Response to Commissioners Comments

Board of Harbor Commissioners Meeting - October 3, 2024

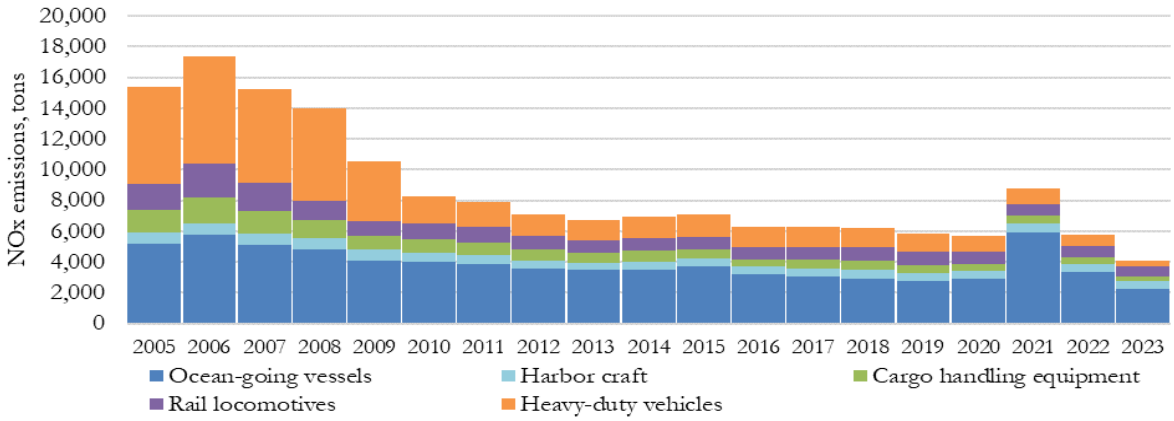
2023 Air Emissions Inventory

This is to provide additional information on the 2023 Air Emissions Inventory (EI), which was presented to the Board of Harbor Commissioners (Board) on October 3, 2024.

General Background to understanding the slides: In the 2023 EI, 2023 emissions are compared to 2005, 2017, and 2022. Note that 2005 was the first year of the Clean Air Action Plan (CAAP), 2017 is the latest CAAP update, and historically the EI compares the current year to the previous year. A question was asked during the Board Meeting regarding slides 2 through 4, specifically for oxides of nitrogen (NOx) emissions comparing 2017 against 2023 and 2022 against 2023. The slides are intended to be taken independently of each other. Specifically on slides 2 and 3, the 29% reduction between 2022 and 2023 is not a subset of the 34% reduction between 2017 to 2023. Each year is unique in its activity and emissions characteristics. For example, the same ships don't show up, the truck call distribution is different, the cargo handling equipment changes, throughputs change, etc. The reason 2022 is relatively the same (-5%) compared to 2017 is because of the elevated NOx emissions due to the anchorage issues from 2021 that impacted the first two quarters.

The figure below from the 2023 EI shows the tons of NOx emissions for each source category for each pollutant by year to show the trend over time.

**Figure ES.1: $NO_x$ Emissions Trend by Source Category**

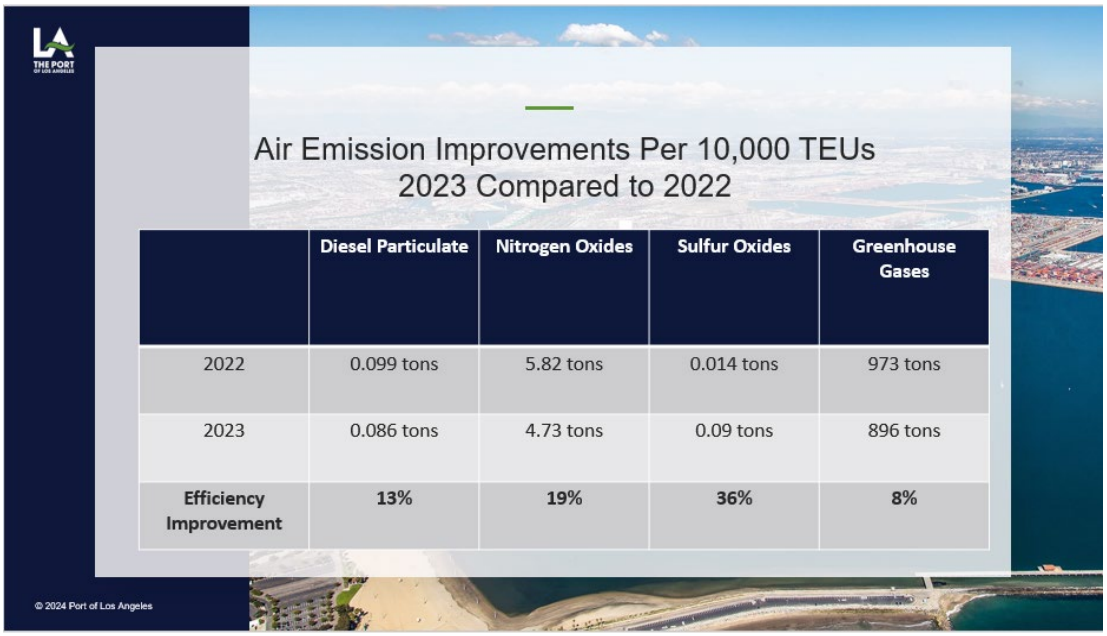



Additionally, the table below shows the tons of emissions for each source category for each pollutant as well as the percentage changes.

Table 9.1: Emissions Comparison

| EI Year | $PM_{10}$ tons | $PM_{2.5}$ tons | DPM tons | $NO_x$ tons | $SO_x$ tons | CO tons | HC tons | $CO_2e$ tonnes |
|---|---|---|---|---|---|---|---|---|
| 2023 | 90 | 83 | 75 | 4,078 | 82 | 1,377 | 285 | 773,331 |
| 2022 | 122 | 113 | 98 | 5,771 | 137 | 1,623 | 340 | 964,145 |
| 2017 | 113 | 104 | 91 | 6,222 | 113 | 1,597 | 343 | 895,848 |
| 2005 | 982 | 845 | 816 | 15,394 | 4,830 | 3,532 | 819 | 1,017,091 |
| Previous Year (2022-2023) | -26% | -26% | -24% | -29% | -40% | -15% | -16% | -20% |
| 2023 vs 2017 | -20% | -20% | -18% | -34% | -28% | -14% | -17% | -14% |
| CAAP Progress (2005-2023 | -91% | -90% | -91% | -74% | -98% | -61% | -65% | -24% |

Question re 2023 compared to 2022: A new slide (slide 13) has been added to the Board presentation which compares the 2023 emissions associated with moving 10,000 TEUs to the 2022 emissions associated with moving 10,000 TEUs. This metric allows us to illustrate/track efficiency improvements year over year without looking at total throughput, which changes year over year.




Question re Slide 15 that illustrates the San Pedro Bay Ports Regional Contributions. As noted by the Board, the San Pedro Bay Ports have significantly exceeded regional reductions in diesel particulate matter (DPM) while reducing NOx at a level slightly higher than, but roughly commensurate to, regional reductions. This can be attributed to significant DPM reductions due

to more stringent international fuel requirements for ships, Vessel Speed Reduction, Shore Power and the Clean Truck Program. Concerning NOx, the region has reduced annual tons of NOx from 375,647 tons to 98,772 tons. On Road sources have been historically the focus of engine and fuel improvements by state and federal agencies therefore they have the biggest reductions to regional NOx contributions, followed by the San Pedro Bay Ports. The Ports have held relatively the same contributions while the other two categories (Stationary & Area and Other Mobile) have raised their regional NOx contribution.