COMMISSION IMPLEMENTING REGULATION (EU) 2021/447

of 12 March 2021

determining revised benchmark values for free allocation of emission allowances for the period from 2021 to 2025 pursuant to Article 10a(2) of Directive 2003/87/EC 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 Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC ([1]), and in particular the third subparagraph of Article 10a(2) thereof,

Whereas:

(1) Commission Decision 2011/278/EU ([2]) determined 54 benchmarks serving as basis for free allocation (the 'benchmarks') and values for those benchmarks for the period from 2013 to 2020. Commission Delegated Regulation (EU) 2019/331 ([3]) repealed and replaced Decision 2011/278/EU as from 1 January 2021 and laid down identical starting points for the determination of annual reduction rates for each benchmark value update for the period from 2021 to 2030.

(2) To the extent feasible, the 54 benchmark values in Decision 2011/278/EU were determined on the basis of data on the greenhouse gas efficiency of individual installations provided by the respective European sector associations following rules defined by the Commission through a guidance paper and so-called 'sector rule books'. Given the voluntary character of the data collection, the dataset did not cover all concerned installations. 14 product benchmark values were based on data from single-product installations, as an assignment of emissions to individual products at the concerned multi-product installations was not regarded feasible in the given time frame. Due to a lack of data from individual installations, five product benchmark values as well as the heat and fuel benchmark values were based on information from Reference Documents on Best Available Techniques (BREFs) or other literature. Four product benchmark values were based on other product benchmark values to ensure a level playing field for producers of the same or similar products.

(3) The revised benchmark values are to be determined on the basis of verified information on the greenhouse gas efficiency of installations reported pursuant to Article 11 of Directive 2003/87/EC for the years 2016 and 2017. For each benchmark, the average performance in 2016 and 2017 of the 10 % most efficient installations is to be calculated. On the basis of a comparison of those values with the benchmark values set out in Decision 2011/278/EU which were based on performance data for the years 2007 and 2008, annual reduction rates are to be determined for each benchmark for the 9-year period from 2007/2008 to 2016/2017. Those annual reduction rates are then to be used to calculate, by means of extrapolation, the corresponding reductions of the benchmark values for the 15-year period from 2007/2008 to 2022/2023. In accordance with Article 10a(2) of Directive 2003/87/EC, the applied reduction over the 15-year period should not be lower than 3 % and not be higher than 24 %. Specific provisions apply for the update of the benchmark values for aromatics, hydrogen, syngas and hot metal.

(4) The list of installations containing information relevant for the free allocation of emission allowances was submitted to the Commission by the Member States by 30 September 2019 in accordance with Article 11(1) of Directive 2003/87/EC. To ensure that the benchmark values are based on correct data, the Commission carried out in-depth completeness and consistency checks of the data relevant for the free allocation of emission allowances, also using

([1]) OJ L 275, 25.10.2003, p. 32.

([2]) Commission Decision 2011/278/EU of 27 April 2011 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 130, 17.5.2011, p. 1).

([3]) Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 59, 27.2.2019, p. 8).

automated tools. Where appropriate, the Commission asked the concerned competent authorities for clarifications and corrections. As a result of this procedure, the Commission obtained an accurate, consistent and comparable set of data on the greenhouse gas efficiencies of all stationary installations covered by Directive 2003/87/EC. That high-quality dataset was used to determine the revised benchmark values for the period from 2021 to 2025 for each of the 54 benchmarks. Data from all sub-installations falling under the definition of a specific benchmark, as set out in Annex I to Delegated Regulation (EU) 2019/331, were used to determine the average performance of the 10 % most efficient installations in the years 2016 and 2017, as established in Article 10a(2) of Directive 2003/87/EC and recital (11) of Directive (EU) 2018/410 of the European Parliament and of the Council ([4]).

(5) Article 27 of Directive 2003/87/EC establishes that Member States are allowed under certain conditions to exclude from the EU ETS installations that have reported emissions of less than 25 000 tonnes of carbon dioxide equivalent and, where they carry out combustion activities, have a rated thermal input below 35 MW, excluding emissions from biomass. Article 27a of Directive 2003/87/EC establishes that Member States are also allowed to exclude from the EU ETS installations that have reported emissions of less than 2 500 tonnes of carbon dioxide equivalent, disregarding emissions from biomass. Several Member States have decided to exclude installations from the EU ETS for the period from 2021 to 2025 based on those provisions. Those installations should not be considered when determining the revised benchmark values.

(6) Delegated Regulation (EU) 2019/331 includes rules for determining emissions at sub-installation level to ensure the consistent treatment of emissions related to imports, exports and in-house production of measurable heat, of carbon-containing waste gases and of transferred CO_2. For that purpose, the relevant emission factors were determined by using the heat and fuel benchmark values which in turn had been updated by applying the determined annual reduction rates. For heat imports with unknown or not clearly defined emission factors and for heat exports, a value of 53,3 t CO_2 equivalents/TJ was used. That value was obtained by applying an annual reduction rate of 1,6 % to the heat benchmark value for the 9-year period from 2007/2008 to 2016/2017. For waste gas exports, a value of 37,4 t CO_2 equivalents/TJ was subtracted from the actual emission factor of the waste gas. That value corresponds to the emission factor of natural gas (56,1 t CO_2 equivalents/TJ) multiplied by a factor of 0,667 that accounts for the difference in efficiencies between the use of the waste gas and the use of the reference fuel natural gas. For waste gas imports, a value of 48,0 t CO_2 equivalents/TJ was used. That value was obtained by applying an annual reduction rate of 1,6 % to the fuel benchmark value for the 9-year period from 2007/2008 to 2016/2017.

(7) In the case of sub-installations importing intermediate products whose production is covered by the system boundaries of the relevant product benchmark and where it was not feasible to determine the greenhouse emissions associated with the production of those intermediate products based on the submitted data, the greenhouse gas efficiencies of the concerned sub-installations should not be considered when determining the revised benchmark values. This concerns the benchmark value updates for refinery products, hot metal, sintered dolime, ammonia, hydrogen and soda ash. In the case of sub-installations exporting intermediate products, and where it was not feasible to determine the greenhouse emissions associated with the subsequent processes based on the submitted data, the greenhouse gas efficiencies of the concerned sub-installations should not be considered when determining the revised benchmark values. This concerns the benchmark value update for refinery products, and hot metal.

(8) The methodology for attributing emissions to different sub-installations that is established in Delegated Regulation (EU) No 2019/331 can lead to negative greenhouse gas efficiencies in cases in which heat produced using a fuel with a low emission factor is exported to other sub-installations or installations. In such cases, the greenhouse gas efficiency of the concerned sub-installation should be set to zero for the purpose of determining the revised benchmark values.

([4]) Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814 (OJ L 76, 19.3.2018, p. 3).

(9) The measures provided for in this Regulation are in accordance with the opinion of the Climate Change Committee,

HAS ADOPTED THIS REGULATION:

Article 1

The revised benchmark values listed in the Annex shall apply for the harmonised free allocation of emission allowances for the period from 2021 to 2025.

Article 2

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

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 12 March 2021.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX

Benchmarks

For the purposes of this Annex, the definitions of products covered and of processes and emissions covered (system boundaries) set out in Annex I to Delegated Regulation (EU) 2019/331 shall apply.

1. **Product benchmarks without consideration of exchangeability of fuel and electricity**

Product benchmark	Average value of the 10 % most efficient installations in 2016 and 2017 (t CO_2 equivalents/t)	Benchmark value (allowances/t) for 2021-2025
Coke	0,144	0,217
Sintered ore	0,163	0,157
Hot metal	1,331	1,288
Pre-bake anode	0,317	0,312
Aluminium	1,484	1,464
Grey cement clinker	0,722	0,693
White cement clinker	0,973	0,957
Lime	0,746	0,725
Dolime	0,881	0,815
Sintered dolime	1,441	1,406
Float glass	0,421	0,399
Bottles and jars of colourless glass	0,323	0,290
Bottles and jars of coloured glass	0,265	0,237
Continuous filament glass fibre products	0,290	0,309
Facing bricks	0,094	0,106
Pavers	0,140	0,146
Roof tiles	0,130	0,120
Spray-dried powder	0,050	0,058
Plaster	0,048	0,047
Dried secondary gypsum	0,008	0,013
Short fibre kraft pulp	0,000	0,091
Long fibre kraft pulp	0,001	0,046
Sulphite pulp, thermo-mechanical and mechanical pulp	0,000	0,015
Recovered paper pulp	0,000	0,030
Newsprint	0,007	0,226
Uncoated fine paper	0,011	0,242
Coated fine paper	0,043	0,242

Product benchmark	Average value of the 10 % most efficient installations in 2016 and 2017 (t CO_2 equivalents/t)	Benchmark value (allowances/t) for 2021-2025
Tissue	0,139	0,254
Testliner and fluting	0,071	0,188
Uncoated carton board	0,009	0,180
Coated carton board	0,011	0,207
Nitric acid	0,038	0,230
Adipic acid	0,32	2,12
Vinyl chloride monomer (VCM)	0,171	0,155
Phenol/acetone	0,244	0,230
S-PVC	0,073	0,066
E-PVC	0,103	0,181
Soda ash	0,789	0,753

2. **Product benchmarks with consideration of exchangeability of fuel and electricity**

Product benchmark	Average value of the 10 % most efficient installations in 2016 and 2017 (t CO_2 equivalents/t)	Benchmark value (allowances/t) for 2021-2025
Refinery products	0,0255	0,0228
EAF carbon steel	0,209	0,215
EAF high alloy steel	0,266	0,268
Iron casting	0,299	0,282
Mineral wool	0,595	0,536
Plasterboard	0,119	0,110
Carbon black	1,141	1,485
Ammonia	1,604	1,570
Steam cracking	0,693	0,681
Aromatics	0,0072	0,0228
Styrene	0,419	0,401
Hydrogen	4,09	6,84
Synthesis gas (syngas)	0,009	0,187
Ethylene oxide/ethylene glycols	0,314	0,389

3. **Heat and fuel benchmarks**

Benchmark	Average value of the 10 % most efficient installations in 2016 and 2017 (t CO_2 equivalents/TJ)	Benchmark value (allowances/TJ) for 2021-2025
Heat benchmark	1,6	47,3
Fuel benchmark	34,3	42,6