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## COMMUNICATION FROM THE COMMISSION

**Publication of the total number of allowances in circulation in 2021 for the purposes of the Market Stability Reserve under the EU Emissions Trading System established by Directive 2003/87/EC and of the number of unallocated allowances during the period 2013-2020**

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#### 1. INTRODUCTION

In 2015, the Council and the European Parliament took the decision to establish a Market Stability Reserve<sup>1</sup> under the EU Emissions Trading System (ETS) established by Directive 2003/87/EC<sup>2</sup>. The Market Stability Reserve began operating in January 2019. Its purpose is to avoid that the EU carbon market operates with a large structural surplus of allowances, with the associated risk that this prevents the EU ETS from delivering the necessary investment signal to achieve the EU's emission reduction target in a cost-efficient manner. Its purpose is also to make the EU ETS more resilient in relation to supply-demand imbalances, so as to enable the EU carbon market to function in an orderly way.

The Decision states that, by 15 May each year and starting in 2017, the Commission shall publish the total number of allowances in circulation. This figure determines whether some of the allowances intended to be auctioned should be placed into the Reserve, or be released from the Reserve.

On 12 May 2021, the Commission published the total number of allowances in circulation in 2020, amounting to around 1.58 billion allowances<sup>3</sup>. The number of allowances to be placed in the Reserve over the period from 1 September 2021 to 31 August 2022 was 378 905 382.

This Communication is the sixth publication for the purposes of the Market Stability Reserve, and concerns the year 2021. It contains the total number of allowances in circulation, and sets out in detail how this figure has been calculated pursuant to Article 1(4) of Decision (EU) 2015/1814. This publication will determine the number of allowances that will be placed in the Reserve from September 2022 to August 2023.

#### 2. FUNCTIONING OF THE MARKET STABILITY RESERVE

The Market Stability Reserve functions in an automatic manner when the total number of allowances in circulation is outside of a predefined range. In accordance with Article 1(5) of Decision (EU) 2015/1814 allowances are added to the Reserve if the total number of allowances in circulation exceeds the threshold of 833 million allowances. Pursuant to Article

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<sup>1</sup> Decision (EU) 2015/1814 of the European Parliament and of the Council of 6 October 2015 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and amending Directive 2003/87/EC (OJ L 264, 9.10.2015, p. 1).

<sup>2</sup> Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ L 275, 25.10.2003, p. 32).

<sup>3</sup> Communication C/2021/3266 from the Commission (OJ C 187, 17.5.2021, p. 3)

1(6) of Decision (EU) 2015/1814 allowances are released from the Reserve, if the total number of allowances in circulation is lower than 400 million allowances. In practical terms, allowances are added to the Reserve by auctioning less, and released from the Reserve by auctioning 100 million more allowances in the future.

The publication of the total number of allowances in circulation, on the basis of which allowances will be added to or released from the Reserve, is therefore a key element for the operation of the Reserve.

In the context of the last major revision of the EU ETS<sup>4</sup>, important changes were made to the functioning of the Market Stability Reserve. During the period from 2019 to 2023, the percentage of the total number of allowances in circulation determining the number of allowances put in the Reserve if the threshold of 833 million allowances is exceeded is temporarily doubled from 12% to 24%, pursuant to Article 1(5), first subparagraph, last sentence, of Decision (EU) 2015/1814. In addition, as from 2023, the number of allowances held in the Market Stability Reserve that exceeds the previous year's auction volume will no longer be valid.

In accordance with Article 1(5) of Decision (EU) 2015/1814 and on the basis of this Communication, 24%<sup>5</sup> of the total number of allowances in circulation will therefore be placed in the Reserve over a period of 12 months starting on 1 September 2022. A corresponding amount will be deducted from the auction volumes of the Member States and the three EEA-EFTA countries, and of the United Kingdom in respect of the generation of electricity in Northern Ireland, in line with their respective auction shares. In this context, it is recalled that in accordance with Article 1(5), second subparagraph, of Decision (EU) 2015/1814 until 31 December 2025, allowances redistributed for the purposes of solidarity and growth within the Union are not taken into account to determine the relevant shares.

### 3. NUMBER OF UNALLOCATED ALLOWANCES DURING THE PERIOD 2013-2020

During the period 2013-2020 not all allowances initially planned for free allocation were allocated to the operators, due to three different reasons:

1. unused allowances from the new entrants reserve;
2. reduced activity (closures, partial cessations, significant capacity reductions);
3. allowances withheld from allocations in view of Article 10a(5) of Directive 2003/87/EC because of the calculations being based on the assumption that installations could be deemed at risk of carbon leakage while in practice that was not the case.

Unallocated allowances are either to be placed in the Market Stability Reserve in accordance with Article 1(3) of Decision (EU) 2015/1814, or placed in the new entrants reserve for the period 2021-2030 under Article 10a(7), first sentence of Directive 2003/87/EC.

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<sup>4</sup> 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 March 2018, p. 3);

<sup>5</sup> Representing 2% per month.

The number of unallocated allowances to be placed in the Market Stability Reserve and in the new entrants reserve for the period 2021-2030 is as follows:

- The unallocated allowances to be placed in the Market Stability Reserve in accordance with Article 1(3) of Decision (EU) 2015/1814 are 886 806 455 in number. This is the sum of 301 801 477 unallocated allowances from the new entrants reserve for the period 2013-2020 under Article 10a(7) of Directive 2003/87/EC and 585 004 978 unallocated allowances from reduced activity under Articles 10a(19) and 10a(20) of Directive 2003/87/EC (*viz.* closures, partial cessations or significant capacity reductions).
- The unallocated allowances to be placed in the new entrants reserve for the period 2021-2030 under Article 10a(7), first sentence of Directive 2003/87/EC are 131 289 138 in number. This number results from the number of 156 289 138 unallocated allowances that are due to changes in the carbon leakage status of installations, from which is deducted the number of 25 million allowances to be set aside for Greece under Article 10a(9) of Directive 2003/87/EC.

#### 4. THE TOTAL NUMBER OF ALLOWANCES IN CIRCULATION

According to Article 1(4) of Decision (EU) 2015/1814, the total number of allowances in circulation "*shall be the cumulative number of allowances issued in the period since 1 January 2008, including the number issued pursuant to Article 13(2) of Directive 2003/87/EC in that period and entitlements to use international credits exercised by installations under the EU ETS in respect of emissions up to 31 December of that given year, minus the cumulative tonnes of verified emissions from installations under the EU ETS between 1 January 2008 and 31 December of that same given year, any allowances cancelled in accordance with Article 12(4) of Directive 2003/87/EC and the number of allowances in the reserve.*"

In short, the total number of allowances in circulation (TNAC) relevant for feeds into and releases from the Market Stability Reserve (MSR) is determined by the following formula:

$$\text{TNAC} = \text{Supply} - (\text{Demand} + \text{allowances in the MSR})$$

There are three different elements that determine the total number of allowances in circulation: first, the supply of allowances since 1 January 2008; second, the demand for allowances (number of allowances surrendered and cancelled); and third, the holdings of the Reserve.

Pursuant to Article 10(1) of Directive 2003/87/EC, the Market Stability Reserve relates to allowances for stationary installations, thus aviation allowances and verified aviation emissions are not considered in this context.

##### 4.1. Supply

The supply of allowances to the market is determined by a number of different elements:

- allowances banked<sup>6</sup> from the period 2008-12 of the EU ETS,
- allowances allocated for free between 1 January 2013 until 31 December 2021, including the allowances allocated from the new entrants reserve,
- allowances not allocated to installations pursuant to Articles 10a(7), 10a(19) and 10a(20) of Directive 2003/87/EC, that were placed in the Market Stability Reserve in 2020 as per Article 1(3) of Decision (EU) 2015/1814<sup>7</sup>,
  - 50 million unallocated allowances auctioned for the Innovation Fund pursuant to Article 10a(8)<sup>8</sup> of Directive 2003/87/EC must be deducted from these volumes.
  - At the beginning of 2021, 200 million allowances were transferred from the Market Stability Reserve to the new entrants reserve for the period 2021-2030, according to Article 10a(7) of Directive 2003/87/EC.
- allowances issued for auctioning between 1 January 2013<sup>9</sup> and 31 December 2021,
  - To this volume must be added 7 213 787 allowances used for the flexibility, as set out in Article 6(2) of Regulation (EU) 2018/842 of the European Parliament and of the Council<sup>10</sup> in 2021.
- allowances deducted from auctioning volumes during the period 2014-2016, and allowances deducted from auctioning volumes from 2019 to 2021 in accordance with the previous Commission Communications<sup>11</sup>,
- allowances monetised by the European Investment Bank for the purposes of the 'NER300' programme,
- international credit entitlements exercised by installations in respect of emissions up to 31 December 2020. International credit entitlements can no longer be used as of the period 2021-2030.

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<sup>6</sup> Allowances issued during the period 2008-2012 of the EU ETS, which were not surrendered to cover verified emissions or cancelled were 'banked' for use at the beginning of the third trading period (2013-2020) of the EU ETS. These allowances were deleted and simultaneously an equal number of allowances were created in the period 2013-2020. Thus, this number represents the exact number of ETS allowances in circulation at the start of the period 2013-2020 of the EU ETS. See [https://ec.europa.eu/clima/eu-action/eu-emissions-trading-system-eu-ets/union-registry\\_en#ecl-inpage-1121](https://ec.europa.eu/clima/eu-action/eu-emissions-trading-system-eu-ets/union-registry_en#ecl-inpage-1121) section "Faq" point on "What is banking?"

<sup>7</sup> Article 1(3) of Decision (EU) 2015/1814 states that "*Allowances not allocated to installations pursuant to Article 10a(7) of Directive 2003/87/EC and allowances not allocated to installations because of the application of Article 10a(19) and (20) of that Directive shall be placed in the reserve in 2020.*"

<sup>8</sup> Article 10a(8) of Directive 2003/87/EC states that "*In addition, 50 million unallocated allowances from the market stability reserve shall supplement any remaining revenues from the 300 million allowances available in the period from 2013 to 2020 under Commission Decision 2010/670/EU, and shall be used in a timely manner for [the Innovation Fund].*"

<sup>9</sup> This figure includes the so-called early auctions, i.e. allowances valid for the period 2013-20, which have been auctioned before 1 January 2013.

<sup>10</sup> Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26).

<sup>11</sup> Communications from the Commission of 15 May 2018 C(2018) 2801 (OJ C 169, 16.5.2018, p. 3), 14 May 2019 C(2019) 3288 (OJ C 167, 16.5.2019, p. 5), 8 May 2020 C(2020) 2835 (OJ C 164, 13.5.2020, p. 17) and 12 May 2021 C(2021) 3266 (OJ C 187, 17.5.2021, p. 3).

The number of allowances banked from the period 2008-2012 of the EU ETS is 1 749 540 826 allowances<sup>12</sup>. This 'banking total' represents the total number of allowances issued during the period 2008-2012 of the EU ETS, which were not surrendered to cover verified emissions or cancelled. For the purpose of the determination of the total number of allowances in circulation it therefore represents the number of allowances in circulation at the start of the period 2013-20 of the EU ETS on 1 January 2013 and is taken into account as such in the calculation.

The number of allowances allocated for free between 1 January 2013 until 31 December 2021, including allowances allocated from the new entrants reserve is 7 141 195 439<sup>13</sup>.

The number of unallocated allowances pursuant to Article 10a(7) of Directive 2003/87/EC was 301 801 477. The volume of 50 million allowances auctioned for the Innovation Fund were deducted from this amount.

The number of unallocated allowances pursuant to Articles 10a(19) and 10a(20) of Directive 2003/87/EC was 585 004 978.

200 million allowances were taken from the Market Stability Reserve and placed in the new entrants reserve.

According to the reports from the auctions on the common auction platform and on the relevant opt-out platforms<sup>14</sup>, the number of allowances auctioned between 1 January 2013 and 31 December 2021, including the so-called early auctions, is 6 598 419 287.

To this volume, 7 213 787 allowances were added based on Article 6(2) of Regulation (EU) 2018/842.

In line with article 1(2) of Decision (EU) 2015/1814, the number of allowances deducted from auctioning volumes during the period 2014-2016 is 900 000 000.

The number of allowances deducted from auctioning volumes from 2019 to 2021 pursuant to the previous Commission Communications<sup>15</sup> was 1 095 875 607 allowances.

300 000 000 allowances have been monetised by the European Investment Bank for the purposes of the NER300 programme<sup>16</sup>.

The international credit entitlements exercised by installations in respect of emissions up to 31 December 2020 correspond to 497 248 017<sup>17</sup>.

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<sup>12</sup> See Carbon Market Report 2015; COM (2015) 576.

<sup>13</sup> Based on an extract of the EU Transaction Log (EUTL) on 1 April 2022.

<sup>14</sup> Available at: <https://www.eex.com/en/markets/environmental-markets/eu-ets-auctions> and <https://www.theice.com/marketdata/reports/148>.

<sup>15</sup> See footnote 11 above.

<sup>16</sup> A first tranche of 200 million allowances – sold in 2011 and 2012 – and a second tranche of 100 million allowances – sold in 2013 and 2014; see for further details [https://ec.europa.eu/clima/system/files/2016-11/summary\\_report\\_ner300\\_monetisation\\_en.pdf](https://ec.europa.eu/clima/system/files/2016-11/summary_report_ner300_monetisation_en.pdf).

## 4.2. Demand

The demand consists of the total verified emissions from installations between 1 January 2013<sup>18</sup> and 31 December 2021, which is 14 836 567 505 tonnes<sup>19</sup>, and allowances cancelled in that same period, which corresponds to 621 882 allowances.

## 4.3. Holdings of the Market Stability Reserve

In line with Article 1(2) of Decision (EU) 2015/1814, the 900 million allowances deducted from auctioning volumes during the period 2014-2016 were placed in the Reserve when it began operating on 1 January 2019.

In line with the previous Commission Communications<sup>20</sup>, 772 749 992 allowances were placed in the Reserve in the period from 1 January 2019 to 31 December 2020.

In line with the Commission Communication of 8 May 2020<sup>21</sup>, 196 823 820 allowances were placed in the Reserve in the period from 1 January 2021 to 31 August 2021.

In line with the Commission Communication of 12 May 2021, 126 301 795 allowances were placed in the Reserve in the period from 1 September 2021 to 31 December 2021.

In line with Article 1(3) of Decision (EU) 2015/1814, 301 801 477 allowances were added to the Reserve at the end of 2020, corresponding to the number of unallocated allowances pursuant to Article 10a(7) of Directive 2003/87/EC. 585 004 978 allowances were added to the Reserve at the end of 2020, corresponding to the number of unallocated allowances pursuant to Articles 10a(19) and Article 10a(20) of Directive 2003/87/EC. In total, the number of unallocated allowances added to the Market Stability Reserve at the end of 2020 was 886 806 455, as was explained in part 3 of this Communication.

In line with article 10a(8) of Directive 2003/87/EC, the holdings of the Market Stability Reserve were reduced by 50 million allowances, that were auctioned in 2020 for the Innovation Fund.

In line with article 10a(7) of Directive 2003/87/EC, the holdings of the Market Stability Reserve were reduced by 200 million allowances, that were placed in the new entrants reserve.

For the period up to 31 December 2021, there were therefore 2 632 682 071 allowances in the Reserve.

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<sup>17</sup> Based on an extract of the EUTL on 1 April 2022.

<sup>18</sup> With respect to verified emissions in the period 2008-2012, please see explanations on the banking total (section 3.1.).

<sup>19</sup> The total verified emissions are based on an extract from the EUTL on 1 April 2022 to take into account verified emissions reported by 31 March 2022. Emissions reported after that date are therefore not reflected in this total.

<sup>20</sup> See footnote 20 above.

<sup>21</sup> See footnote 21 above.

#### 4.4. Total number of allowances in circulation

In the light of the foregoing, the total number of allowances in circulation amounts to 1 449 214 182 allowances.

#### 5. CONCLUSION

In line with Decision (EU) 2015/1814, over a 12-month period – from 1 September 2022 to 31 August 2023 –, a total of 347 811 404 allowances will be placed in the Market Stability Reserve.

The next publication will be made in May 2023 to determine Reserve feeds from September 2023 until August 2024.

#### Overview

| <b>Supply</b>  |               |
|--|---------------|
| a) Banking from the period 2008-2012   | 1 749 540 826 |
| b) Allowances allocated for free for the period between 1 January 2013 until 31 December 2021, including from the new entrants reserve | 7 141 195 439 |
| c) Unallocated allowances pursuant to Articles 10a(7), 10a(19) and 10a(20) of Directive 2003/87/EC                                     | 886 806 455   |
| d) Allowances deducted from c) in order to be auctioned in 2020 for the Innovation Fund  | - 50 000 000  |
| e) Allowances deducted from c) and placed in the new entrants reserve in 2021  | - 200 000 000 |
| f) Total number of allowances auctioned between 1 January 2013 and 31 December 2021, including early auctions                          | 6 598 419 287 |
| g) Allowances used for flexibility under Regulation (EU) 2018/842  | 7 213 787     |
| h) Allowances deducted from auctioning volumes during the period 2014-2016   | 900 000 000   |
| i) Allowances deducted from auctioning volumes in 2019-2021 pursuant to the previous Commission Communications                         | 1 095 875 607 |
| j) The number of allowances monetised by the European Investment Bank for the purposes of the NER300 programme                         | 300 000 000   |

|  |                      |
|--|----------------------|
| k) International credit entitlements exercised by installations in respect of emissions up to 31 December 2020   | 497 248 017          |
| <b>Sum (supply)</b>  | 18 919 085 631       |
| <b>Demand</b>  |                      |
| (a) Tonnes of verified emissions from installations under the EU ETS between 1 January 2013 and 31 December 2021 | 14 836 567 505       |
| (b) Allowances cancelled in accordance with Article 12(4) of Directive 2003/87/EC by 31 December 2021            | 621 882              |
| <b>Sum (demand)</b>  | 14 837 189 387       |
| <b>Market Stability Reserve holdings</b>   |                      |
| Number of allowances in the Market Stability Reserve   | 2 632 682 071        |
| <b>Total number of allowances in circulation</b>   | <b>1 449 214 182</b> |