

**Outline of draft regulation for test procedure of fuel and electric energy
consumption for heavy duty vehicles
(Draft partial amendments of “Public Notice that Prescribes Details of Safety
Regulations for Road Transport Vehicles”, etc.)**

1. Background

In the face of climate change issues, there have been growing global trends for carbon neutrality. In Japan, in October 2020, the Government committed the carbon neutrality in 2050, followed by "the Action against Global Warming" in October 2021, which raised the target of a 46% reduction of greenhouse gases (over 2013 year). On the other hand, the transportation sector has a 18% share of whole CO₂ emissions in Japan, and about 90% of CO₂ emissions from the transportation sector consist of road transportation (i.e., owner cars, trucks, and buses). Furthermore, heavy-duty vehicles account for about half of CO₂ emissions from the road transportation.

In these contexts, towards carbon neutrality, Japan needs to take actions such as promoting electrified heavy-duty vehicles (Pure electric vehicle (PEV), Fuel cell hybrid vehicle (FCV), Off-vehicle charging hybrid electric vehicle (OVC-HEV), Non off-vehicle charging hybrid electric vehicle (NOVC-HEV)) as well as enhancing fuel/electric energy efficiency of vehicles.

2. Outline of Amendment

Regulations to be amended: Public Notice that Prescribes Details of Safety Regulations for Road Transport Vehicles, etc.

Scope: Vehicles with GVW exceeding 3.5 tons (excluding those with a seating capacity of less than 10 passengers used exclusively for passenger use) of PEV, OVC-HEV, and FCV.

- It is not applied to non-type-approval vehicles.
- It is not applied to motor cycles (including two-wheeled vehicles with side wheels)

Outline: The amendments introduce the test procedures of fuel/electric energy efficiency for heavy duty vehicles. The test procedures are based on simulation methods (the HILS method and the powertrain method).

3. Proposed Schedule

Date of adoption: around October, 2022

Dates of application:

New vehicle type: from April, 2025 for PEV and OVC-HEV
from January, 2028 for FCV

All new vehicle: from April, 2027 for PEV and OVC-HEV
from January, 2030 for FCV