

Mobile Sources



Final Rule: Mandatory Reporting of Greenhouse Gases (74 FR 56260)

Under the Mandatory Reporting of Greenhouse Gases (GHGs) rule, all vehicle and engine manufacturers¹ outside of the light-duty sector² must report emission rates of carbon dioxide (CO₂), nitrous oxide (N₂O), and methane (CH₄) from the products they supply. EPA is not requiring reporting of mobile source emissions or activity data from fleet operators or state and local governments.

EPA incorporated the GHG reporting requirements for vehicle and engine manufacturers into the long-standing conventional (“criteria”) pollutant testing and reporting requirements under Title II of the Clean Air Act. Wherever possible, we based the new reporting requirements on existing measurement methods and plan to use existing data collection systems.

How Is This Source Category Defined and What GHGs Must Be Reported?

Manufacturers of the following mobile source categories...	must report the following GHGs...	in units of...	for new vehicles and engines certified under or subject to the Code of Federal Regulations (CFR) Title 40, including amendments to these parts.
Highway heavy-duty vehicles (chassis-certified)	CO ₂ , N ₂ O ^a , CH ₄	grams per mile	86 ³
Highway heavy-duty engines	CO ₂ , N ₂ O ^a , CH ₄	grams per bhp-hour	86, 1065
Highway motorcycles	CO ₂ , N ₂ O ^a , CH ₄	grams per kilometer	86
Nonroad diesel engines	CO ₂ , N ₂ O ^a , CH ₄	grams per kilowatt-hour	89, 1039, 1065
Marine diesel engines	CO ₂ , N ₂ O, ^{a,b} CH ₄ ^b	grams per kilowatt-hour	94, 1042, 1065
Locomotive engines	CO ₂ , N ₂ O ^a , CH ₄	grams per bhp-hour	1033, 1065
Nonroad small spark ignition engines	CO ₂ , N ₂ O ^a , CH ₄	grams per kilowatt-hour	90, 1054, 1065
Nonroad large spark ignition engines	CO ₂ , N ₂ O ^a , CH ₄	grams per kilowatt-hour	1048, 1065
Marine spark ignition engines/personal watercraft	CO ₂ , N ₂ O ^a , CH ₄	grams per kilowatt-hour	1045, 1065
Snowmobiles	CO ₂ , N ₂ O ^a , CH ₄	grams per kilowatt-hour	1051, 1065
Off-highway motorcycles and ATVs	CO ₂ , N ₂ O ^a , CH ₄	grams per kilometer	86, 1051
Aircraft engines ^c	CO ₂ , NO _x	grams per kilonewton	87

^a N₂O requirements only apply to new engines equipped with NO_x aftertreatment technology.

^b Except C3 marine engines.

¹ The term “manufacturer” in this information sheet means a company that is subject to EPA’s mobile source emission certification requirements. This category primarily includes companies that manufacture engines domestically and foreign manufacturers that import engines into the U.S. market. In some cases, it also includes domestic companies that are required to meet EPA certification requirements when they import foreign-manufactured engines.

² The light-duty sector includes cars, SUVs, small pickup trucks and vans.

³ As part of a subsequent rule published on October 28, 2010 (75 FR 66434), EPA corrected an editorial error in the provisions related to Part 86 in the final Mandatory Reporting of GHGs Rule (74 CFR 56260).

^c Only applies to turbofan and turbojet engines in production in 2011 with a rated output greater than 26.7 kilonewtons.

These new GHG reporting requirements do not apply to manufacturers treated as a “small business” or “small-volume manufacturers” under EPA’s existing mobile source emission regulations.⁴ Unique definitions of “small” apply to manufacturers of different mobile source categories. See the respective sections of CFR for details.

How Should GHG Emissions Be Calculated?

To measure emission rates, manufacturers must use prescribed testing and measurement procedures, most of which are already used for existing criteria pollutant reporting requirements. These procedures vary by mobile source category and pollutant. For more information on these procedures, please see the preamble and the amendments to the respective sections of CFR.

What Information Must Be Reported?

Manufacturers must report GHG emission rates of new vehicles and engines at the same time and through the same process as they currently follow for criteria pollutant emission certification. Reporting requirements apply beginning with the 2011 model year for CO₂ and the 2012 model year for CH₄. N₂O reporting requirements apply beginning with the 2013 model year or when the manufacturer introduces NO_x aftertreatment technology, whichever is later.

In place of N₂O and/or CH₄ test data for each engine family, manufacturers may submit alternative test data and/or other information that will give EPA a reasonable basis for estimating the engine’s emission rates. For more information on this provision, see the preamble.

For More Information

This document is provided solely for informational purposes. It does not provide legal advice, have legally binding effect, or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits in regard to any person. The series of information sheets is intended to assist reporting parties in understanding key provisions of the final rule.

Visit EPA’s Web site (www.epa.gov/climatechange/emissions/ghgrulemaking.html) for more information, including the final preamble and rule, additional information sheets on specific industries, the schedule for training sessions, and other documents and tools. For questions that cannot be answered through the Web site, please contact us at: ghgmrr@epa.gov.

⁴ Small business manufacturers will continue to be subject to measurement and/or reporting requirements for compliance with existing regulations.