



South Coast Air Quality Management District

Airport Memorandum of Understanding Working Group Meeting

October 8, 2026



Annual Report Requirements

One MOU Schedule

Commercial Ground Support Equipment (GSE)

- LGB conducts an annual GSE survey and reports on June 1st for the preceding calendar year, starting in 2021 and continuing through 2032.
- Reports cover:
 - Fleet emissions performance relative to MOU targets
 - Emission inventories
 - Legacy GSE phase-out



2024 and 2025 Progress Highlights

✓ 2031 performance
target achieved in 2025

89% reduction in
emissions

95% of legacy GSE
eliminated



Schedule No. 1 – Commercial GSE Performance



Airport-wide Commercial GSE Performance Trends

- 2017 Baseline – 1.50 grams per horsepower-hour (g/hp-hr) of nitrogen oxides (NO_x)
- 2020 – 1.12 g/hp-hr
- 2021 – 0.74 g/hp-hr
- 2022 – 0.68 g/hp-hr
- 2023 – 0.55 g/hp-hr
- **2024 – 0.45 g/hp-hr**
- **2025 – 0.38 g/hp-hr**

✓ MOU 2023 Target – 0.93 g/hp-hr (achieved in 2021)

✓ MOU 2031 Target – 0.44 g/hp-hr (achieved in 2025)

Schedule No. 1 – Commercial GSE Emissions

Airport-wide Commercial GSE Emissions Trends

- 2017 Baseline – 23.7 tons of NOx
- 2020 – 13.3 tons of NOx
- 2021 – 6.1 tons of NOx
- 2022 – 5.6 tons of NOx
- 2023 – 3.1 tons of NOx
- **2024 – 2.5 tons of NOx**
- **2025 – 2.5 tons of NOx**



✓ Emissions in 2024 and 2025 are 89% lower than baseline.

Schedule No. 1 – Commercial GSE Fleet

Commercial GSE Fleet Fuel Mix (in-use, ≥ 25 horsepower equipment only)

Year	Gasoline		LPG/Propane		Diesel				Electric	Total Fleet
	Legacy	2010+	Legacy	2010+	Legacy	Tier 3	Tier 4	Onroad		
2017	36	13	15	3	84	3	11	0	155	320
2020	24	29	12	1	24	15	31	12	96	244
2021	3	21	11	3	7	9	25	6	75	160
2022	3	23	9	2	6	7	24	7	83	164
2023	4	28	4	1	2	2	28	8	96	173
2024	4	30	4	1	1	1	25	8	108	182
2025	2	31	4	2	0	2	26	7	110	184

✓ Only 9 units of legacy GSE remained in-use at Long Beach Airport in 2024 and only 6 remained in 2025, down from 135 in the MOU baseline.

✓ Roughly 59% in-use Commercial GSE were electric in 2024 → 60% in 2025.

Commercial Tenant Updates

Since the previous Working Group Meeting...

- Delta Air Lines' ground support provider completed electrification of their GSE fleet in Oct. 2025 (effects will be clear in 2026 report).



(Image per Delta Air Lines)



(Image per Delta Air Lines)

Additional Non-MOU Airport Developments

JetZero 30-Year Lease (Oct. 2025)

Pioneering next-generation aircraft design;
Developing a new blended-wing body focused on
operational efficiency, fuel waste reduction, and
aircraft electrification.



Concourse Enhancement (Apr. 2026)

Ground breaks on \$37 million enhancement,
including sustainability upgrades related to
back-up generation and energy-efficient
lighting

Additional Non-MOU Airport Developments (cont.)



Carbon Accreditation (Nov. 2025)

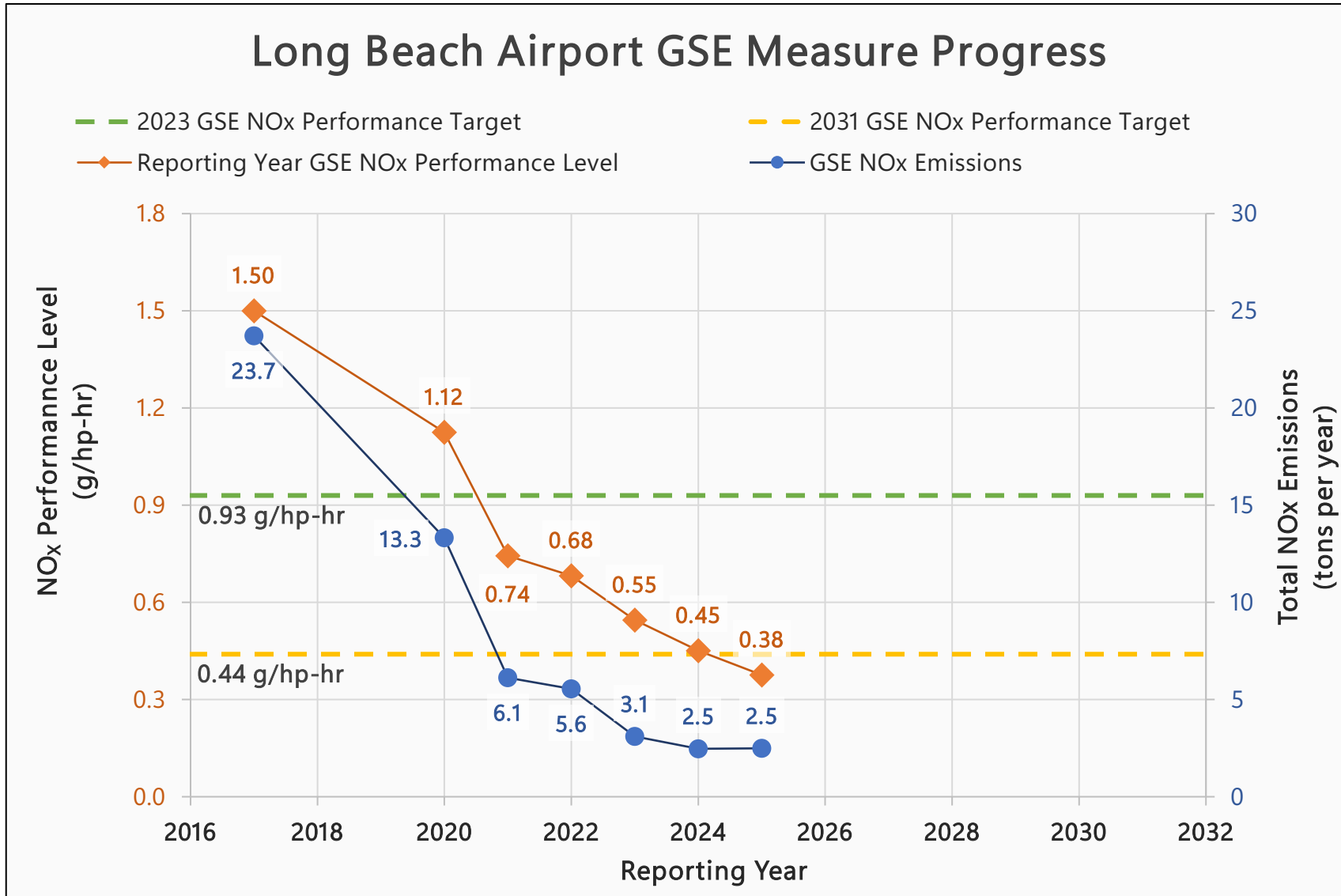
LGB reaches 56% reduction in carbon emissions relative 2016 baseline. Solar canopy project (started operation in 2024) brought down electricity purchased by LGB by roughly 10% in its first year of operation.



Airport Ops Fleet Electrification (2025-2026)

Using FAA AIP funding, Airfield Ops obtained six all-electric Ford F150 Lightning trucks supporting daily work around the airfield.

Summary and Looking Forward



2026 and beyond...

- Further electrification will continue to push down performance and emissions
- Maintenance of 2031 MOU target is expected



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airport

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