COMMISSION IMPLEMENTING DECISION (EU) 2021/488

of 22 March 2021

amending Implementing Decisions (EU) 2020/174 and (EU) 2020/1167 as regards the use of the approved innovative technologies in certain passenger cars and in light commercial vehicles capable of running on liquefied petroleum gas, compressed natural gas and E85

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO_2 emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011 ([1]), and in particular Article 11(4) thereof,

Whereas:

(1) On 9 July 2020, the manufacturers Škoda Auto a.s, Ford-Werke GmbH, Groupe Renault, FCA Italy S.p.A, SEAT S.A., Volkswagen AG, Automobiles Citroen, Automobiles Peugeot, PSA Automobiles SA and OPEL Automobile GmbH jointly submitted a request, pursuant to Article 12a of Commission Implementing Regulation (EU) No 725/2011 ([2]) and Commission Implementing Regulation (EU) No 427/2014 ([3]), for amendment of Commission Implementing Decision (EU) 2020/174 ([4]) in order for 12 Volt efficient alternators approved as an innovative technology under that Decision to be used also in internal combustion engine powered passenger cars and light commercial vehicles capable of running on liquefied petroleum gas (LPG), compressed natural gas (CNG) and E85.

(2) On 11 December 2020, the manufacturers Ford-Werke GmbH, Honda Motor Europe Ltd and Renault SA jointly submitted a request, pursuant to Article 12a of Implementing Regulation (EU) No 725/2011 and Implementing Regulation (EU) No 427/2014, for amendment of Commission Implementing Decision (EU) 2020/1167 ([5]) in order for 48 Volt efficient motor-generators combined with a 48 Volt/12 Volt DC/DC converters, approved as an innovative technology under that Decision, to be used also in internal combustion engine and certain hybrid electric passenger cars and light commercial vehicles capable of running on LPG, CNG and E85.

(3) The Commission assessed both requests in accordance with Article 11 of Regulation (EU) 2019/631, Implementing Regulation (EU) No 725/2011, Implementing Regulation (EU) No 427/2014 as well as the Technical Guidelines for the preparation of applications for the approval of innovative technologies pursuant to Regulation (EC) No 443/2009 and Regulation (EU) No 510/2011 (July 2018 version) ([6]).

([1]) OJ L 111, 25.4.2019, p. 13.

([2]) Commission Implementing Regulation (EU) No 725/2011 of 25 July 2011 establishing a procedure for the approval and certification of innovative technologies for reducing CO_2 emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (OJ L 194, 26.7.2011, p. 19).

([3]) Commission Implementing Regulation (EU) No 427/2014 of 25 April 2014 establishing a procedure for the approval and certification of innovative technologies for reducing CO_2 emissions from light commercial vehicles pursuant to Regulation (EU) No 510/2011 of the European Parliament and of the Council (OJ L 125, 26.4.2014, p. 57).

([4]) Commission Implementing Decision (EU) 2020/174 of 6 February 2020 on the approval of the technology used in 12 Volt efficient alternators for use in certain passenger cars and light commercial vehicles as an innovative technology pursuant to Regulation (EU) 2019/631 of the European Parliament and of the Council (OJ L 35, 7.2.2020, p. 13).

([5]) Commission Implementing Decision (EU) 2020/1167 of 6 August 2020 on the approval of the technology used in a 48 Volt efficient motor-generator combined with a 48 Volt/12 Volt DC/DC converter for use in conventional combustion engine and certain hybrid electric passenger cars and light commercial vehicles as an innovative technology pursuant to Regulation (EU) 2019/631 of the European Parliament and of the Council (OJ L 258, 7.8.2020, p. 15).

([6]) https://circabc.europa.eu/sd/a/a19b42c8-8e87-4b24-a78b-9b70760f82a9/July%202018%20Technical%20Guidelines.pdf

(4) As both requests concern the clarification of the use of the innovative technologies in vehicles capable of running on LPG, CNG and E85, it is appropriate to address those requests in one single Implementing Decision.

(5) As regards both requests, it is appropriate to clarify that CO_2 savings from the innovative technologies may be determined also when they are fitted on LPG, CNG and E85 fuelled vehicles. Subject to the addition of certain fuel-specific factors, the methodologies to determine the CO_2 savings as set out in Implementing Decisions (EU) 2020/174 and (EU) 2020/1167 are therefore considered appropriate for determining the CO_2 savings associated with the use of the respective innovative technologies for vehicles powered with those fuels.

(6) As regards E85, due to its limited availability on the Union market as a whole, it is, however, not appropriate to distinguish this fuel type from petrol for the purpose of the methodologies to determine the CO_2 savings.

(7) Implementing Decisions (EU) 2020/174 and (EU) 2020/1167 should therefore be amended accordingly,

HAS ADOPTED THIS DECISION:

Article 1

Amendments to Implementing Decision (EU) 2020/174

Implementing Decision (EU) 2020/174 is amended as follows:

(1) Article 1 is amended as follows:

(a) point (a) is replaced by the following:

'(a) it is fitted in internal combustion engine powered passenger cars (M_1) and light commercial vehicles (N_1) capable of running on petrol, diesel, liquefied petroleum gas (LPG), compressed natural gas (CNG) or E85 or on a combination of those fuels;';

(b) point (c) is amended as follows:

(i) points (i) and (ii) are replaced by the following:

'(i) 73,8 % for petrol- or E85-fuelled vehicles other than turbo-charged;

(ii) 73,4 % for turbo-charged petrol- or E85-fuelled vehicles;';

(ii) the following points (iv) to (vii) are added:

'(iv) 74,6 % for LPG-fuelled vehicles other than turbo-charged;

(v) 74,1 % for turbo-charged LPG-fuelled vehicles;

(vi) 76,3 % for CNG-fuelled vehicles other than turbo-charged;

(vii) 75,7 % for turbo-charged CNG-fuelled vehicles.';

(2) in Article 3, the following paragraph 3a is inserted:

'3a. Where the innovative technology is fitted in a bi-fuel or flex-fuel vehicle, the type-approval authority shall record the certified CO_2 savings as follows:

(a) for a bi-fuel vehicle using petrol and gaseous fuels, the CO_2 savings value with regard to LPG or CNG;

(b) for a flex-fuel vehicle using petrol and E85, the CO_2 savings value with regard to petrol.';

(3) the Annex is amended in accordance with Annex I to this Decision.

Article 2

Amendments to Implementing Decision (EU) 2020/1167

Implementing Decision (EU) 2020/1167 is amended as follows:

(1) Article 1 is amended as follows:

(a) point (a) is replaced by the following:

'(a) it is fitted in passenger cars (M_1) or light commercial vehicles (N_1) with the following characteristics:

(i) vehicles powered by internal combustion engines (conventional ICE vehicles) capable of running on petrol, diesel, liquefied petroleum gas (LPG), compressed natural gas (CNG) or E85 or a combination of those fuels;

(ii) not-off-vehicle charging hybrid electric vehicles capable of running on the fuels referred to in point (i) for which uncorrected fuel consumption and CO_2 emission values may be used in accordance with point 1.1.4 of Appendix 2 of Sub-Annex 8 to Annex XXI to Regulation (EU) 2017/1151.';

(b) point (b) is amended as follows:

(i) points (i) and (ii) are replaced by the following:

'(i) 73,8 % for petrol- or E85-fuelled vehicles other than turbo-charged;

(ii) 73,4 % for turbo-charged petrol- or E85-fuelled vehicles;';

(ii) the following points (iv) to (vii) are added:

'(iv) 74,6 % for LPG-fuelled vehicles other than turbo-charged;

(v) 74,1 % for turbo-charged LPG-fuelled vehicles;

(vi) 76,3 % for CNG-fuelled vehicles other than turbo-charged;

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(a) for a bi-fuel vehicle using petrol and gaseous fuels, the CO_2 savings value with regard to LPG or CNG;

(b) for a flex-fuel vehicle using petrol and E85, the CO_2 savings value with regard to petrol.';

(3) the Annex is amended in accordance with Annex II to this Decision.

Article 3

Entry into force

This Decision shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Done at Brussels, 22 March 2021.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX I

The Annex to Implementing Decision (EU) 2020/174 is amended as follows:

(1) point 6 is amended as follows:

(a) Table 2 is replaced by the following:

'Table 2

Consumption of effective power

Type of engine	Consumption of effective power (V_{pe}) [l/kWh]
Petrol/E85	0,264
Petrol/E85 Turbo	0,280
Diesel	0,220
LPG	0,342
LPG Turbo	0,363
	Consumption of effective power (V_{pe}) [m^3/kWh]
CNG (G20)	0,259
CNG (G20) Turbo	0,275'

(b) Table 3 is replaced by the following:

'Table 3

Fuel conversion factor (CF)

Type of fuel	Conversion factor (CF) [gCO_2/l]
Petrol/E85	2 330
Diesel	2 640
LPG	1 629
	Conversion factor (CF) [gCO_2/m^3]
CNG (G20)	1 795'

(2) point 8 is amended as follows:

Table 4 is replaced by the following:

'Table 4

CO_2 correction due to the extra mass

Petrol/E85 (ΔCO_{2mP}) [g CO_2/km]	0,0277•Δm
Diesel (ΔCO_{2mD}) [g CO_2/km]	0,0383•Δm
LPG (ΔCO_{2mLPG}) [g CO_2/km]	0,0251•Δm
CNG ($\Delta CO2_{mCNG(G20)}$) [g CO_2/km]	0,0209•Δm'.

ANNEX II

The Annex to Implementing Decision (EU) 2020/1167 is amended as follows:

(1) in point 3.2, Tables 2 and 3 are replaced by the following:

'Table 2

Consumption of effective power

Type of engine	Consumption of effective power (V_{pe}) [l/kWh]
Petrol/E85	0,264
Petrol/E85 Turbo	0,280
Diesel	0,220
LPG	0,342
LPG Turbo	0,363
	Consumption of effective power (V_{pe}) [m^3/kWh]
CNG (G20)	0,259
CNG (G20) Turbo	0,275

Table 3

Fuel conversion factor (CF)

Type of fuel	Conversion factor (CF) [gCO_2/l]
Petrol/E85	2 330
Diesel	2 640
LPG	1 629
	Conversion factor (CF) [gCO_2/m^3]
CNG (G20)	1 795';

(2) in point 3.5, Table 4 is replaced by the following:

'Table 4

CO_2 correction due to the extra mass

Petrol/E85 (ΔCO_{2mP}) [g CO_2/km]	0,0277•Δm
Diesel (ΔCO_{2mD}) [g CO_2/km]	0,0383•Δm
LPG (ΔCO_{2mLPG}) [g CO_2/km]	0,0251•Δm
CNG ($\Delta CO_{2mCNG(G20)}$) [g CO_2/km]	0,0209•Δm'.