

Commission Implementing Decision of 18 November 2014 on the approval of the battery charging Webasto solar roof as an innovative technology for reducing CO<sub>2</sub> emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (Text with EEA relevance) (2014/806/EU)

COMMISSION IMPLEMENTING DECISION

of 18 November 2014

on the approval of the battery charging Webasto solar roof as an innovative technology for reducing CO<sub>2</sub> emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council

(Text with EEA relevance)

(2014/806/EU)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EC) No 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emissions performance standards for new passenger cars as part of the Community's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles<sup>(1)</sup>, and in particular Article 12(4) thereof,

Whereas:

- (1) The supplier Webasto Roof & Components SE (the 'Applicant') submitted an application for the approval of the battery charging Webasto solar roof as an innovative technology on 5 March 2014. The application was found to be complete and the period for the Commission's assessment of the application started on the day following the date of official receipt, i.e. 6 March 2014.
- (2) The application has been assessed in accordance with Article 12 of Regulation (EC) No 443/2009, Commission Implementing Regulation (EU) No 725/2011<sup>(2)</sup> and the Technical Guidelines for the preparation of applications for the approval of innovative technologies pursuant to Regulation (EC) No 443/2009 (the Technical Guidelines)<sup>(3)</sup>.
- (3) The application refers to the battery charging Webasto solar roof. The solar roof consists of a photovoltaic (PV) panel which is installed on the vehicle roof. The photovoltaic panel converts ambient energy into electrical energy which, via a DC-DC-converter, is stored in an on-board battery. The Commission finds that the information provided in the application demonstrates that the conditions and criteria referred to in Article 12 of Regulation (EC) No 443/2009 and in Articles 2 and 4 of Implementing Regulation (EU) No 725/2011 have been met.
- (4) The Applicant has demonstrated that a battery charging solar roof system of the kind described in this application did not exceed 3 % of the new passenger cars registered in the reference year 2009.

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**Changes to legislation:** There are outstanding changes not yet made to Commission Implementing Decision of 18 November 2014 on the approval of the battery charging Webasto solar roof as an innovative technology for reducing CO<sub>2</sub> emissions from passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council (Text with EEA relevance) (2014/806/EU). Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details)

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- (5) In order to determine the CO<sub>2</sub> savings that the innovative technology will deliver when fitted to a vehicle, it is necessary to define the baseline vehicle against which the efficiency of the vehicle equipped with the innovative technology should be compared as provided for in Articles 5 and 8 of Implementing Regulation (EU) No 725/2011. The Commission finds that the baseline vehicle should be a vehicle variant that in all aspects is identical to the eco-innovation vehicle with the exception of the solar roof and, where applicable, without the additional battery and other appliances needed specifically for the conversion of the solar energy into electricity and its storage. For a new version of a vehicle in which the solar roof panel is installed the baseline vehicle should be the vehicle in which the solar roof panel is disconnected and the change in mass due to the installation of the solar roof is taken into account.
- (6) The Applicant has provided a methodology for testing the CO<sub>2</sub> reductions which includes formulae which are based on the Technical Guidelines with regard to a battery charging solar roof. The Commission considers that it should moreover be demonstrated the degree to which the overall energy consumption of the vehicle with regard to its transport function is improved compared to the energy consumed for the operation of devices aimed at enhancing the comfort of the driver or the passengers.
- (7) In determining the savings it is also necessary to take into account the storage capacity of a single on-board battery or the presence of an additional battery dedicated for only storing the electricity generated by the solar roof
- (8) The Commission finds that the testing methodology will provide testing results that are verifiable, repeatable and comparable and that it is capable of demonstrating in a realistic manner the CO<sub>2</sub> emissions benefits of the innovative technology with strong statistical significance in accordance with Article 6 of Implementing Regulation (EU) No 725/2011.
- (9) Against that background the Commission finds that the Applicant has demonstrated satisfactorily that the emission reduction achieved by the innovative technology is at least 1 g CO<sub>2</sub>/km.
- (10) Since the CO<sub>2</sub> emissions type-approval test referred to in Regulation (EC) No 715/2007 of the European Parliament and of the Council<sup>(4)</sup> and Commission Regulation (EC) No 692/2008<sup>(5)</sup> does not take into consideration the presence of a solar roof and the additional energy provided through this technology, the Commission is satisfied that the battery charged Webasto solar roof is not covered by the standard test cycle. The Commission finds that the verification report has been prepared by the TÜV SÜD Czech s.r.o. which is an independent and certified body and that the report supports the findings set out in the application.
- (11) Against that background, the Commission finds that no objections should be raised as regards the approval of the innovative technology in question.
- (12) For the purposes of determining the general eco-innovation code to be used in the relevant type-approval documents in accordance with Annexes I, VIII and IX to Directive 2007/46/EC, the individual code to be used for the innovative technology approved through this Implementing Decision should be specified,

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HAS ADOPTED THIS DECISION:

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- (1) [OJ L 140, 5.6.2009, p. 1.](#)
- (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<sub>2</sub> 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) [http://ec.europa.eu/clima/policies/transport/vehicles/cars/docs/guidelines\\_en.pdf](http://ec.europa.eu/clima/policies/transport/vehicles/cars/docs/guidelines_en.pdf) (version of February 2013).
- (4) Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information ([OJ L 171, 29.6.2007, p. 1](#)).
- (5) Commission Regulation (EC) No 692/2008 of 18 July 2008 implementing and amending Regulation (EC) No 715/2007 of the European Parliament and of the Council on type-approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information ([OJ L 199, 28.7.2008, p. 1](#)).

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