Climate Action
0-50-100-Roots
www.sfclimateaction.org

What Does This Mean to the Port?

San Francisco is meeting the challenge of climate change with leading policies, programs, and partnerships. To achieve our greenhouse gas emission reduction goals by 2025, San Francisco has developed the formula 0, 50, 100, Roots. These climate goals are:

- 0% Waste To Landfills
- 50% Clean Transportation
- 100% Renewable Energy
- Roots = Trees, Native Gardens, Compost

In 2014, the White House recognized the City of San Francisco for, "some of the most aggressive climate and sustainability targets in the nation, covering a broad range of sectors, including energy efficiency, renewable energy, transportation, water, green infrastructure, and waste. With robust goals to measure progress, San Francisco aims to reduce greenhouse gas emissions by 25 percent below 1990 levels by 2017, and 40 percent by 2025."

The Port of San Francisco is an avid partner with the entire City family in its efforts to fight climate change. In fact, the Port was the first recipient of the City's Climate Action Champion award in 2008.

The Port began as a cornerstone of settlement for the City of San Francisco and, indeed, the entire watershed that feeds the Bay. Today we are among the most diverse ports on the west coast of the Americas with activities such as ship repair, excursion and commuter ferries, commercial fishing and fish processing, cargo, and recreational marinas. We are also the only city department whose core function lies at the land/water interface. In that role lies one of our least visible, yet most important functions, maintaining the seawall that protects downtown San Francisco from the Bay. Projected sea level rise will affect the Port directly and

significantly, demanding major capital investment in the sea wall, but also alternative strategies to managing our finger piers and development overall.

In the midst of an extreme drought we are also reminded that climate change is a global issue, without boundaries and with the broadest of implications. Changes in temperature, precipitation, and in ocean acidity are placing unprecedented stresses on ecosystems of all scales. Science increasingly tells us that these stresses will transform the global ecology in profound ways. Ports always have represented our human instinct to transform the earth to meet our needs. Ports are the nexus of the movement of the earth's materials such as wood and steel, products and waste, as well as the water and energy to operate a Port. More than ever we are compelled to bring a new consciousness and a deeper wisdom to this instinct.

0% Zero Waste

Zero waste is the goal of sending zero waste to landfills by diverting it through recycling and composting. San Francisco recycles and composts more than any other city in the US, consequently our emissions from waste have decreased significantly since 1990. The City has several programs that have moved us closer to this goal.

City Programs

- Mandatory Recycling and Composting
- Plastic Bag Ban and Styrofoam Ban
- Textiles Recycling Program

Port

The Port has joined in this effort to divert waste from landfills and to improve waste management at the point of collection. In 2012, the Port Commission adopted the ***Zero Waste Event Policy*** that prohibits the use of plastic bottles, plastic food ware and plastic bags at large events. Required of scores of events, this policy helps to eliminate waste, improve composting, and keep plastics out of the San Francisco Bay.

In 2011 the Port initiated a pilot test at Fisherman's Wharf of the ***BigBelly*** waste and recycling stations. These are waste collection units with a solar powered compactor that have several advantages. The compaction allows for the collection of more material before they are full. The wireless technology informs staff when the receptacles are full, which reduces the number of truck trips by more than 50%. This also reduces the problems of overflowing receptacles and scavenging of waste by birds and people. Both problems create an unsightly mess in a tourist area and increase the debris that is carried to the bay by wind or stormwater runoff. The Port

has 16 BigBellys at Fisherman's Wharf for trash, recycling, and organics. The Port also is planning to install them at the newly constructed Brannan Street Wharf and several other locations.

Several Port tenants have demonstrated leadership in achieving zero waste. The San Francisco Giants have excelled with a diversion rate of 96% (L. Baer Earth Day Press Conference 2015) and they are still working to improve. Pier 45 is home to one of the largest fish processing operations on the west coast. The organic waste is significant and every processor diverts its fish waste from the landfill, sending it either composting or processing into another product. The Port also encourages its development partners to maximize the recycling of construction materials. In particular, older buildings can yield great opportunities to reclaim and re-mill old growth wood.

The Port's Zero Waste strategy is to continue on this path to minimize waste and divert as much waste from the landfill as possible through recycling and composting.

To achieve this, Port staff can:

- **Train new employees on waste separation and Zero Waste goals;**
- **Monitor all Port operations and locations for opportunities to improve waste diversion;**
- **Monitor and support tenant efforts to achieve Zero Waste;**
- **Work specifically with Port restaurants to maximize proper management of food waste.**
- **Include zero waste provision in leases, licenses, operating agreements, and development agreements.**

50% Clean Transportation

Transportation is a major source of greenhouse gas emissions. Though our cars are becoming more fuel efficient, people continue to drive more and the emissions from vehicles are increasing. To tackle traffic congestion and the problems of emissions from vehicles, we need to commute more sustainably. Whether going to work, school, or the grocery store, clean transportation means public transit, walking, bicycling, etc. If we must drive, it will help to choose clean vehicles and green fuels, as well as to carpool for commuting and work trips, where possible.

City Programs

- MUNI Forward
- Transit Effectiveness Project
- Vision Zero SF
- Transit First Policy
- Clean Fleets
- Alternative Fuel Vehicles

Port

The Port actively supports Clean Transportation in several ways. Our ***clean fleet*** improves with each vehicle purchase, relying on electric, hybrid, and alternative fuel for passenger vehicles. The Port recently used a portion of its fleet to conduct a successful pilot test of **renewable diesel** as an alternative to petroleum diesel. Mayor Lee's commitment to renewable diesel will help the City's fleet of trucks and heavy duty vehicles become cleaner and reduce their carbon footprint. The Port also supports the City's ***Transit First*** policy by encouraging the use of alternate modes of transportation for working and commuting. Bicycling, walking and public transit are used by many Port staff throughout the work day and more than 75% of Port staff commute to work by some form of cleaner transportation. The Port also has invested in shoreside power at Pier 27 and Pier 70 which allows large ocean going vessels at berth or in drydock to run their auxiliary power from the electric grid rather than their diesel engines. We also have supported several tenant efforts to promote clean transportation, including the production of biodiesel and the development of hydrogen fuel cell technology for ferry service.

To stay on the path to Clean Transportation the Port can continue to support Transit First and the development of clean fleets.

To promote Clean Transportation, Port staff can:

- **Train new employees on the Transit First policy;**
- **Further develop the clean fleet through vehicle and fuel purchasing decisions;**
- **Encourage tenants to develop clean fleets and embrace the Transit First policy;**
- **Consider bold ideas as they emerge (e.g., renewable diesel, hybrid ferries).**

100% Renewable Energy

Among the most effective actions we can take to meet our climate goals are to choose 100% renewable electricity, increase the energy efficiency of our buildings, and reduce our consumption of natural gas.

The City has several programs to help people commit to renewable energy and to reduce their energy usage.

City Programs

- Clean Power SF
- GoSolarSF
- GreenFinance SF
- Existing Commercial Buildings Energy Performance Ordinance
- City's solar generating capacity = 7.6 megawatts.

Port

The Port has a strong history of supporting energy conservation and efficiency as well as the development of renewable energy. The Port participated on the Mayor's Urban Wind Power Task Force and Biodiesel Access Task Force. We have a solar generating capacity of 1.8 megawatts distributed over several sites including Pier 15, Pier 1, Pier 96, and AT&T Park. In 2011 the Port completed a major energy efficiency upgrade at eighteen facilities. Port staff also implemented a boiler maintenance and replacement program. All but one boiler has been replaced or refurbished.

The Port can use maintenance and new construction projects to ensure robust support for renewable electricity, energy efficiency, and energy conservation.

To promote Renewable Energy, Port staff can:

- **Consider installation of solar panels during roof repairs and replacements;**
- **Develop a streamlined roadmap for permitting and licensing for installation of renewable energy projects.**

To promote Energy Efficiency and Energy Conservation, Port staff can:

- **Complete and maintain registration of all subject buildings with the EPA Energy Performance Benchmarking Program;**
- **Monitor energy consumption at buildings;**
- **Train and encourage staff to conserve energy;**
- **Use maintenance projects as opportunities to introduce more energy efficient fixtures and equipment.**
- **Work with developers to promote maximum energy and conservation in projects.**

Roots

'Roots' means healing the planet by finding ways to pull carbon dioxide out of the air, creating ***a carbon sink***. Planting trees, removing concrete, and planting a native garden all enhance the ability of the soil to act as a carbon sink.

San Francisco is known for its natural beauty. Our parks and waterfront are well loved by residents and visitors. Our urban green spaces provide essential services such as cleaning our air, filtering and slowing flood waters, and sequestering greenhouse gas emissions. We are also learning how the application of compost to rangelands can catalyze the sequestration of carbon in the soil.

Port

The Port is responsible for 7.5 miles of property, much of it with open space and the Port is committed to managing this open space responsibly, to enhance public access and the quality of the environment. The Port gardeners developed an inventory of all of its trees. They also emphasize native plants and drought resistance in their plant selections.

The Port can support efforts to create carbon sinks by maximizing zero waste efforts and employing carbon friendly landscaping and open space management.

To promote Roots and carbon sequestration, Port staff can:

- **Continue to maximize the segregation of organic, compostable waste (the green bin);**
- **Support open space;**
- **Maintain healthy native landscapes and trees;**
- **Employ carbon-friendly landscape practices.**
- **Work with developers to develop carbon-friendly landscape designs and promote carbon sequestration.**