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Executive Director

April 24, 2013

Shelby Livingston, Chief
Climate Change Program Planning and Management Branch
California Air Resources Board
1001 I Street, 6th Floor
Sacramento, CA 95812

Dear Ms. Livingston:

SUBJECT: CAP AND TRADE AUCTION PROCEEDS INVESTMENT PLAN

The Port of Los Angeles (Port) would like to first commend the California Air Resources Board (ARB) on its continued efforts to reduce air emissions and improve public health throughout California. ARB and the Port have a successful history of working together on efforts such as the Clean Air Action Plan (CAAP), Drayage Truck Rule/Clean Truck Program, and enforcement of ARB regulations/Port requirements. The Port would like to propose investment opportunities for Cap-and-Trade Auction Proceeds that build on this successful partnering and that will help the State to further the goals and objectives of the California Global Warming Solutions Act (Assembly Bill 32 (AB32)) in reducing greenhouse gases (GHGs). We believe our proposals will provide an excellent opportunity to contribute Cap-and-Trade Auction proceeds to the reduction of greenhouse gas emissions in disadvantaged communities, one of the stated goals of your plan and the program. In addition to helping to develop technologies to reduce emissions in low income areas, this proposed investment will help support local jobs in Southern California.

The Port has identified and outlined below the following three key investment areas that will further the State's goals and objectives of AB32: Zero Emission Technologies, Emissions Reduction Technology Advancement Demonstrations and Energy Efficiency Technologies Studies. As you know, the Port of Los Angeles is located directly adjacent to the predominantly low-income, minority communities of San Pedro and Wilmington, and these communities are disproportionately affected by air pollution from industrial activities occurring throughout the region. Our proposed key investment areas would help develop transportation programs that will directly help these low income areas by reducing mobile source emissions from port-related sources. Further, as described, these programs will have applicability well beyond the immediate port area. Technologies to reduce emissions in low income areas will apply to virtually any urban

area in the state of California. In this way, we believe the Cap-and-Trade program investments we propose can contribute to the study of key emissions reduction and energy management issues everywhere.

Zero Emission Technologies

Both the Port and the State are relying on the development of these technologies to reach future emission reduction goals. These technologies have application well beyond the port, and could apply to any urban area in the state. They have the potential to provide immediate reductions in local criteria pollutant emissions to local low income communities, and they will dramatically improve the carbon footprint from goods movement. Examples of investment opportunities include on-going demonstrations of zero emission trucks, yard tractors and cargo handling equipment.

The Port proposes the following actions for each of the Investment Phases identified in the Draft Cap-and-Trade Auction Proceeds Investment Plan:

- Early Action: Fund technology demonstrations to supplement current Port investments. Incentivize the conversion of gantry cranes to electric.
- Transition: Offset the cost to purchase and incentivize the use of zero emission trucks.
- Transformation: Enhance the charging infrastructure network in and around the Port to further expand the fleet of zero emission trucks serving the Port.

Technology Advancement

In order to push the development of Technology Advancement Demonstrations, the Port of Los Angeles, in partnership with the Port of Long Beach, has developed the Technology Advancement Demonstration Program. This program is designed to push the envelope for reduction of emissions from goods movement, and it has already proven important in the study of hybridization of cargo handling equipment and the study of technologies to reduce emissions and fuel consumption from ocean going vessels. We believe investment of Cap-and-Trade monies in these projects will have a chance to reduce emissions from some of the largest sources of air impacts in all of southern California, thereby having benefits to communities throughout the region.

The Port proposes the following actions for each of the Investment Phases:

- Early Action: Provide funding for new technology demonstrations and testing to supplement TAP investments.
- Transition: Incentivize early adoption of proven technologies.
- Transformation: Incentivize the widespread use of advanced technologies.

Energy Technologies

In order to understand and meet its growing energy needs, the Port is assessing current and future power profiles including *Power Resiliency, Power Availability, Power Quality, Power Cost Effectiveness, and Power Sustainability*. Based on this, the Port will identify energy efficiency projects including energy storage, infrastructure modernization, and electrification projects. The Port will also identify strategies including demand response schemes and cogeneration that will improve its energy infrastructure. Energy infrastructure security is important for all of southern California. Recent severe weather issues in other parts of the country – not to mention the continuing threat of terrorism from abroad and even at home - underscore the importance of this project, and we believe it can serve as a model of the study of these issues throughout the state.

The Port proposes the following actions for each of the Investment Phases:

Early Action: Fund the strategic planning research that assesses the power profile of the Port. Incentivize the implementation of existing energy efficiency technologies identified by the Port.

Transition: Fund potential energy efficiency and energy storage projects.

Transformation: Fund potential renewable cogeneration projects.

Finally, the Port has prepared and attached matrices, which demonstrate our strong support of the *Goals Established by Statute, Investment Principles, and Implementation Principles* provided in that document as described in the Draft Cap-and-Trade Auction Proceeds Investment Plan. Also attached are more detailed descriptions of the investment opportunities and benefits described herein.

We look forward to working with you on this important initiative moving forward and the continued partnership between our organizations. If you have any question please feel free to contact me.

Sincerely,



CHRISTOPHER CANNON
Director of Environmental Management

CC:TD:
ADP No.: 110131-860

Attachments

ENERGY TECHNOLOGIES AT PORTS

INTRODUCTION

This document is meant to outline potential investment opportunities at the Port of Los Angeles the California Air Resources Board (ARB) and Department of Finance should consider while developing the Cap-and-Trade Auction Proceeds Investment Plan. It is recommended that funding be used to supplement the Port's efforts on the development and early implementation of energy technologies in port operations. At any given moment in operations, the Port can have energy demand loads of 50 megavolt amperes (MVA) for various equipment such as cranes, shore powered vessels, refrigerated containers, as well as buildings and other miscellaneous power needs. The Port receives its electricity from an aging electrical grid infrastructure shared by the neighboring communities. This demand is expected to only increase with time for of a number of reasons. First, throughput at the Port is expected to increase over the next few decades. Container forecast for the Port of Los Angeles and Port of Long Beach show that throughput will exceed 30 million twenty-foot equivalent units (TEUs) by 2030. Second, ARB's At-Berth Regulation will increase the amount of shore powered vessels starting in 2014. Each vessel connected to shore power has an average energy demand load of approximately 2 MVA. Third, terminal automation is expected to be more widely used at terminals. Automation at a single terminal can increase energy demand loads by 20 to 25 MVA. Lastly, the Port and its regional partners are relying on and investing into zero emission technologies for trucks and cargo handling equipment to achieve emission reduction goals. The widespread use of such technologies would significantly increase the energy demand load of the Port and the region.

In order to remain competitive, the Port must find ways to service the increased demand in a manner that does not increase capital and operating costs to customers while minimizing the Port's carbon footprint. The Port has identified energy technologies that increase efficiency and increase the use of renewables as a way to accomplish these things while creating local jobs to nearby residents. Local job creation is very important as the Port is located directly adjacent to the communities of San Pedro and Wilmington, which are made up of predominantly minority and low-income residents and are classified as Disadvantaged Communities.

The investments would also build upon ARB and the Port's successful history of working together on efforts such as the Clean Air Action Plan (CAAP), Drayage Truck Rule/Clean Truck Program, and enforcement of ARB regulations/Port requirements. Investments by ARB would support the State in achieving its 2020 greenhouse gas emission targets established by the Global Warming Solutions Act of 2006 (AB 32). As stated in the *California's Clean Energy Plan* "Energy Efficiency and demand response...remain California's top priority for meeting our future energy needs."

INVESTMENT OPPORTUNITIES

In order to understand and meet its growing energy needs, the Port is going to assess current and future power profiles. In doing so, the study will focus on five areas of research: *Power Resiliency, Power Availability, Power Quality, Power Cost Effectiveness, and Power Sustainability*. Based on this, the Port will identify energy efficiency projects (energy storage, infrastructure modernization, electrification projects, etc.) and strategies (demand response schemes, cogeneration, etc.) that will improve its energy infrastructure. For Port energy technologies, Cap and Trade Auction Proceeds can be applied to each of the Investment

Phases identified in the Cap-and-Trade Auction Proceeds Investment Plan Concept Paper: Early Action, Transition and Transformation.

- Early Action:** Fund the strategic planning research that assesses the power profile of the Port. Incentivize the implementation of existing energy efficiency technologies identified by the Port.
- Transition:** Fund potential energy efficiency and energy storage projects.
- Transformation:** Fund potential renewable cogeneration projects.

BENEFITS

The investment opportunities above would result in a reduction of GHG emissions in an industry that has high and ever increasing energy demands and in an area located adjacent to Disadvantaged Communities that are disproportionately affected by pollution. Investments by ARB to assist the Port in the efforts in these areas would have wide reaching emission reductions as initiatives can be duplicated at all California ports as well as ports around the world. The Port can serve as a model for studying and implementing energy efficiency and renewable energy projects at ports and in areas of need such as high-density urban areas.

Energy efficiency projects would reduce energy consumption and therefore reduce costs to Port customers. This would keep the Port competitive and keep cargo in California rather than be diverted to the east coast with the opening of the Panama Canal. Goods movement is a major engine that greatly supports California's economy. The Port accounts for \$6 billion of local and State taxes and 1.2 million jobs in the State. Keeping and/or growing the Port's market share of cargo is key to the economic vitality of California.

ZERO EMISSION TECHNOLOGIES AT PORTS

INTRODUCTION

This document outlines potential investment opportunities at the Port of Los Angeles that the California Air Resources Board (ARB) and Department of Finance should consider while developing the Cap-and-Trade Auction Proceeds Investment Plan. It is recommended that auction proceeds be used to supplement the Port's efforts on the development and deployment of zero emission technologies in goods movement. Investments in these areas would have wide reaching greenhouse gas (GHG) and criteria pollutant emission reductions, as initiatives can be replicated at ports, in California and around the world. These initiatives can also serve as a model for areas of need such as Disadvantaged Communities or urban areas. Additionally, the investments would build upon ARB and the Port's successful history of working together on efforts such as the Clean Air Action Plan (CAAP), Drayage Truck Rule/Clean Truck Program, and enforcement of ARB regulations/Port requirements. The investment opportunities discussed here would leverage the Port's current and upcoming technology initiatives and Cap-and-Trade Auction Proceeds to assist each agency in meeting their synergistic goals. These goals include those established by the Port in its San Pedro Baywide Standards as well as ARB's *Vision for Clean Air: A Framework for Air Quality and Climate Planning*, which states, "a transition to zero- and near-zero emission technologies is necessary to meet 2023 and 2032 air quality standards and 2050 climate goals." In addition to the Vision for Clean Air, these benefits also directly support the three of the goals of ARB's *Sustainable Freight Transport Initiative*: Move goods more efficiently and with zero/near-zero emissions; Transition to cleaner, renewable transportation energy sources; and Support healthy, livable communities.

INVESTMENT OPPORTUNITIES

In the area of zero emission technologies, the Port has identified two primary Key Investment Areas, which are described below. Each of these Key Investment Areas reduces GHG and criteria pollutant emissions in Disadvantaged Communities and contains elements that can be applied to each of the Investment Phases identified in the Cap-and-Trade Auction Proceeds Investment Plan Concept Paper: Early Action, Transition and Transformation.

1. **Zero Emission Technologies.** As stated above, both the Port and ARB are relying on the development of zero emission technologies to reach future emission reduction goals. In order to drive the commercialization of these technologies, the Port, together with the Port of Long Beach, prepared the document titled, "Roadmap for Moving Forward with Zero Emissions Technologies at the Ports of Long Beach and Los Angeles" (attached). This report describes the path forward to testing zero emission technologies at the ports and includes near- and long-term goals to ensure that technologies are available in the future. Through its Technology Advancement Program (TAP) demonstrations battery-electric on-road trucks and yard tractors as well as a hydrogen fuel cell hybrid on-road truck is underway. These demonstrations will prove the technologies for future deployment of zero emission trucks in short-haul drayage operations (approximately ten to fifteen miles round trip). The use of these trucks in short-haul drayage can facilitate broader acceptance and use of technologies throughout the Los Angeles metropolitan area. This aligns with the regional efforts to have zero emission trucks operate along the Interstate 710 corridor which transects Disadvantaged Communities. Additionally, marine terminal operators are exploring the conversion of diesel gantry cranes to

electric. The technology is available and being used at ports in other countries. Initial discussions with operators show that there is a near-term desire to convert 40 rubber tired gantry cranes and 30 rail mounted gantry cranes to electric power.

Early Action: Fund technology demonstrations to supplement Port investments. Incentivize the conversion of gantry cranes to electric.

Transition: Offset the cost to purchase and incentivize the use of zero emission trucks.

Transformation: Enhance the charging infrastructure network in and around the port to further expand the fleet of zero emission trucks serving the port.

- 2. Technology Advancement.** To push the development of new technologies, the Port, in partnership with the Port of Long Beach, has developed the TAP. The purpose of the TAP is to accelerate the commercialization of new technologies by funding demonstration projects and testing. The TAP allots \$3 million per year for technology projects. In addition to zero emission technologies, the TAP is also actively looking into hybridization and technologies that reduce emissions and fuel consumption from ocean going vessels.

Early Action: Provide funding for new technology demonstrations and testing to supplement TAP investments.

Transition: Incentivize early adoption of proven technologies.

Transformation: Incentivize the widespread use of advanced technologies.

BENEFITS







The investment opportunities above would result in a reduction of GHG and criteria pollutant emissions in Disadvantaged Communities that are disproportionately affected by pollution. While great strides have been made, the Port hopes to continue reducing emissions while remaining the busiest container port in North America and a major economic engine in the state and nation. Keeping or growing its market share of cargo allows the Port to supply good paying, local jobs.







To achieve its emission reduction goals, the Port is relying heavily on and investing in the development of zero emission technologies. Similar to ARB, the Port needs these technologies to achieve its long-term emission reduction goals. The Port will continue to be a driver of zero emission technologies and is optimistic that the technologies will develop into viable options in port operations in the future. However, the current timing of availability is speculative. ARB Cap-and-Trade Investments in zero emission technologies can expedite this by accelerating the acceptance and use of these technologies.






Successful, accelerated implementation of zero emission truck technologies at the Port can serve as a model of zero emission corridors or zero emission zones that can be implemented in other Disadvantaged Communities and/or in high density urban areas. The technologies that are demonstrated at the Port can be applied in a wide array of applications including delivery trucks, buses, and domestic hauling. Additionally, implementation mechanisms can be emulated and localized in specific areas of need. This would target populations that are disproportionately affected by pollution.







Further, ARB investments can spur transformational change in trucking on a state-wide level. Port initiatives can serve as catalysts for the use of zero emission technologies, but Port trucking needs are not at a scale large enough to drive the market or to force large original engine manufacturers (OEMs) to invest in these technologies. ARB investment into zero emission technologies signifies that this is a statewide priority. This can serve as a driving force behind a truly transformation change in the transportation sector that is needed to achieve state goals and meet federal standards.

ZERO EMISSION TECHNOLOGIES AT THE PORT OF LOS ANGELES







Disadvantaged Communities		
Requirement	Supports?	Description
Statute requires that at least 25% of program funding expended be directed to projects that benefit Disadvantaged Communities		Investment in zero emission technologies would benefit areas that are disproportionately affected by pollution and areas with socioeconomically disadvantaged communities. The Port is surrounded by the predominantly low-income, minority communities of San Pedro and Wilmington. These are identified as "Top 10% Highest Scoring Zip Codes" (see figure A-1) which represent disadvantaged communities in the State of California.
Goals Established by Statute		
Goals Established by Statute	Supports?	Description
Maximize economic, environmental, and public health benefits to the state.		Investment in zero emission technologies including trucks and cargo handling equipment such as cranes and yard tractors would increase local manufacturing and port-related jobs and would reduce air pollution and health risk in and around the Port and throughout the region.
Foster job creation by promoting in-state GHG emissions reduction projects carried out by California workers and businesses.		Investment in zero emission technologies would stimulate jobs and economic growth around the Port and throughout the State as many technology vendors are located near the Port. Additionally, the Port is a major economic engine in the region and state. The use of new technologies helps the Port maintain and grow market share which results in job growth throughout the entire state.
Complement efforts to improve air quality.		The air quality would be significantly improved by implementing zero-emission equipment. The reduction of air emissions at the Port directly supports the local goals and initiatives of the South Coast Air Quality Management District and the California Air Resources Board.
Direct investment toward the most disadvantaged communities and households in the state.		Investment in zero emission technologies would benefit disadvantaged communities. The Port is surrounded by the predominantly low-income, minority communities of San Pedro and Wilmington. These are identified as "Top 10% Highest Scoring Zip Codes" (see figure A-1) which represent disadvantaged communities in the State of California.
Provide opportunities for businesses, public agencies, nonprofits, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions.		All stakeholders would benefit from opportunities to generate, demonstrate, and incorporate zero emissions technologies in and around the Port.









Lessen the impacts and effects of climate change on the state's communities, economy, and environment.		The Port of Los Angeles' Greenhouse Gas (GHG) footprint would be significantly reduced implementing zero emission equipment.
Investment Principles		
Principle	Supports?	Description
Investments must further the purposes of AB 32. All investment proposals must show how a proposed project will further the regulatory purposes of AB 32, to be eligible to receive potential funding.		Zero emission technologies represent an Eligible Investment under "Low Carbon Transportation and Infrastructure", which focuses on reduction of GHG emissions through the development of state-of-the-art systems to move goods and freight, advanced technology vehicles and vehicle infrastructure.
Investments should focus on projects that achieve near-term GHG emission reductions.		The proposed near-term GHG emission reduction strategies include supplementing existing Port demonstration investments including on-going demonstrations battery-electric on-road trucks and yard tractors as well as a hydrogen fuel cell hybrid on-road truck. Additionally, incentivizing the conversion of gantry cranes to electric can be done in the near term to achieve GHG emission reductions.
Investments should focus on projects that support development of the transformative technologies/approaches needed to achieve the State's long-term GHG reduction goals.		Zero emission technologies represent the transformative technologies that can have significant impacts on how goods are moved. Equipment tested and used at the Port can be duplicated at any other port in California and can help the State in achieving its longterm GHG goals.
Investments should be prioritized toward sectors with both the highest GHG emissions and the greatest need for future reductions to meet GHG goals.		The Ports are generally looked at as one of the highest GHG producers in the State due to the tremendous amount of goods movement that occurs at each Port. The Port's latest Expanded GHG Inventory shows 11,315,080 mtons of CO2 of port-related emissions were generated in 2010. As a result, the Port of Los Angeles represents a great opportunity for reducing GHGs.
State agencies should seek to maximize investments in and benefits to disadvantaged communities wherever possible.		Investment in zero emission technologies would benefit disadvantaged communities. The Port is surrounded by the predominantly low-income, minority communities of San Pedro and Wilmington. These are identified as "Top 10% Highest Scoring Zip Codes" (see figure A-1) which represent disadvantaged communities in the State of California.







<p>Investments should foster job creation and maximize economic benefits for California wherever possible.</p>		<p>The Port is a major economic engine in the region and the State. The Port accounts for approximately one million jobs in the State and three million nationwide. The Port also generates \$6 billion of tax revenue in the State. The use of advanced technologies helps the Port keep and grow its market share thus retaining and increasing jobs in California. Additionally, many technology vendors are located in the region which can create additional jobs if widely used.</p>
<p>Investments should be coordinated with other local, State, and federal funding programs and avoid duplicative efforts. The State should coordinate its clean energy, transportation, and climate change investments to maximize their impacts.</p>		<p>The Port has a history of collaborating with local, State and federal agencies to leverage funding, resources and expertise. The Port has most recently teamed with local port, regulatory, and transportation agencies to form the Countywide Zero Emission Truck Collaborative to coordinate zero emission technology efforts in the region.</p>
<p>Funding should leverage private and other government investment to the maximum extent possible.</p>		<p>Investments in demonstration projects would leverage Port funding that has already been or will be used. Incentives for implementation would be used to offset the incremental cost of purchasing zero emission technologies. It is anticipated that users would cost share the purchase of each piece of equipment.</p>
Implementation Principles		
Principle	Supports?	Description
<p>State agencies should ensure information on funding opportunities is easily accessible to potential applicants, including those in disadvantaged communities.</p>		<p>The Port's Community Relations Section meets with Neighborhood Councils and Environmental Committees in San Pedro and Wilmington approximately 3 times each week. Their role is to represent, report, and answer questions about the Port. In addition to the Port's website, the Port distributes a quarterly newsletter, "On the LA Waterfront", of 70,000 mailers to members, businesses and groups in the surrounding communities.</p>
<p>State agencies should ensure that any funding solicitations, requests for proposals, notices of funding availability, etc. provide clear description of project requirements, timelines, deliverables, and the criteria that the State agency will use to evaluate proposals.</p>		<p>The Port's Contracts & Purchasing Division provides a fair, objective selection process for all agreements and procurement opportunities. The Division actively seeks the participation of all qualified vendors, consultants and contractors in the Port's contracting processes and is available to assist in contractor selection, administration and monitoring.</p>




<p>State agencies should ensure that information about the projects being funding is readily accessible to the public.</p>		<p>The Port’s Community Relations Section meets with Neighborhood Councils and Environmental Committees in San Pedro and Wilmington approximately 3 times each week. Their role is to represent, report, and answer questions about the Port. In addition to the Port’s website, the Port distributes a quarterly newsletter, “On the LA Waterfront”, of 70,000 mailers to members, businesses and groups in the surrounding communities.</p>
<p>State agencies should ensure information on program outcomes, including greenhouse gas emission reduction benefits, is reported to the Department of Finance in a timely manner and is easily accessible to the public.</p>		<p>The Port prepares annual emission inventories that are available to the public. Through this, the Port would ensure information on program outcomes, including greenhouse gas emission reduction benefits, is reported to the Department of Finance in a timely manner and is easily accessible to the public.</p>
<p>State agencies should establish or confirm that policies and procedures are in place before expending funds to ensure efficient and timely implementation in accordance with statutory requirements. These should include procedures for monitoring and evaluating projects in progress.</p>		<p>The Port would ensure efficient and timely implementation in accordance with statutory requirements including procedures for monitoring and evaluating projects in progress.</p>
<p>State agencies should include the necessary components for accountability (e.g., measureable objectives, recordkeeping provisions, State access to documents for program reviews and audits, and consequences for non-performance).</p>		<p>The Port would ensure that the necessary components for accountability were provided in a timely manner.</p>
<p>State agencies should provide support to disadvantaged communities to help ensure the statutory investment requirements for disadvantaged communities are met.</p>		<p>One of the Strategic Objectives in the Port of Los Angeles Strategic Plan is to “Increase Stakeholder and Community Awareness and Support”. In order to satisfy that objective, the Port would ensure the statutory investment requirements for disadvantaged communities are met.</p>
<p>State agency funding proposals to the Department of Finance should specify the agency’s costs for administering projects as well as the administrative/overhead costs for funding recipients in order to provide the full accounting of administrative costs.</p>		<p>The Port would support the State’s Department of Finance to ensure that a full accounting of administrative costs were provided.</p>

TECHNOLOGY ADVANCEMENT AT THE PORT OF LOS ANGELES







Disadvantaged Communities		
Requirement	Supports?	Description
Statute requires that at least 25% of program funding expended be directed to projects that benefit Disadvantaged Communities		Investment in technology advancement would benefit areas that are disproportionately affected by pollution and areas with socioeconomically disadvantaged communities. The Port is surrounded by the predominantly low-income, minority communities of San Pedro and Wilmington. These are identified as "Top 10% Highest Scoring Zip Codes" (see figure A-1) which represent disadvantaged communities in the State of California.
Goals Established by Statute		
Goals	Supports?	Description
Maximize economic, environmental, and public health benefits to the state.		Investment in technology advancement for ships, trucks, trains, cargo handling equipment and harbor craft would increase local manufacturing and port-related jobs and would reduce air pollution and health risk in and around the Port and throughout the region.
Foster job creation by promoting in-state GHG emissions reduction projects carried out by California workers and businesses.		Investment in technology advancement would stimulate jobs and economic growth around the Port and throughout the State as many technology vendors are located near the Port. Additionally, the Port is a major economic engine in the region and state. The use of new technologies helps the Port maintain and grow market share which results in job growth throughout the entire state.
Complement efforts to improve air quality.		The air quality would be significantly improved by the advancement of new emission reduction technologies. The reduction of air emissions at the Port directly supports the local goals and initiatives of the South Coast Air Quality Management District and the California Air Resources Board.
Direct investment toward the most disadvantaged communities and households in the state.		Investment in technology advancement would benefit areas that are disproportionately affected by pollution and areas with socioeconomically disadvantaged communities. The Port is surrounded by the predominantly low-income, minority communities of San Pedro and Wilmington. These are identified as "Top 10% Highest Scoring Zip Codes" (see figure A-1) which represent disadvantaged communities in the State of California.
Provide opportunities for businesses, public agencies, nonprofits, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions.		All stakeholders would benefit from opportunities to generate, demonstrate, and incorporate advanced technologies in and around the Port.







Lessen the impacts and effects of climate change on the state's communities, economy, and environment.		The Port's Greenhouse Gas (GHG) footprint would be significantly reduced with the use of advanced technologies.
Investment Principles		
Principle	Supports?	Description
Investments must further the purposes of AB 32. All investment proposals must show how a proposed project will further the regulatory purposes of AB 32, to be eligible to receive potential funding.		The Port's technology advancement efforts represent an Eligible Investment under "Low Carbon Transportation and Infrastructure", which focuses on reduction of GHG emissions through the development of state-of-the-art systems to move goods and freight, advanced technology vehicles and vehicle infrastructure.
Investments should focus on projects that achieve near-term GHG emission reductions.		The proposed near-term GHG emission reduction strategies include the provision of funding for new technology demonstrations and testing to supplement the Port's Technology Advancement Program investments.
Investments should focus on projects that support development of the transformative technologies/approaches needed to achieve the State's long-term GHG reduction goals.		Demonstration projects for new technologies represent the first steps to transforming the transportation sector in a way that can have significant impacts on how goods are moved. Equipment tested and used at the Port can be duplicated at any other port in California and can help the State in achieving its longterm GHG goals.
Investments should be prioritized toward sectors with both the highest GHG emissions and the greatest need for future reductions to meet GHG goals.		The Ports are generally looked at as one of the highest GHG producers in the State due to the tremendous amount of goods movement that occurs at each Port. The Port's latest Expanded GHG Inventory shows 11,315,080 mtons of CO2 of port-related emissions were generated in 2010. As a result, the Port of Los Angeles represents a great opportunity for reducing GHGs.
State agencies should seek to maximize investments in and benefits to disadvantaged communities wherever possible.		Investment in technology advancement would benefit areas that are disproportionately affected by pollution and areas with socioeconomically disadvantaged communities. The Port is surrounded by the predominantly low-income, minority communities of San Pedro and Wilmington. These are identified as "Top 10% Highest Scoring Zip Codes" (see figure A-1) which represent disadvantaged communities in the State of California.
Investments should foster job creation and maximize economic benefits for California wherever possible.		The Port is a major economic engine in the region and the State. The Port accounts for approximately one million jobs in the State and three million nationwide. The Port also generates \$6 billion of tax revenue in the State. The use of advanced technologies helps the Port keep and grow its market share thus retaining and increasing jobs in California. Additionally, many technology vendors are located in the region which can create additional jobs if widely used.
Investments should be coordinated with other local, State, and federal funding programs and avoid duplicative efforts. The State should coordinate its clean energy,		The Port has a history of collaborating with local, State and federal agencies to leverage funding, resources and expertise. The Port serves on the Technology Advancement Program (TAP) Advisory Committee with the Port







<p>transportation, and climate change investments to maximize their impacts.</p>		<p>of Long Beach, SCAQMD, ARB and EPA Region IX to evaluate technologies. The Port has most recently teamed with the Port of Long beach, and local regulatory and transportation agencies to form the Countywide Zero Emission Truck Collaborative to coordinate zero emission technology efforts in the region.</p>
<p>Funding should leverage private and other government investment to the maximum extent possible.</p>		<p>Technology projects funded by the TAP require a minimum cost share of 50% by outside parties such as private companies. Funding Cap and Trade Proceeds would be used to supplement the Port and outside funding.</p>
<p>Implementation Principles</p>		
<p>Principle</p>	<p>Supports?</p>	<p>Description</p>
<p>State agencies should ensure information on funding opportunities is easily accessible to potential applicants, including those in disadvantaged communities.</p>		<p>The Port’s Community Relations Section meets with Neighborhood Councils and Environmental Committees in San Pedro and Wilmington approximately 3 times each week. Their role is to represent, report, and answer questions about the Port. In addition to the Port’s website, the Port distributes a quarterly newsletter, “On the LA Waterfront”, of 70,000 mailers to members, businesses and groups in the surrounding communities.</p>
<p>State agencies should ensure that any funding solicitations, requests for proposals, notices of funding availability, etc. provide clear description of project requirements, timelines, deliverables, and the criteria that the State agency will use to evaluate proposals.</p>		<p>The Port’s Contracts & Purchasing Division provides a fair, objective selection process for all agreements and procurement opportunities. The Division actively seeks the participation of all qualified vendors, consultants and contractors in the Port’s contracting processes and is available to assist in contractor selection, administration and monitoring.</p>
<p>State agencies should ensure that information about the projects being funding is readily accessible to the public.</p>		<p>The Port’s Community Relations Section meets with Neighborhood Councils and Environmental Committees in San Pedro and Wilmington approximately 3 times each week. Their role is to represent, report, and answer questions about the Port. In addition to the Port’s website, the Port distributes a quarterly newsletter, “On the LA Waterfront”, of 70,000 mailers to members, businesses and groups in the surrounding communities.</p>
<p>State agencies should ensure information on program outcomes, including greenhouse gas emission reduction benefits, is reported to the Department of Finance in a timely manner and is easily accessible to the public.</p>		<p>The Port prepares annual emission inventories that are available to the public. Through this, the Port would ensure information on program outcomes, including greenhouse gas emission reduction benefits, is reported to the Department of Finance in a timely manner and is easily accessible to the public.</p>
<p>State agencies should establish or confirm that policies and procedures are in place before expending funds to ensure efficient and timely implementation in accordance with statutory requirements. These should include procedures for monitoring and evaluating projects in progress.</p>		<p>The Port would ensure efficient and timely implementation in accordance with statutory requirements including procedures for monitoring and evaluating projects in progress.</p>




<p>State agencies should include the necessary components for accountability (e.g., measureable objectives, recordkeeping provisions, State access to documents for program reviews and audits, and consequences for non-performance).</p>		<p>The Port would ensure that the necessary components for accountability were provided in a timely manner.</p>
<p>State agencies should provide support to disadvantaged communities to help ensure the statutory investment requirements for disadvantaged communities are met.</p>		<p>One of the Strategic Objectives in the Port of Los Angeles Strategic Plan is to “Increase Stakeholder and Community Awareness and Support”. In order to satisfy that objective, the Port would ensure the statutory investment requirements for disadvantaged communities are met.</p>
<p>State agency funding proposals to the Department of Finance should specify the agency’s costs for administering projects as well as the administrative/overhead costs for funding recipients in order to provide the full accounting of administrative costs.</p>		<p>The Port would support the State’s Department of Finance to ensure that a full accounting of administrative costs were provided.</p>

ENERGY TECHNOLOGIES AT THE PORT OF LOS ANGELES

Disadvantaged Communities		
Requirement	Supports?	Description
Statute requires that at least 25% of program funding expended be directed to projects that benefit Disadvantaged Communities		Investment in energy technologies would benefit areas that are disproportionately affected by pollution and areas with socioeconomically disadvantaged communities. The Port is surrounded by the predominantly low-income, minority communities of San Pedro and Wilmington. These are identified as "Top 10% Highest Scoring Zip Codes" (see figure A-1) which represent disadvantaged communities in the State of California.
Goals Established by Statute		
Goals	Supports?	Description
Maximize economic, environmental, and public health benefits to the state.		Investment in energy technologies including energy storage, infrastructure modernization and electrification projects would increase local manufacturing and port-related jobs and reduce air pollution and health risk in and around the Port and throughout the region.
Foster job creation by promoting in-state GHG emissions reduction projects carried out by California workers and businesses.		Investment in energy technologies would stimulate jobs and economic growth around the Port and throughout the State as many technology vendors are located near the Port. Additionally, the Port is a major economic engine in the region and state. The use of new technologies helps the Port maintain and grow market share which results in job growth throughout the entire state.
Complement efforts to improve air quality.		Investment in energy efficiency projects at the Port would directly support the State's goals associated with AB 32.
Direct investment toward the most disadvantaged communities and households in the state.		Investment in zero emission technologies would benefit areas that are disproportionately affected by pollution and areas with socioeconomically disadvantaged communities. The Port is surrounded by the predominantly low-income, minority communities of San Pedro and Wilmington. These are identified as "Top 10% Highest Scoring Zip Codes" (see figure A-1) which represent disadvantaged communities in the State of California.
Provide opportunities for businesses, public agencies, nonprofits, and other community institutions to participate in and benefit from statewide efforts to reduce greenhouse gas emissions.		All stakeholders would benefit from opportunities to incorporate energy efficiency, energy storage, and renewable energy projects in and around the Port.

Lessen the impacts and effects of climate change on the state's communities, economy, and environment.		The Port of Los Angeles' Greenhouse Gas (GHG) footprint would be significantly reduced by incorporating energy efficiency, energy storage, and energy generation projects at the Port.
Investment Principles		
Principle	Supports?	Description
Investments must further the purposes of AB 32. All investment proposals must show how a proposed project will further the regulatory purposes of AB 32, to be eligible to receive potential funding.		The Port of Los Angeles' energy technologies represent an Eligible Investment under "Energy Efficiency and Clean Energy", which focuses on reducing GHG emissions through energy efficiency, clean and renewable energy generation, distributed renewable energy generation, transmission and storage, and other related actions, including, at industrial facilities.
Investments should focus on projects that achieve near-term GHG emission reductions.		The proposed near-term GHG emission reduction strategies include funding the strategic planning research that assesses the power profile of the Port and incentivizing the implementation of existing energy efficiency technologies identified by the Port.
Investments should focus on projects that support development of the transformative technologies/approaches needed to achieve the State's long-term GHG reduction goals.		The proposed transformative GHG emission reduction strategies include funding potential energy efficiency and energy storage projects, and renewable energy projects.
Investments should be prioritized toward sectors with both the highest GHG emissions and the greatest need for future reductions to meet GHG goals.		The Port is the busiest container port in North America. It is anticipated that the energy demand will continue to increase as container throughput increases. The Port's latest Expanded GHG Inventory shows 11,315,080 mtons of CO2 of port-related emissions were generated in 2010. As a result, the Port of Los Angeles represents a great opportunity for reducing GHGs.
State agencies should seek to maximize investments in and benefits to disadvantaged communities wherever possible.		Investment in zero emission technologies would benefit areas that are disproportionately affected by pollution and areas with socioeconomically disadvantaged communities. The Port is surrounded by the predominantly low-income, minority communities of San Pedro and Wilmington. These are identified as "Top 10% Highest Scoring Zip Codes" (see figure A-1) which represent disadvantaged communities in the State of California.
Investments should foster job creation and maximize economic benefits for California wherever possible.		The Port of Los Angeles and local businesses would benefit from opportunities to incorporate energy efficiency, energy storage, and renewable energy projects in and around the Port.
Investments should be coordinated with other local, State, and federal funding programs and avoid duplicative		The Port has a history of collaborating with local, State and federal agencies to leverage funding, resources and expertise. The Port has

efforts. The State should coordinate its clean energy, transportation, and climate change investments to maximize their impacts.		teamed with the Port of Long Beach, SCAQMD, ARB and EPA Region IX on important air quality initiatives such as the Clean Air Action Plan and will continue to do so with its energy initiatives.
Funding should leverage private and other government investment to the maximum extent possible.		Funding provided to the Port would be leveraged with private investors to the maximum extent possible to ensure that energy efficiency, energy storage, and renewable energy projects are initiated at the Port.
Implementation Principles		
Principle	Supports?	Description
State agencies should ensure information on funding opportunities is easily accessible to potential applicants, including those in disadvantaged communities.		The Port's Community Relations Section meets with Neighborhood Councils and Environmental Committees in San Pedro and Wilmington approximately 3 times each week. Their role is to represent, report, and answer questions about the Port. In addition to the Port's website, the Port distributes a quarterly newsletter, "On the LA Waterfront", of 70,000 mailers to members, businesses and groups in the surrounding communities.
State agencies should ensure that any funding solicitations, requests for proposals, notices of funding availability, etc. provide clear description of project requirements, timelines, deliverables, and the criteria that the State agency will use to evaluate proposals.		The Port's Contracts & Purchasing Division provides a fair, objective selection process for all agreements and procurement opportunities. The Division actively seeks the participation of all qualified vendors, consultants and contractors in the Port's contracting processes and is available to assist in contractor selection, administration and monitoring.
State agencies should ensure that information about the projects being funding is readily accessible to the public.		The Port's Community Relations Section meets with Neighborhood Councils and Environmental Committees in San Pedro and Wilmington approximately 3 times each week. Their role is to represent, report, and answer questions about the Port. In addition to the Port's website, the Port distributes a quarterly newsletter, "On the LA Waterfront", of 70,000 mailers to members, businesses and groups in the surrounding communities.
State agencies should ensure information on program outcomes, including greenhouse gas emission reduction benefits, is reported to the Department of Finance in a timely manner and is easily accessible to the public.		The Port prepares annual emission inventories that are available to the public. Through this, the Port would ensure information on program outcomes, including greenhouse gas emission reduction benefits, is reported to the Department of Finance in a timely manner and is easily accessible to the public.
State agencies should establish or confirm that policies and procedures are in place before expending funds to ensure efficient and timely implementation in accordance with statutory requirements. These should include procedures		The Port would ensure efficient and timely implementation in accordance with statutory requirements including procedures for monitoring and evaluating projects in progress.

for monitoring and evaluating projects in progress.		
State agencies should include the necessary components for accountability (e.g., measureable objectives, recordkeeping provisions, State access to documents for program reviews and audits, and consequences for non-performance).		The Port would ensure that the necessary components for accountability were provided in a timely manner.
State agencies should provide support to disadvantaged communities to help ensure the statutory investment requirements for disadvantaged communities are met.		One of the Strategic Objectives in the Port of Los Angeles Strategic Plan is to “Increase Stakeholder and Community Awareness and Support”. In order to satisfy that objective, the Port would ensure the statutory investment requirements for disadvantaged communities are met
State agency funding proposals to the Department of Finance should specify the agency’s costs for administering projects as well as the administrative/overhead costs for funding recipients in order to provide the full accounting of administrative costs.		The Port would support the State’s Department of Finance to ensure that a full accounting of administrative costs were provided.