sustainalytics notes that the Port's operations are conducted in the US which classifies as a Designated Country of the Equator Principles, implying the presence of robust environmental and social governance systems, legislation and institutional capacity for protecting the environment and communities.<sup>21</sup>

Based on these policies, standards and assessments, Sustainalytics is of the opinion that the Port of Los Angeles has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

### Section 3: Impact of Use of Proceeds

The use of proceeds category is aligned with those recognized by the GBP. Sustainalytics has focused below on where the impact is specifically relevant in the local context.

#### Importance of Alternative Maritime Power (AMP) Infrastructure in Los Angeles

Alternative Maritime Power (or cold ironing, or shore power) is a port-based emissions reduction technology that allows ships at berth to "plug-in" to shoreside electrical power, enabling such ships to turn off their diesel auxiliary engines.<sup>22</sup>

In 2004, the Port opened the world's first berth to run a container ship on shore-side electricity. As of 2024, all container, cruise, and reefer vessels are required to use grid-based power or another CARB-approved emissions control technology while at berth.<sup>23</sup> AMP supports decarbonization and protects local communities by eliminating at-berth ship emissions, conserving fuel, reducing engine noise pollution, and reducing health risks associated with air pollution in port communities.<sup>24,25</sup> As of 2024, the Port has 80 AMP-equipped berths where vessels plug-in and run their onboard systems using electricity.<sup>26</sup> The impact of AMP on emissions reduction is substantial and has helped the Port to reduce diesel particulate matter (DPM) emissions by 88%, Nitrogen oxide (NOx) emissions by 62%, and Sulfur oxide (SOx) emissions by 97% by 2022, versus 2005 levels.<sup>27</sup>

Following the initiative at the Port, the California Air Resources Board approved the At Berth Regulation<sup>28</sup> in 2007 for statewide adoption, under which ocean-going vessels must reduce at-berth emissions by 80%.<sup>29</sup> The update of the At Berth Regulation in 2020 aims to achieve greater emissions reduction from ocean-going vessels while they are docked by expanding coverage to more vessel types, such as roll-on/roll-off vehicle carriers and tankers, which produce a significant portion of fine particulate pollution from ocean-going vessels at berth.<sup>30</sup>

As of 2020, 80% of the global merchant trade by volume was carried out by maritime vessels,<sup>31</sup> contributing more than 2% to total global energy-related CO<sub>2</sub> emissions.<sup>32</sup> Since maritime transportation

<sup>18</sup> Port of Los Angeles, "Sustainability Report", at: <https://kentic.portoflosangeles.org/getmedia/abbaaa8c-af23-412d-9313-175972ace992/POLA-20FY13-14-20Sustainability-20Report-202016-2002-2029>

<sup>19</sup> Port of Los Angeles, "Annual Continuing Disclosure Report", at: <https://kentic.portoflosangeles.org/getmedia/c1ebbf24-5e5f-4598-9ae1-b732c40fba6/FY-2023-Annual-Continuing-Disclosure-Report>

<sup>20</sup> U.S. Department of Labor, "OSH Act of 1970", at: <https://www.osha.gov/laws-regs/oshact/completoeshact>

<sup>21</sup> Equator Principles, "Designated & Non-designated Countries", at: <https://equator-principles.com/designated-countries/>

<sup>22</sup> The Port of Los Angeles, "Alternative Maritime Power", at: <https://www.portoflosangeles.org/environment/air-quality/alternative-maritime-power-%28amp%29>

<sup>23</sup> Ibid.

<sup>24</sup> Maritime Professional, "Alternative Maritime Power Solutions Key to Greener Ports", at: <https://www.maritimeprofessional.com/news/alternative-maritime-power-solutions-greener-384494>

<sup>25</sup> The Port of Los Angeles, "Committed to Clean Air", at: <https://www.portoflosangeles.org/environment/air-quality>

<sup>26</sup> The Port of Los Angeles, "Alternative Maritime Power", at: <https://www.portoflosangeles.org/environment/air-quality/alternative-maritime-power-%28amp%29>

<sup>27</sup> The Port of Los Angeles, "Air Quality Report Card 2022", at: <https://kentic.portoflosangeles.org/getmedia/8ac5fb42-6cd0-4838-bdb3-70f244edabc2/2022-Air-Quality-Report-Card>

<sup>28</sup> California Air Resources Board, "Ocean-Going Vessels At Berth Regulation", at: <https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation>

<sup>29</sup> California Air Resources Board, "Ocean-Going Vessels At Berth Regulation – About", at: <https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation/about>

<sup>30</sup> Sustainable Ships, "Ocean-Going Vessels at Berth Regulation", at: <https://www.sustainable-ships.org/rules-regulations/ogvb>

<sup>31</sup> UNCTAD, "Review of Maritime Transport", (2020), at: [https://unctad.org/system/files/official-document/rmt2020\\_en.pdf](https://unctad.org/system/files/official-document/rmt2020_en.pdf)

<sup>32</sup> IEA, "International Shipping", (2020), at: <https://www.iea.org/reports/international-shipping>

largely runs on marine diesel oil (MDO) and/or heavy fuel oil (HFO), the shore electrical power provides a clean alternative that reduces the need for ships' reliance on such fuels while at berth.

Given the above, Sustainalytics is of the opinion that the Port's investments in AMP infrastructure, including related electrical equipment and systems, under the Framework have the potential to contribute to the reduction of GHG emissions from the port infrastructure in Los Angeles and, more broadly, to the country's GHG emissions reduction targets.

**Contribution to SDGs**

The Sustainable Development Goals were adopted in September 2015 by the United Nations General Assembly and form part of an agenda for achieving sustainable development by 2030. The instruments issued under the Port of Los Angeles Green Bond Framework are expected to advance the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

**Conclusion**

Port of Los Angeles has developed the Port of Los Angeles Green Bond Framework under which it may issue green bonds and use the proceeds to refund portions of bonds issued previously in 2014 (Series 2014A and 2014B), to finance expenditures related to selected green renewable energy projects. Sustainalytics considers that the eligible projects are expected to provide positive environmental impacts.

The Framework outlines processes for tracking, allocation and management of proceeds, and makes commitments for reporting on allocation and impact. Sustainalytics considers that the Port of Los Angeles Green Bond Framework is aligned with Port of Los Angeles's sustainability strategy and that the use of proceeds will contribute to the advancement of UN Sustainable Development Goal 7. Additionally, Sustainalytics considers that the Port of Los Angeles has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects.

Based on the above, Sustainalytics is confident that the Port of Los Angeles is well positioned to issue green bonds and that the Port of Los Angeles Green Bond Framework is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021.

## Appendix 1

Following an examination of Series 2014A bond drawdown statements spanning September 2014 through July 2016, the following amount of proceeds were drawn down from the Port's Construction Fund related to the green bond projects:

<b>Green Project</b>	<b>Green Drawdown (Draft)</b>	<b>Percentage of 2014A bonds</b>
B. 100 – Wharf – South Extension – AMP	\$1,031,542	0.5%
B. 212-216 – AMP Phase II	\$3,524,954	1.7%
B. 121-126 – AMP	\$3,307,683	1.6%
B. 401-406 – AMP	\$28,300,407	13.9%
B. 230-232 – AMP	\$6,048,254	3.0%
<b>Total</b>	<b>\$42,212,840</b>	<b>20.8%</b>

Following an examination of requisition statements spanning December 2010 through July 2014 which support the commercial paper drawdowns which were refunded by the Series 2014B bonds, the following amount of proceeds were related to the green bond projects:

<b>Green Project</b>	<b>Green Drawdown (Draft)</b>	<b>Percentage of 2014B bonds</b>
B. 91-93 World Cruise Center AMP	\$205,512	0.2%
B. 102 Wharf AMP	\$4,935,315	5.5%
B. 144 & 145-147 AMP	\$11,039,593	12.4%
B. 93 A&B Cruise Terminal Solar Power Generation	\$3,094,328	3.5%
B. 136-139 AMP	\$9,625,512	10.8%
B. 93 World Cruise Center AMP	\$6,331,271	7.1%
<b>Total</b>	<b>\$35,231,531</b>	<b>39.5%</b>

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