

Commission Implementing Decision (EU) 2016/1926 of 3 November 2016 on the approval of the battery-charging photovoltaic 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)

COMMISSION IMPLEMENTING DECISION (EU) 2016/1926

of 3 November 2016

on the approval of the battery-charging photovoltaic 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)

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,

Having regard to 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<sup>(2)</sup>, and in particular Article 10(2) thereof,

Whereas:

- (1) The application submitted by the supplier a2solar Advanced and Automotive Solar Systems GmbH ('the applicant') on 4 February 2016 for the approval of the battery charging photovoltaic roof as an eco-innovation has been assessed in accordance with Article 12 of Regulation (EC) No 443/2009, Implementing Regulation (EU) No 725/2011 and the Technical Guidelines for the preparation of applications for the approval of innovative technologies pursuant to Regulation (EC) No 443/2009<sup>(3)</sup>.
- (2) The information provided in the application demonstrates that the conditions and the 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. As a consequence, the battery charging photovoltaic roof proposed by the applicant should be approved as an innovative technology.
- (3) By Implementing Decisions 2014/806/EU<sup>(4)</sup> and (EU) 2015/279<sup>(5)</sup> the Commission has approved two applications concerning battery charging photovoltaic roofs. Based on the experience gained from the assessment of those applications as well as the current application, it has been satisfactorily and conclusively demonstrated that a battery charging photovoltaic roof meets the eligibility criteria referred to in Article 12 of

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*Changes to legislation:* There are currently no known outstanding effects for the Commission Implementing Decision (EU) 2016/1926, Introductory Text. (See end of Document for details)

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Regulation (EC) No 443/2009 and Implementing Regulation (EU) No 725/2011 and provides a reduction in CO<sub>2</sub> emissions of at least 1 g CO<sub>2</sub>/km compared to a baseline vehicle. It is therefore appropriate to generally acknowledge and, in accordance with Article 12(4) of Regulation (EC) No 443/2009, attest the capacity of this innovative technology to reduce CO<sub>2</sub> emissions and provide a generic testing methodology for the certification of the CO<sub>2</sub> savings.

- (4) It is therefore appropriate to provide manufacturers with the possibility to certify the CO<sub>2</sub> savings from battery charging photovoltaic roofs that meet those conditions. In order to ensure that only photovoltaic roofs that are compliant with those conditions are proposed for certification, the manufacturer should provide a verification report from an independent and certified body confirming the compliance of the component with the conditions specified in this Decision together with the application for certification submitted to the type approval authority.
- (5) If the type approval authority finds that the battery charging photovoltaic roof does not satisfy the conditions for certification, the application for certification of the savings should be rejected.
- (6) It is appropriate to approve the testing methodology for determining the CO<sub>2</sub> savings from battery charging photovoltaic roofs.
- (7) In order to determine the CO<sub>2</sub> savings from a battery charging photovoltaic roof 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 variant that in all aspects is identical to the eco-innovation vehicle with the exception of the photovoltaic 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.
- (8) In accordance with Article 2(2)(b) of Implementing Regulation (EU) No 725/2011 it is to be demonstrated that the battery-charging photovoltaic roof is intrinsic to the efficient operation of the vehicle. This means that the energy generated by the photovoltaic roof should not for example be solely devoted to a comfort-enhancing appliance.
- (9) In order to facilitate a wider deployment of battery-charging photovoltaic roofs in new vehicles, a manufacturer should also have the possibility to apply for the certification of the CO<sub>2</sub> savings from several photovoltaic roof systems by a single certification application. It is however appropriate to ensure that where this possibility is used a mechanism is applied that incentivises the deployment of only those photovoltaic roofs systems that offer the highest efficiency.
- (10) 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 of the European Parliament and of the Council<sup>(6)</sup>, the individual code to be used for the innovative technology should be specified,

HAS ADOPTED THIS DECISION:

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- (1) [OJ L 140, 5.6.2009, p. 1.](#)
- (2) [OJ L 194, 26.7.2011, p. 19.](#)
- (3) <https://circabc.europa.eu/w/browse/f3927eae-29f8-4950-b3b3-d2e700598b52>
- (4) Commission Implementing Decision 2014/806/EU 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 ([OJ L 332, 19.11.2014, p. 34.](#))
- (5) Commission Implementing Decision (EU) 2015/279 of 19 February 2015 on the approval of the battery charging Asola 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 ([OJ L 47, 20.2.2015, p. 26.](#))
- (6) Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive) ([OJ L 263, 9.10.2007, p. 1.](#))

**Changes to legislation:**

There are currently no known outstanding effects for the Commission Implementing Decision (EU) 2016/1926, Introductory Text.