

# Measures concerning the Calculation of Average Fuel Consumption for Car Companies

## Part I General provisions

### Article 1

The purpose of these measures is to improve the management of passenger car fuel efficiency, manage the average fuel consumption of car companies, and gradually drive down average passenger car fuel consumption in China to 6.9l/100km by 2015 and 5.0l/100km by 2020. These measures are in accordance with the "Notice of the State Council on Energy-saving and New Energy Vehicles Industry Development Program (2012-2020)" (GUO FA No. [2012] 22) and the "Notice of the State Council on the Comprehensive Work Plan for Energy Saving and Emissions Reduction during the 12th Five-year Plan Period" (GUO FA No. [2011] 26).

### Article 2

For the purpose of these measures, "passenger car" means any car powered by a petrol or diesel engine (including non plug-in hybrid passenger cars), as well as passenger cars which use new energy sources such as pure-electric vehicles, plug-in hybrid electric vehicles or those that use fuel cells. This includes all passenger cars sold in China, whether manufactured domestically or abroad.

### Article 3

For the purpose of these measures, "company" means a company which has been legally granted a licence to sell passenger cars in China (either a domestic manufacturer of passenger cars or an imported passenger car manufacturer). Domestic manufacturers of passenger cars are those included on the "List of Car Manufacturers and Products" which have obtained the compulsory certification required in China. Manufacturers of imported passenger cars are car manufacturers outside of China whose passenger cars have obtained the compulsory certification required in China. Dealers of imported passenger cars are considered as agents of manufacturers of imported

passenger cars and are responsible for the calculation of average fuel consumption and any related activity.

#### Article 4

For the purpose of these measures, an accounting year coincides with the Gregorian calendar year (from 1st January to 31st December). For domestically manufactured passenger cars, the production date will be used for calculation purposes, which is defined by the date present on the "Certificate of Assembled Motor Vehicle". For imported passenger cars, the import date is used for calculation purposes. This refers to the date when a passenger car is cleared for entry by customs.

#### Article 5

The Ministry of Industry, Information and Technology (MIIT), the National Development and Reform Commission (NDRC), the Ministry of Commerce (MOFCOM), General Administration of Customs (GAC) and General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) manage the administration of these measures.

Part II Average fuel consumption calculation of a company's complete range of passenger cars (from now on referred to as the calculated company average)

#### Article 6

Domestic car manufacturers and importers of passenger cars are required to produce a calculated company average.

#### Article 7

In principle, every car manufacturer or importer is required to produce a calculated company average. That includes any manufacturer that is an independent legal entity which is included on the 'List of Car Manufacturers and Products' or an independently registered seller of imported passenger cars which is included on the list.

Part III The declaration and publication of a calculated company average

#### Article 8

MIIT will be responsible for creating the Management System for Passenger Car Fuel Consumption Data.

#### Article 9

A company should establish a monitoring system for fuel consumption data which can be used to assess its performance in meeting established targets and to make appropriate changes in production and importing activity where necessary. A company should provide the Department of Industrial Equipment which comes under MIIT with information relating to products that have ceased to be manufactured or imported. A copy of this information should also be sent to the Certification and Accreditation Administration of China which comes under AQSIQ.

#### Article 10

MIIT manages the publication of fuel consumption data relating to different models of passenger car. This information is made public by means of the notification system on the China Automotive Fuel Consumption Website.

Part IV      Calculating the average fuel consumption of a company's passenger cars (calculated company average)

#### Article 11

The actual fuel consumption of a certain model of passenger car is calculated using the data contained in the online notification system (combined fuel consumption). If the notification system contains more than one fuel consumption value for the same model of a passenger car manufactured or imported by a company, the actual fuel consumption figure is based on the highest figure (including models of a passenger car that has already been declared in the system as no longer being manufactured or imported).

#### Article 12

The average fuel consumption calculation for a domestic manufacturer is based on the total number of passenger cars manufactured that year (exclusive of exported passenger cars). Average fuel consumption figures for an imported car dealership are based on the number of vehicles cleared by Chinese customs that year.

#### Article 13

The calculated company average is calculated as follows: first, the company's total fuel consumption figure is found by adding together the total fuel consumption for each model of passenger car (for each model multiply the fuel consumption figure by the number of cars manufactured or imported). This sum is then divided by the total number of passenger cars (of all models) to give the average fuel consumption. This figure is rounded up or down to two decimal places. The target company average is calculated as follows: first, multiply the sum of the target fuel consumption figures for a company's entire range of models by the number of vehicles manufactured or imported; this figure is then divided by the total number of passenger cars (of all models) to give the target average fuel consumption. This figure is rounded up or down to two decimal places.

#### Article 14

Target fuel consumption levels and related standards are set in accordance with the 'Passenger Car Fuel Consumption Assessment Method and Related Guidelines' (GB27999-2011).

If a certain model of passenger car has more than one target fuel consumption figure due to a difference in kerb weight, the number of seat rows or gearbox type, then the calculated company average is based on the lowest target figure.

#### Article 15

In order to further the development of energy efficiency and vehicles that use new energy sources, the following changes apply when calculating a company's performance in meeting national fuel consumption targets. The combined fuel consumption of a plug-in electric hybrid passenger car that is able to travel on full-electric mode

for 50km or more is given a fuel consumption value of zero. In addition, the base number for this model is multiplied by five (every passenger car is counted as five); when calculating the fuel consumption of those models which have a combined fuel consumption of less than 2.8l/100 km (not including passenger cars powered wholly by electricity or fuel cells), the base number (no of cars) is multiplied by three.

## Part V Reporting a calculated company average

### Article 16

Before 20 December each year, a company should submit an annual preliminary report containing its estimated calculated company average to MIIT in accordance with that year's specific requirements (five copies). The main content of the report should include an estimated calculated company average and a fuel consumption target figure.

### Article 17

Before 1 August each year, a company should submit an interim report containing its estimated calculated company average to MIIT (five copies). The main content of the report should include:

- (1) The number of each model of passenger car either manufactured or imported during the first six months of that year, the relevant combined fuel consumption figures and any other key figures;
- (2) The calculated company average target figure and an estimated actual figure for the second half of that year;
- (3) A prediction of the probability of a company meeting its calculated company average target figure for that year.

### Article 18

Before 1 February each year, a company should submit an annual report on average fuel consumption for the previous year (five copies). The report should contain the following: the number of cars

manufactured or imported, the combined fuel consumption figures and other key figures for each model of passenger car. The report should contain both target figures and actual figures (please see attachment 2 for details of the required format for the preliminary report, interim report and annual report).

#### Article 19

If the preliminary report or interim report contains confidential commercial information, this should be clearly marked and an embargo date should be stated, where appropriate. If this is approved by MIIT, the information will not be made public. The protection of sensitive commercial information cannot be cited as a reason for limiting public access to the information in an annual report.

### Part XI The calculation and its publication

#### Article 20

MIIT, NDRC, MOFCOM, GAC and AQSIQ have set up a joint working mechanism for the administration of these measures. MIIT is responsible for inspecting domestic car manufacturers and verifying the fuel consumption and production volume of domestically manufactured passenger cars. GAC and AQSIQ are responsible for verifying information relating to the fuel consumption figures and import volumes for imported passenger cars as well as information about the importing companies and manufacturers of imported cars.

#### Article 21

The calculated company average of each car company in the previous year is made public before 20 March each year.

#### Article 22

If a car company, organisation or member of the general public disagrees with the published figures, they may raise the issue within 20 working days. Relevant departments shall respond to or deal with the issue raised within 20 working days of receiving the query.

### Article 23

Before 1 June each year, MIIT, NDRC, MOFCOM, GAC and AQSIQ release the "Car Company Average Fuel Consumption Calculation Report" for the previous year. The content of the report includes the quantity of manufactured or imported passenger cars, the target and actual calculated company averages as well as the compliance status and ranking of companies.

## Part XII The transfer and application of positive difference

### Article 24

A positive or negative difference is the product of the number of passenger cars and the difference between the target figure and the actual figure of the calculated company average of a given year. The figure should be rounded up or down to the nearest whole number.

### Article 25

A positive difference can be transferred to alter the average figure for the following year. Before 2015, a positive difference is any figure lower than the target figure.

### Article 26

The transferred positive difference must be applied within three years. Within the three year period a company can choose when and how to apply the difference.

## Part XIII Supervision and management

### Article 27

MIIT, NDRC, MOFCOM, AQSIQ and GAC will establish the system for the inspection and publication of passenger car fuel consumption. This system will involve conducting spot checks on the fuel consumption of passenger cars sold and publishing the results.

### Article 28

Failure to submit the required fuel consumption data shall be treated as non-compliance.

## Article 29

The following misconduct shall be dealt with according to its severity and in accordance with the relevant national laws and regulations:

- (1) failure to label a passenger car's fuel consumption as required;
- (2) labelling passenger cars with fuel consumption data that are inconsistent with the data submitted by the car company;
- (3) labelling passenger cars with fuel consumption data or submitting data that are inconsistent with the findings of a subsequent inspection;
- (4) failure to submit the preliminary report, interim report or annual report on the calculated company average by the required time;
- (5) presenting an annual report which contains an inaccurate calculated company average.

## Part IX Supplements

### Article 30

These measures will come into force on XXXXXX.

### Article 31

For 2012, the calculated company average should be calculated based on activity during the period 1 July 2012 to 31 December 2012.

### Article 33

According to the "Energy-saving and New Energy Vehicles Industry Development Program (2012-2020)", the measures pertaining to the regulation of vehicle fuel consumption will be enacted separately.

### Article 34

MIIT is the competent authority for the interpretation of these measures.





## Attachment 1

Requirements for the reporting of passenger car fuel consumption data  
The Department of Industrial Equipment at MIIT will establish the Passenger Car Fuel Consumption Management System. Each company is responsible for submitting information about the fuel consumption of any passenger car manufactured or imported for the first time.

### I The scope of these requirements

These requirements apply to passenger cars sold in China with a maximum design weight of less than 3 500kg. This includes any passenger car powered by a petrol or diesel engine (including non plug-in hybrid passenger cars), as well as passenger cars which use new energy sources such as pure-electric vehicles, plug-in hybrid electric vehicles or those that use fuel cells.

This includes domestically manufactured and imported passenger cars but does not include exported passenger cars. Imported passenger cars are those that have been cleared by customs for sale in China under the classification of general trade.

### II Data submission requirements

1. After the stipulated date, a company must submit data relating to all passenger cars that are manufactured or imported for the first time and that fall within the scope of these requirements. Calculations relating to domestically manufactured passenger cars are based on the production date as stated on the "Certificate of Assembled Motor Vehicle". Calculations relating to imported passenger cars are based on the date when a passenger car is cleared by customs.

2. In principle, each car manufacturer or importer is required to submit fuel consumption data for each model of passenger car. That includes any manufacturer that is an independent legal entity or an

independently registered seller of imported passenger cars which is included on the ‘List of Car Manufacturers and Products’.

3. Reported figures should take into account all passenger cars manufactured or imported and there should be an individual fuel consumption figure for each model.

4. Fuel consumption data for a domestically manufactured passenger car should be submitted within 48 hours of production. Fuel consumption data for an imported passenger car should be submitted within 48 hours of customs clearance (this can be extended during public holidays).

5. See *Form 1*, “Passenger Car Fuel Consumption Form” for details of the required information.

6. A company should guarantee the accuracy of any data which it submits. A company is allowed to amend, remove or add information, but a record will be kept of all such activity.

7. Fuel consumption data are managed on a monthly basis (calendar month). Before the 15th of each month, a company may amend, remove or add further data pertaining to the previous month. However, after the 15th of that month, any amendments, removals or additions would need to be accompanied by a written request. The written request and accompanying materials must bear the corporate seal of the company and be signed by a legal representative.

### III Submission procedure

1. Software download - visit the Department of Industrial Equipment section of the MIIT website at <http://zbs.miit.gov.cn> and download the “Passenger Car Fuel Consumption Data Management System”. The downloadable file also includes the “Handbook for the Passenger Car Fuel Consumption Data Management System”.

2. Installation from a local copy - after downloading the file, follow the instructions in the handbook to install the “Passenger Car Fuel Consumption Data Management System”.

3. Complete the form - use a temporary user password to register and gain access to the program.

4. Obtain a data uploading account - a company should submit the following printed materials (all of which must bear the corporate seal of the company):

(1) general company information, see *Form 2*;

(2) a photocopy of the Industry and Commerce Registration document and business licence;

(3) a copy of the document giving a named employee of the company powers of attorney for the related tasks and a photocopy of this employee’s ID;

(4) a photocopy of the dealer’s official authorisation to act as an agent for the imported product or a photocopy of the Import Licence.

5. Application to develop an interface application

If a company needs to develop individual uploading software, an application to do so should be submitted together with the details of the newly opened data-uploading account. The application is necessary to obtain a development code and relevant technical materials. The application should bear the company's corporate seal.

6. Facilitate the remote transmission of relevant data.

# Form 1

## Passenger car fuel consumption form

### 1. General passenger car information

Car manufacturer	_____		
Car importer	_____ (only for imported vehicles)		
Case no	(1)_____	vehicle manufacture/ import date	_____
Model of vehicle	_____	Common name	_____
Category of vehicle	_____	Off-road vehicle (Category G)	_____
Fuel Type	(2)_____	Number of seat rows	_____
Total kerb weight	_____ kg	Max design weight	_____ kg
Max Speed	_____ km/h	Max no of passengers	_____ persons
Tyre size	_____	Wheel base	_____ mm
Axle track	_____ mm	Drive train	_____
Other information	(3)_____		

### 2.1 Cars powered by conventional fuel types

Engine model	_____	No of cylinders	_____
Displacement	_____ ml	Power output	_____ kW
Max Power	(7)_____ kW	Gearbox type	_____
No of gears	_____		
Fuel consumption in urban conditions	_____ l/100km	Fuel consumption in extra urban conditions	_____ l/100km
Fuel consumption in hybrid/electric assist mode	_____ l/100km	CO2 emissions in hybrid/ electric assist mode	_____ g/km

### 2.2 Non plug-in hybrid cars

Hybrid type (Parallel/series /power-split/other)	_____		
Does car have a switch to change power type?	_____	Battery-set type (lead-acid/lithium ion/ supercapacitor/nickel metal hydride)	_____
Overall power of	_____ kWh	Specific energy of	_____ Wh/kg

battery-set		battery-set	
Overall driving range in pure electric mode	(4)_____km	Max speed in pure electric mode	(4)_____km/h
Voltage of battery set	_____V	Motor type	_____
Max electric power ratio	_____%	Motor torque	_____Nm
Output of electric motor	_____kW	Combined fuel consumption (5)	_____l/100km
Overall urban fuel (5) consumption	_____l/100km	Overall extra-urban fuel (5) consumption	(5)_____l/100km
Overall CO2 emissions	(5)_____g/100km	Engine serial no	_____
Displacement	_____ml	No of cylinders	_____
Power output	_____kW	Max net power	(7)_____kW
Gearbox type	_____	No of gears	_____

### 2.3 Plug-in hybrid cars

Hybrid type (Parallel/series \_\_\_\_\_  
/power-split/other)

Does car have a switch to change power type?	_____	Battery-set type (lead-acid/lithium ion/supercapacitor/nickel metal hydride)	_____
Overall power of battery-set	_____kWh	Specific energy of battery-set	_____Wh/kg
Overall driving range in pure electric mode	_____km	Max speed in pure electric mode	_____km/h
Voltage of battery set	_____V	Motor type	_____
Max electric power ratio	_____%	Motor torque	_____Nm
Output of electric motor	_____kW	Combined electric power consumption (6)	_____kWh/100km
Combined fuel consumption	(6)_____l/100km	Combined CO2 emissions (6)	_____g/100km
Engine model	_____	Number of cylinders	_____
Displacement	_____ml	Power output	_____kW
Max net power	(7)_____kW	Gearbox type	_____
No of gears	_____		

### 2.4 Pure electric cars

Battery Type: (lead-acid/ nickel metal hydride/lithium ion/supercapacitor/other ) \_\_\_\_\_

Overall power of battery-set \_\_\_\_\_ kWh      Specific energy of battery-set \_\_\_\_\_ Wh/kg

Max speed able to be maintained for 30 minutes \_\_\_\_\_ km/h

Ratio between battery mass and kerb weight \_\_\_\_\_ %      Voltage of battery set \_\_\_\_\_ V

Overall driving range \_\_\_\_\_ km      Motor type \_\_\_\_\_

Power output \_\_\_\_\_ kW      Motor torque \_\_\_\_\_ Nm

Overall electric power consumption \_\_\_\_\_ kWh/100km

## 2.5 Fuel-cell cars

Fuel cell type \_\_\_\_\_

Fuel cell stack output density \_\_\_\_\_ kW/L      Battery-set type (lead-acid/lithium ion/supercapacitor/nickel metal hydride/other) \_\_\_\_\_

Specific energy consumption in hybrid mode \_\_\_\_\_ Wh/kg      Overall electric power consumption (7) \_\_\_\_\_ kWh/100km

Overall driving range (7) \_\_\_\_\_ km      Max speed able to be maintained for 30 minutes (7) \_\_\_\_\_ km/h

Motor output \_\_\_\_\_ kW      Motor type \_\_\_\_\_

Hydrogen container type \_\_\_\_\_      Motor torque \_\_\_\_\_ Nm

Pressure of hydrogen container \_\_\_\_\_ kPa      Hydrogen container capacity \_\_\_\_\_ NL

## 3. Testing conditions

Name of testing organisation \_\_\_\_\_

Report number \_\_\_\_\_

Note:

- (1) For each case use the vehicle identification number (VIN);
- (2) For fuel type, indicate petrol, diesel, bi-fuel, dual-fuel, non plug-in hybrid, plug-in hybrid, pure electric or fuel cell;
- (3) Optional question with many possible answers;

- (4) Only applicable to vehicles which have a pure-electric mode;
- (5) Insert the amended fuel consumption figure (pure electric cars are given a value of 0) or CO<sub>2</sub> emission figure;
- (6) Insert the weighted average value;
- (7) Optional question.



Form 2

Car Company General Information

Company Name (in full):			
Registered Address:			
Legal Representative:		Registered Trademark:	
Organisation Code:		Business Licence No:	
Registered Capital (CNY):		Net Fixed Assets (CNY):	
Correspondence Address:			
Postal Code:		Contact:	
Position:		Tel. No	
Fax No		Mobile No	
Email:			

Note: This form must be submitted when obtaining the uploading account. If any change occurs which causes the information contained in this form to become inaccurate, an updated form should be sent without delay.

Attachment 2

Company Average Fuel Consumption Report

Company Name: \_\_\_\_\_ (corporate seal)

Location of Company: \_\_\_\_\_ City of \_\_\_\_\_ Province

Date:

## Company Average Fuel Consumption Annual Preliminary report

Our company plans to manufacture/import [number] passenger cars in [year].  
Based on current circumstances, our estimated average fuel consumption target figure is [number] l/100 km and our estimated actual average fuel consumption is [number] l/100 km.

We estimate that there will be a positive/negative difference of [percentage]% between actual average fuel consumption and target average fuel consumption.

We undertake to implement measures to ensure that the actual average fuel consumption of our company meets the required national standard.

Signed by the legal representative (hand-written signature):

Company (corporate seal):

Date:

## Company Average Fuel Consumption Annual Interim Report

Our company has manufactured/imported [number] passenger cars in the first half of [year]. Based on activity during the first half of this year our company's average fuel consumption target figure is [number] l/100 km and the actual average fuel consumption is [number] l/100 km (please see the attached form for further information).

Our company plans to manufacture/import [number] passenger cars in the second half of [year]. Based on current circumstances, our company's estimated average fuel consumption target figure is [number] l/100 km and the estimated actual average fuel consumption is [number] l/100 km.

We estimate that there will be a positive/negative difference of [percentage]% between actual average fuel consumption and target average fuel consumption.

We undertake to implement measures to ensure that the actual average fuel consumption of our company meets the required national standard.

Signed by the legal representative (hand-written signature):

Company (corporate seal):

Date:

## Company Average Fuel Consumption Annual Report

Our company has manufactured/imported [number] passenger cars in [year].  
Our company average fuel consumption target figure for [year] is [number] l/100 km and our actual average fuel consumption is [number] l/100 km (please see the attached form for further information).

There is a positive/negative difference of [percentage]% between our company's actual average fuel consumption and target average fuel consumption.

The company's transferrable positive difference for this year is +/- [number].

The positive difference shall be used for:

We certify that all figures and data are accurate and true to the best of our knowledge. We understand that fraud or forgery will lead to prosecution.

Signed by a legal representative (hand-written signature):

Company (corporate seal):

Date:



- i<sup>1</sup> Fuel consumption target: the target value varies for the same model depending on the kerb weight, number of seat rows and transmission type. For the purpose of the calculated company average, the lowest target value must be used.
- ii Combined fuel consumption: the value must be rounded up to one decimal place. If the same model has different values for its combined fuel consumption in the vehicle fuel consumption notification system, please give the highest value here.
- iii The actual production or import volume (excluding exported passenger cars).

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