






Port of San Diego 2016 Maritime Emissions Inventory

Maritime Sources of Emissions

-  **Ocean-going Vessels** (e.g., large cargo and cruise ships) equipped for travel across the open ocean.
-  **Commercial Harbor Craft** (e.g., tug, ferry, commercial fishing boats) used for in-harbor work.
-  **On-road Vehicles** (e.g., freight trucks, cruise passenger buses, shuttles, taxis).
-  **Rail operations** transporting goods to and from the Port of San Diego.
-  **Cargo Handling Equipment** (e.g., forklifts, reach stackers, yard tractors) used to move containers, etc.

The Port of San Diego recently finalized an assessment of emissions associated with maritime activities based on operations which occurred in 2016. Maritime emissions are associated with goods and passenger movement along the Port's waterfront. The 2016 air emissions inventory is compared to a baseline established in 2006. Since then, air pollutants and greenhouse gases that impact public health and climate change have been reduced.

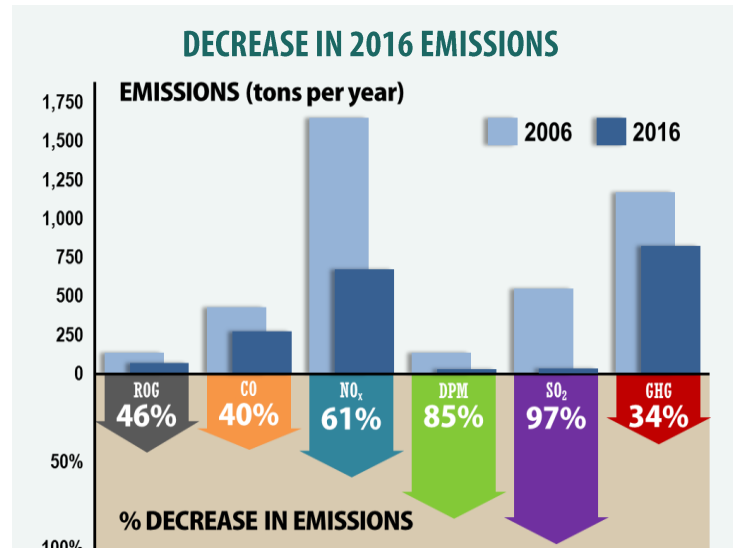


Highlights of the 2016 Emissions Inventory

Compared to 2006, air pollutants have decreased between 40% and 97% and GHG emissions fell 34%. GHG emissions from maritime activity account for roughly 13% of the Port's entire greenhouse gas emissions in 2016. Further reductions are expected as the Port and its tenants adopt cleaner technologies for freight movement.







Key findings in 2016 include:

- The largest sources of maritime-related emissions include harbor craft, ocean-going vessels, and trucks.
- The Port's efforts to provide shorepower to visiting ocean-going vessels, promote slower speeds within the vicinity of San Diego Bay, and banning older drayage trucks from operating at the terminals has reduced vessel and vehicle emissions.
- State regulations requiring low sulfur marine fuels, shorepower, and cleaner engines for maritime vehicles and equipment have improved air quality.
- Maritime-related activities transported more cargo and passengers per emissions generated in 2016.



For comparison purposes, GHG emissions are shown divided by 100.

Air Pollutants and Emissions:

-  **ROG** Reactive Organic Gases
-  **CO** Carbon Monoxide
-  **NO_x** Nitrogen Oxides
-  **DPM** Diesel Particulate Matter
-  **SO₂** Sulfur Dioxide
-  **GHG** Greenhouse Gases

2016 Specific Reductions

Maritime activity is a source of DPM and NO_x which can have public health and environmental impacts. Since 2006, DPM and NO_x emissions have been significantly reduced compared to 2016 activities.

