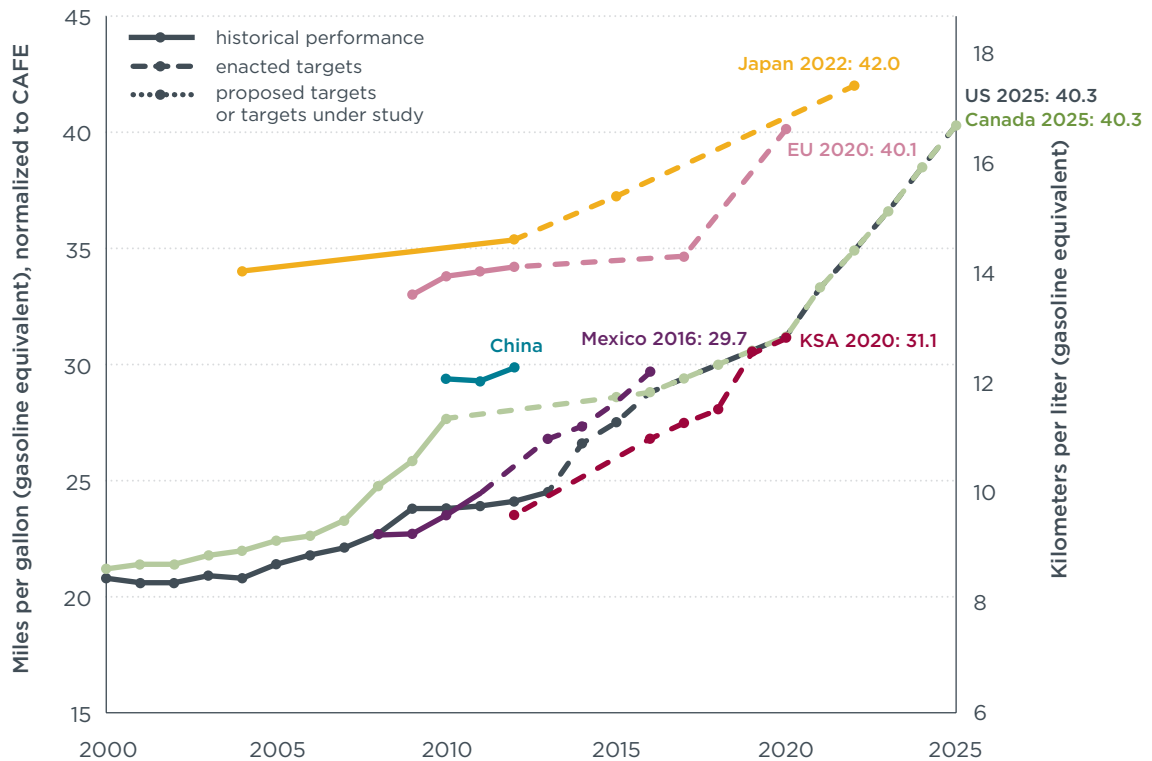


# JAPAN LIGHT COMMERCIAL VEHICLE FUEL ECONOMY STANDARDS FOR 2022

**ICCT POLICY UPDATES**  
 SUMMARIZE  
 REGULATORY  
 AND OTHER  
 DEVELOPMENTS  
 RELATED TO CLEAN  
 TRANSPORTATION  
 WORLDWIDE.

On March 20, 2015, an advisory committee to Japan’s Ministry of Land, Infrastructure, Transport and Tourism (MLIT) and Ministry of Economy, Trade, and Industry (METI) finalized new fuel economy standards for light and medium commercial vehicles with gross vehicle weights (GVW) less than 3.5 tonnes. The new standards will require that the fuel economy of model year 2022 light and medium commercial vehicles sold in Japan average 17.9 km/L in 2022, compared to 14.2 km/L in 2012. This represents a 26% increase in fuel economy from 2012 values, and a 23% increase from the 2015 standard of 14.5 km/L.



Global comparison of light truck/light commercial vehicle fuel economy standards (in mpg or km/L under CAFE test cycle)

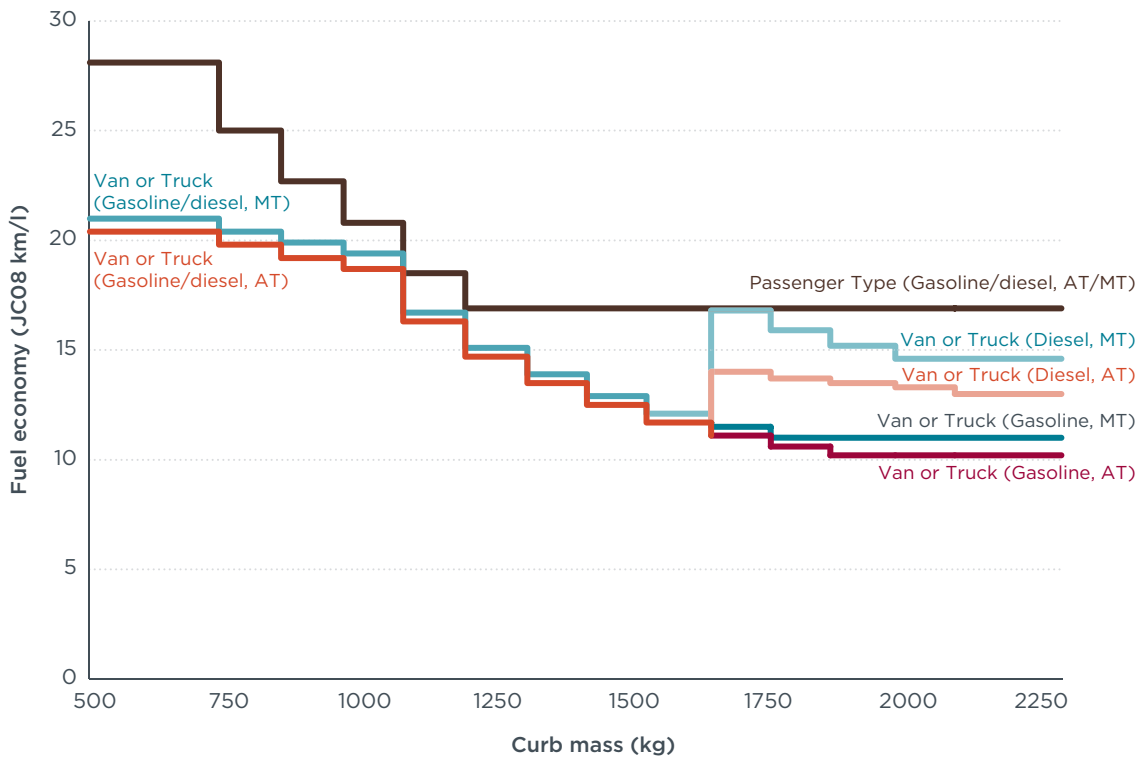
## BACKGROUND

Japan regulates the fuel efficiency of a variety of consumer products, including motor vehicles, under its Energy Conservation Law. Fuel economy targets had previously been established for passenger vehicles (2010, 2015, and 2020) and heavy-duty vehicles (2015), but to date the 2015 targets for light and medium commercial vehicles had not been updated. Next-stage targets are established through a “top runner” approach indexing to today’s best-performing models.

MLIT and METI estimate that the transport sector is currently responsible for 23% of energy use in Japan, a little over a third of which is linked to freight transport. In total, motor vehicles are responsible for 16% of carbon dioxide (CO<sub>2</sub>) emissions in Japan.

## KEY ELEMENTS OF THE NEW REGULATION

Targets for individual models will be assigned as a function of body and fuel type, transmission, and curb mass. The number of standard bins will be reduced from 77 under the 2015 standards to 38 for the revised standards. The individual targets by body type, fuel, transmission, and weight bin are summarized in the table and chart below.



New light and medium commercial vehicle fuel economy standards in 2022

Body	Fuel	Transmission	Curb mass (kg)	Target (km/L)
Passenger type	Gasoline/diesel	MT or AT	~ 740	28.1
Passenger type	Gasoline/diesel	MT or AT	741 ~ 855	25.0
Passenger type	Gasoline/diesel	MT or AT	856 ~ 970	22.7
Passenger type	Gasoline/diesel	MT or AT	971 ~ 1080	20.8
Passenger type	Gasoline/diesel	MT or AT	1081 ~ 1195	18.5
Passenger type	Gasoline/diesel	MT or AT	1196 ~	16.9
Van or Truck	Gasoline/diesel	MT	~ 740	21.0
Van or Truck	Gasoline/diesel	MT	741 ~ 855	20.4
Van or Truck	Gasoline/diesel	MT	856 ~ 970	19.9
Van or Truck	Gasoline/diesel	MT	971 ~ 1080	19.4
Van or Truck	Gasoline/diesel	MT	1081 ~ 1195	16.7
Van or Truck	Gasoline/diesel	MT	1196 ~ 1310	15.1
Van or Truck	Gasoline/diesel	MT	1311 ~ 1420	13.9
Van or Truck	Gasoline/diesel	MT	1421 ~ 1530	12.9
Van or Truck	Gasoline/diesel	MT	1531 ~ 1650	12.1
Van or Truck	Gasoline	MT	1651 ~ 1760	11.5
Van or Truck	Gasoline	MT	1761 ~	11.0
Van or Truck	Gasoline/diesel	AT	~ 740	20.4
Van or Truck	Gasoline/diesel	AT	741 ~ 855	19.8
Van or Truck	Gasoline/diesel	AT	856 ~ 970	19.2
Van or Truck	Gasoline/diesel	AT	971 ~ 1080	18.7
Van or Truck	Gasoline/diesel	AT	1081 ~ 1195	16.3
Van or Truck	Gasoline/diesel	AT	1196 ~ 1310	14.7
Van or Truck	Gasoline/diesel	AT	1311 ~ 1420	13.5
Van or Truck	Gasoline/diesel	AT	1421 ~ 1530	12.5
Van or Truck	Gasoline/diesel	AT	1531 ~ 1650	11.7
Van or Truck	Gasoline	AT	1651 ~ 1760	11.1
Van or Truck	Gasoline	AT	1761 ~ 1870	10.6
Van or Truck	Gasoline	AT	1871 ~	10.2
Van or Truck	Diesel	MT	1651 ~ 1760	16.8
Van or Truck	Diesel	MT	1761 ~ 1870	15.9
Van or Truck	Diesel	MT	1871 ~ 1990	15.2
Van or Truck	Diesel	MT	1991 ~	14.6
Van or Truck	Diesel	AT	1651 ~ 1760	14.0
Van or Truck	Diesel	AT	1761 ~ 1870	13.7
Van or Truck	Diesel	AT	1871 ~ 1990	13.5
Van or Truck	Diesel	AT	1991 ~ 2100	13.3
Van or Truck	Diesel	AT	2101 ~	13.0

The fuel economy of individual models will be measured on the JC08 test cycle, with a 25% and 75% weighting for cold- and hot-start fuel economy, respectively. Implementation of the 2022 targets with modified targets under the World Harmonized Light Vehicle Test Procedure (WLTP) may be considered in the future.

Individual companies will demonstrate compliance via a corporate average fuel economy approach with harmonic averaging. Manufacturers can use the production of plug-in hybrid and battery electric commercial vehicles to comply with their corporate average targets, with some limitations in order to maintain the incentive to improve conventional vehicles. When a company produces commercial vehicles with alternative drive trains, the corporate average fuel economy for its diesel and gasoline vehicles alone must be at least 90% of its overall regulatory target imposed by the standard. Provisions for labeling are also outlined in the final report.

## NEXT STEPS

MLIT and METI will use the proposal as a basis for revisions to relevant laws and regulations, with a target for completion in spring of 2015.

## REFERENCES

Text of the proposal (Japanese only): <http://www.mlit.go.jp/common/001083720.pdf>

Press release (Japanese only): [http://www.mlit.go.jp/report/press/jidosha10\\_hh\\_000140.html](http://www.mlit.go.jp/report/press/jidosha10_hh_000140.html)

Japan light-duty vehicle fuel efficiency standards fact sheet,  
[www.theicct.org/sites/default/files/info-tools/pvstds/Japan\\_PVstds-facts\\_jan2015.pdf](http://www.theicct.org/sites/default/files/info-tools/pvstds/Japan_PVstds-facts_jan2015.pdf)