

# San Pedro Bay Ports' Clean Trucks Rate - Environmental Issues

*Presentation and comments by Richard Havenick, Chair - Coastal San Pedro Neighborhood  
Council Environment & Sustainability Committee, September 2, 2021*

# San Pedro Bay Clean Trucks Rate - Meetings

- The Ports hosted two public stakeholder workshops in August and September to solicit feedback on their plan to charge a per-container fee to incentivize cleaner trucks, the Clean Truck Fund (CTF) Rate and CTF spending plan.
- Two alternative technologies were discussed as potentials to be incentivized and funded through the CTF, Low NOx (Natural Gas) and Zero Emission (electric).
- The type of technology to be incentivized & funded will establish a significant public policy and environmental policy that could drive significant advancements in the near term.

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# San Pedro Bay Clean Trucks Rate - Background

- Discussion of the CTF continued after postponement due to Covid disruption from originally planned implementation in Fall of 2020.
- The rate under consideration is \$10 per Twenty Foot Equivalent Unit (\$20 for the 40' containers, the predominant), which would raise about **\$130 Million** based on 2020 volume (truck transport only and before subtracting administrative costs).
- Total 2020 TEU volume for both Ports was 17,326,710; approximately 75% moved by truck from the Ports (roughly 25% by rail).
  - Total 2020 POLA TEU volume was 9,213,395 TEU, down 1.33%.
  - Total 2020 POLB TEU volume was 8,113,315 TEU, a 6.3% annual increase.
- Port of Long Beach announced in May the plan to exempt Low NOx Natural Gas trucks from the fee.

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- Heavy Duty On Road trucks contribute the greatest amount of Greenhouse Gas (CO2) of all Port source categories.
- Complete Fleet Replacement Costs are in the range of between \$3 Billion for NG and \$6 Billion for ZE (**warning: Estimated costs are highly variable and provided for order of magnitude comparison**):
  - **Estimated** costs to replace POLA and POLB drayage fleet with NG equipment is **\$3.4 Billion** or greater (17,000 trucks times \$200,000 average cost per truck, excluding infrastructure costs for fueling network).
  - **Estimated** costs to replace drayage fleet with ZE equipment is **\$5.95 Billion** (17,000 trucks times \$350,000 average cost per truck, excluding infrastructure costs for charging network).

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# San Pedro Bay Clean Trucks Rate - Considerations

- The California Air Resources Board stated that low NOx technology results in greatly reduced nitrogen oxides necessary to comply with a Year 2031 Environmental Protection Administration requirement: “Heavy-duty trucks comprise the largest source of NOx in the state, contributing nearly a third of all statewide NOx emissions as well as more than a quarter of total statewide diesel particulate matter (PM) emissions . . . we need to reduce NOx emissions from on-road heavy-duty trucks by 85 percent . . . by 2031.”
- Natural Gas is 85 to 90% Methane, a Greenhouse Gas with potential for climate warming many times greater than carbon dioxide and which results from Natural Gas production, transportation, storage (“Methane Slip”), and when burned as fuel.

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- Renewable Natural Gas, also discussed, is also 85 to 90% **methane** and emits **carbon dioxide** when burned as fuel, though the carbon may be offset through the renewable production cycle (“carbon-neutral”).
- However, because methane is a greenhouse gas many times more powerful than carbon dioxide (estimated 80+ times more powerful over 20 years), any methane leaks along the RNG supply chain risks additional significant contribution to climate warming well beyond the damage of carbon dioxide.

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- The methane slip or leakage is believed to be between 1.4% and 4.9% by volume of Natural Gas consumed.
- Capital equipment such as heavy-duty trucks can be expected to be in service no less than eight to ten years.
- Polling from first meeting: Over 50% say no funding of NG.

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- Senate Bill 974 by Assemblyman Lowenthal in 2007 proposed a \$30/Container fee in California Ports which would equal roughly \$59 in current dollars, as shipping costs have increased by a factor of 16 or more.
- A study to establish the range of marginal container fee that could be charged without reducing demand would provide the projected dollar amount(s) that could be charged with no negative impact to POLA/POLB demand or revenues and would likely be several magnitudes above the \$10 under consideration.

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# San Pedro Bay Clean Trucks Rate - Considerations

- **A fee-per-container raised by the Ports invested in ZE technology would drive advancements in the near term and reduce per unit costs which is likely to influence government and business policy well beyond California.**
- Heavy-duty truck transition to ZE would reduce San Pedro Ports' Greenhouse Gas emissions by almost one half and significantly reduce the greater climate/environmental damage resulting from methane.

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# San Pedro Bay Clean Trucks Rate – Background and Considerations - References

[https://www.portoflosangeles.org/references/2021-news-releases/news\\_081221\\_ctpworkshop](https://www.portoflosangeles.org/references/2021-news-releases/news_081221_ctpworkshop)

<https://www.portoflosangeles.org/business/statistics/container-statistics>

[https://www.logisticsmgmt.com/article/port\\_of\\_los\\_angeles\\_and\\_port\\_of\\_long\\_beach\\_end\\_2020\\_with\\_strong\\_volume\\_gain](https://www.logisticsmgmt.com/article/port_of_los_angeles_and_port_of_long_beach_end_2020_with_strong_volume_gain)

<https://www.fleetowner.com/emissions-efficiency/article/21701527/tesla-announces-semi-prices-raises-reservation-cost-to-20000>

<https://spectrumnews1.com/ca/la-west/environment/2021/01/21/california-launches-project-800-to-get-hundreds-of-electric-semis-on-the-road-in-2021>

[https://ww2.arb.ca.gov/sites/default/files/classic/msprog/hdlownox/files/HD\\_NOx\\_Omnibus\\_Fact\\_Sheet.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/msprog/hdlownox/files/HD_NOx_Omnibus_Fact_Sheet.pdf)

<https://www.portofoakland.com/files/PDF/Zero%20Emissions%20Truck%20Feasibility%20Study%20Final.pdf>

[https://www.greencarreports.com/news/1094087\\_why-arent-natural-gas-powered-long-haul-semi-trucks-selling-better](https://www.greencarreports.com/news/1094087_why-arent-natural-gas-powered-long-haul-semi-trucks-selling-better)

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[www.greencarreports.com/news/1094087\\_why-arent-natural-gas-powered-long-haul-semi-trucks-selling-better](http://www.greencarreports.com/news/1094087_why-arent-natural-gas-powered-long-haul-semi-trucks-selling-better)

<https://www.greenbiz.com/article/7-things-know-about-renewable-natural-gas>

<https://www.wri.org/research/renewable-natural-gas-climate-strategy-guidance-state-policymakers>

<https://energypost.eu/gas-infrastructure-leaks-methane-fix-it-or-accelerate-to-clean-energy/>

<https://theconversation.com/the-us-natural-gas-industry-is-leaking-way-more-methane-than-previously-thought-heres-why-that-matters-98918>

<https://www.portoflosangeles.org/business/supply-chain/rail>

[https://www.joc.com/port-news/us-ports/port-long-beach/long-beach-hopeful-major-rail-hub-will-win-final-permits-2022\\_20210902.html](https://www.joc.com/port-news/us-ports/port-long-beach/long-beach-hopeful-major-rail-hub-will-win-final-permits-2022_20210902.html)

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