

## II

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## EUROPEAN COMMISSION

## COMMUNICATION FROM THE COMMISSION

**Publication of the total number of allowances in circulation in 2022 for the purposes of the Market Stability Reserve under the EU Emissions Trading System established by Directive 2003/87/EC**

(2023/C 172/01)

**1. INTRODUCTION**

In 2015, the European Parliament and the Council of the European Union (EU) adopted Decision (EU) 2015/1814 <sup>(1)</sup> to create a Market Stability Reserve under the EU Emissions Trading System (ETS) established by Directive 2003/87/EC <sup>(2)</sup>. The purpose of the Market Stability Reserve is to avoid the EU carbon market operating with a large structural surplus of allowances and the associated risk that this prevents the EU ETS from delivering an investment signal needed to achieve the EU's emission reduction target cost-efficiently. The purpose of the Reserve is also to make the EU ETS more resilient to supply-demand imbalances, thus enabling the EU carbon market to function smoothly. The Market Stability Reserve began operating in January 2019.

Under Article 1(4) of Decision (EU) 2015/1814, the Commission publishes the total number of allowances in circulation every year for the purposes of the Market Stability Reserve, by 15 May the subsequent year. This figure determines whether allowances are withdrawn from the auction volume and placed in the Reserve or released from the Reserve and auctioned. Publishing the total number of allowances in circulation is therefore an important feature of the operation of the Market Stability Reserve and the EU ETS.

On 13 May 2022, the Commission published the total number of allowances in circulation in 2021, which amounted to 1 449 214 182 <sup>(3)</sup>. Accordingly, 347 811 404 allowances were to be placed in the Market Stability Reserve from 1 September 2022 to 31 August 2023.

This Communication is the seventh publication of the total number of allowances in circulation for the purposes of the Market Stability Reserve and concerns the year 2022. It details the underlying calculation and the number of allowances that will be placed in the Reserve from 1 September 2023 to 31 August 2024. It also indicates the number of allowances in the Reserve that became invalid on 1 January 2023.

<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> C(2022) 2780 - 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 2022/C 195/02 (OJ C 195, 13.5.2022, p. 2). Corrigendum to the Communication – C(2022) 4874.

## 2. FUNCTIONING OF THE MARKET STABILITY RESERVE

The Market Stability Reserve functions automatically when the total number of allowances in circulation is outside of the set range. Allowances are withdrawn from the auction volume and placed in the Reserve if the total number of allowances in circulation exceeds the threshold of 833 million. The intake rate of the Reserve is set at 24 % of the total number of allowances in circulation. If the total number of allowances in circulation is less than the threshold of 400 million, 100 million allowances are released from the Reserve and auctioned. Allowances are either placed in or released from the Reserve over the course of 12 months <sup>(4)</sup>.

Under Article 1(5) of Decision (EU) 2015/1814 and on the basis of this Communication, 24 % of the total number of allowances in circulation on 31 December 2022 will be placed in the Reserve over a period of 12 months, starting on 1 September 2023. A corresponding number of allowances will be deducted from the auction volumes of EU Member States and the three EEA-EFTA countries (Iceland, Liechtenstein and Norway), and of the United Kingdom in respect of the generation of electricity in Northern Ireland, in line with their respective auction shares.

Under Article 1(5) of Decision (EU) 2015/1814, until 31 December 2025, allowances distributed for the purposes of solidarity and growth in the EU ETS <sup>(5)</sup> are not included in the calculation of the relevant shares for the purposes of the Market Stability Reserve.

Under Article 1(5a) of Decision (EU) 2015/1814, from 2023 onwards, any allowances held in the Market Stability Reserve above the previous year's auction volume are no longer valid. This Communication is thus the first publication of the total number of allowances in circulation that details how many allowances became invalid.

The next year's Communication on the total number of allowances in circulation will take into account two important developments. Firstly, the amendments of Decision (EU) 2015/1814 as part of the 'Fit for 55' legislative package to deliver the European Green Deal, which will apply from 2024. Secondly, Regulation (EU) 2023/435 <sup>(6)</sup> adopted in February 2023. Under the title REPowerEU, this Regulation constitutes part of the EU's response to the energy crisis. Among other measures, it amends Directive 2003/87/EC to derogate from Article 1(5a) of Decision 2015/1814 by using 27 million unallocated allowances in the Market Stability Reserve for the Innovation Fund, from the total quantity that would otherwise be invalidated over the period until 31 December 2030.

## 3. TOTAL NUMBER OF ALLOWANCES IN CIRCULATION

Under 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 and 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 pursuant to Article 12(4) of Directive 2003/87/EC and the number of allowances in the Market Stability Reserve.'*

In short, the total number of allowances in circulation (TNAC) relevant for the operation of the Market Stability Reserve is calculated using the formula:

$$\text{TNAC} = \text{Supply} - (\text{Demand} + \text{Allowances in the Market Stability Reserve})$$

The three elements are described in detail in this Communication. An overview of all figures is presented in the table at the end of the document.

Under Article 10(1) of Directive 2003/87/EC, the Market Stability Reserve covers allowances for stationary installations. Allowances issued in respect of aviation and verified aviation emissions are therefore not included in the context of this year's publication.

<sup>(4)</sup> Corresponding to the intake rate of 2 % per month.

<sup>(5)</sup> Under Article 10(2), point b of Directive 2003/87/EC.

<sup>(6)</sup> Regulation (EU) 2023/435 of the European Parliament and of the Council of 27 February 2023 amending Regulation (EU) 2021/241 as regards REPowerEU chapters in recovery and resilience plans and amending Regulations (EU) No 1303/2013, (EU) 2021/1060 and (EU) 2021/1755, and Directive 2003/87/EC (OJ L 63, 28.2.2023, p. 1).

## Supply

Supply of allowances on the EU carbon market consists of the following elements:

- Allowances banked <sup>(7)</sup> from phase 2 of the EU ETS (2008-12). This volume amounted to 1 749 540 826 allowances <sup>(8)</sup>.
- Allowances allocated for free for the period from 1 January 2013 to 31 December 2022, including the allowances allocated from the New Entrants Reserve (NER). This volume amounts to 7 683 593 499 allowances <sup>(9)</sup>.
- Allowances not allocated to installations under Articles 10a(7), 10a(19) and 10a(20) of Directive 2003/87/EC that were placed in the Market Stability Reserve in 2020 under Article 1(3) of Decision (EU) 2015/1814. The number of allowances not allocated under Article 10a(7) was 301 801 477 and the number of allowances not allocated under Articles 10a(19) and 10a(20) was 585 004 978 - in total, 886 806 455 allowances. From this volume, the following volumes of allowances must be deducted:
  - 50 000 000 allowances auctioned in 2020 for the Innovation Fund under Article 10a(8) of Directive 2003/87/EC,
  - 200 000 000 allowances transferred from the Market Stability Reserve to the NER for phase 4 of the EU ETS (2021-30) under Article 10a(7) of Directive 2003/87/EC.
- Allowances issued for auctioning from 1 January 2013 <sup>(10)</sup> to 31 December 2022, and allowances used for flexibility purposes in 2021-22 under Article 6 of Regulation (EU) 2018/842 <sup>(11)</sup>. According to auction reports on the common auction platform and the relevant opt-out platforms <sup>(12)</sup>, the volume of allowances auctioned, including 'early auctions', was 7 073 594 500.
- To this volume, 14 427 576 allowances must be added under the 'Effort Sharing Regulation flexibility' as set out in Article 6(2) of Regulation (EU) 2018/842 <sup>(13)</sup>.
- Allowances deducted from auction volumes in 2014-16, and allowances deducted from auction volumes since 2019 in line with the Communications on the total number of allowances in circulation of the last years <sup>(14)</sup>. Under Article 1(2) of Decision (EU) 2015/1814, 900 000 000 allowances were deducted from auction volumes in 2014-16. In line with the 2018-2022 Communications on the total number of allowances in circulation, 1 464 416 332 allowances were deducted from auction volumes from 2019 to 2022.

<sup>(7)</sup> Allowances issued during phase 2 of the EU ETS (2008-12), which were not surrendered to cover verified emissions or cancelled were 'banked' for use at the beginning of phase 3 of the EU ETS (2013-20). These allowances were deleted and simultaneously an equal number of allowances was created in phase 3. Thus, this number represents the exact number of ETS allowances in circulation at the start of phase 3 of the EU ETS.

<sup>(8)</sup> COM(2015) 576 - Report from the Commission to the European Parliament and the Council - Climate action progress report, including the report on the functioning of the European carbon market and the report on the review of Directive 2009/31/EC on the geological storage of carbon dioxide.

<sup>(9)</sup> Based on an extract of the EU Transaction Log (EUTL) on 1 April 2023.

<sup>(10)</sup> This figure includes 'early auctions' i.e., allowances valid for phase 3 of the EU ETS (2013-20), which had been auctioned before 1 January 2013.

<sup>(11)</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>(12)</sup> Auction reports: European Energy Exchange (EEX) and Intercontinental Exchange (ICE).

<sup>(13)</sup> Regulation (EU) 2018/842, Effort Sharing Regulation, creates a one-off flexibility, whereby Member States can have up to a maximum of 100 million EU ETS allowances collectively cancelled in 2021-30 for compliance with their respective greenhouse gas emission reduction targets under this Regulation. The flexibility concerns Member States with the targets significantly above both the Union average and their cost-effective reduction potential as well as Member States that did not allocate any EU ETS allowances for free to industrial installations in 2013. A cancellation is made from the auctioning volume of the Member State concerned under Article 10 of Directive 2003/87/EC. Cancelled allowances are considered as EU ETS allowances in circulation when determining the total number of allowances in circulation for the purposes of the Market Stability Reserve in a given year.

<sup>(14)</sup> Communications from the Commission - Publications of the total number of allowances in circulation for the purposes of the Market Stability Reserve under the EU Emissions Trading System established by Directive 2003/87/EC: C(2018) 2801 of 16 May 2018 (OJ C 169, 16.5.2018, p. 3), C/2019/3288 of 16 May 2019 (OJ C 167, 16.5.2019, p. 5), C/2020/2835 of 13 May 2020 (OJ C 164, 13.5.2020, p. 17), C/2021/3266 of 17 May 2021 (OJ C 187, 17.5.2021, p. 3) and C/2022/2780 of 13 May 2022 (OJ C 195, 13.5.2022, p. 2).

- Allowances monetised for the NER300 programme. A total of 300 000 000 allowances were monetised by the European Investment Bank <sup>(15)</sup>.
- International credits exercised in respect of emissions up to 31 December 2020 <sup>(16)</sup>. Installations used 497 248 017 international credits in respect of their emissions <sup>(17)</sup>.

### **Demand**

Demand for allowances on the EU carbon market comprises the total verified emissions from installations from 1 January 2013 <sup>(18)</sup> to 31 December 2022, which amount to 16 182 965 083 tonnes <sup>(19)</sup>, and 644 597 allowances cancelled during this period under Article 12(4) of Directive 2003/87/EC.

### **Holdings of the Market Stability Reserve**

Under Article 1(2) of Decision (EU) 2015/1814, 900 000 000 allowances, deducted from auction volumes in 2014-16, were placed in the Reserve on 1 January 2019.

In line with the Communications on the total number of allowances in circulation of the last years, the following volumes of allowances were placed in the Reserve:

- 1 095 875 607 allowances from 1 January 2019 to 31 December 2021 <sup>(20)</sup>,
- 252 603 587 allowances from 1 January to 31 August 2022 <sup>(21)</sup>, <sup>(22)</sup>,
- 115 937 138 allowances from 1 September to 31 December 2022 <sup>(23)</sup>.

Under Article 1(3) of Decision (EU) 2015/1814, a total of 886 806 455 unallocated allowances from phase 3 of the EU ETS (2013-20) were added to the Reserve at the end of 2020.

Under Article 10a(8) of Directive 2003/87/EC, the holdings of the Reserve had been reduced by 50 000 000 allowances that were auctioned in 2020 for the Innovation Fund.

Under Article 10a(7) of Directive 2003/87/EC, the holdings of the Reserve had been reduced by 200 000 000 allowances that were placed in the NER in 2021 for phase 4 of the EU ETS (2021-30).

On 31 December 2022, there were therefore 3 001 222 787 allowances in the Market Stability Reserve.

On 1 January 2023, 2 515 135 787 of these allowances became invalid under Article 1(5a) of Decision (EU) 2015/1814. The remaining holdings of the Reserve amount to 486 087 000 allowances – the volume of allowances auctioned in 2022.

### **Total number of allowances in circulation**

Based on the above, the total number of allowances in circulation in 2022 amounts to 1 134 794 738 allowances.

## **4. CONCLUSION**

In line with Decision (EU) 2015/1814, a total of 272 350 737 allowances will be placed in the Market Stability Reserve over a 12-month period from 1 September 2023 to 31 August 2024.

<sup>(15)</sup> The first instalment of 200 million allowances – sold in 2011 and 2012, and the second instalment of 100 million allowances – sold in 2013 and 2014.

<sup>(16)</sup> International credits cannot be used for compliance in phase 4 of the EU ETS (2021-30).

<sup>(17)</sup> Based on an extract of the EUTL on 1 April 2023.

<sup>(18)</sup> With respect to the verified emissions in the period 2008-12 (phase 2), see footnote 8.

<sup>(19)</sup> The total verified emissions are based on the data extract from the EUTL on 1 April 2023. It takes into account verified emissions reported by 31 March 2023 – the reporting deadline in the EU ETS. Emissions reported after this date are not reflected in the total.

<sup>(20)</sup> C/2018/2801, C/2019/3288, C/2020/2835, C/2021/3266 - as previously mentioned.

<sup>(21)</sup> C/2021/3266 - as previously mentioned. As concluded in point 4 of this Communication, 378 905 382 allowances would be placed in the Market Stability Reserve in the period from 1 September 2021 to 31 August 2022. The volume corresponding to the period from 1 January to 31 August 2022 was 252 603 587.

<sup>(22)</sup> C(2020) 8643 - Notice on the Union-wide quantity of allowances for 2021 and the Market Stability Reserve under the EU Emissions Trading System.

<sup>(23)</sup> C/2022/2780 - as previously mentioned. As concluded in point 5 of this Communication, 347 811 404 allowances would be placed in the Market Stability Reserve in the period from 1 September 2022 to 31 August 2023. The volume corresponding to the period from 1 September to 31 December 2022 was 115 937 138.

The next year's publication of the total number of allowances in circulation for the purposes of the Market Stability Reserve will determine the Reserve's operation from September 2024 until August 2025.

### OVERVIEW

<b>Supply</b>	
a) Allowances banked from phase 2 (2008-12)	1 749 540 826
b) Allowances allocated for free for the period from 1 January 2013 to 31 December 2022, including from the NER	7 683 593 499
c) Allowances not allocated under Articles 10a(7), 10a(19) and 10a(20) of Directive 2003/87/EC in phase 3 (2013-20)	886 806 455
d) Allowances deducted from c) and auctioned for the Innovation Fund	- 50 000 000
e) Allowances deducted from c) and placed in the NER	- 200 000 000
f) Allowances auctioned from 1 January 2013 to 31 December 2022, including early auctions	7 073 594 500
g) Allowances used for flexibility purposes in 2021-22	14 427 576
h) Allowances deducted from auction volumes in 2014-16	900 000 000
i) Allowances deducted from auction volumes in 2019-2022 in line with the Communications on the total number of allowances in circulation	1 464 416 332
j) Allowances monetised for the NER300 programme	300 000 000
k) International credits used in respect of emissions up to 31 December 2020	497 248 017
<b>Sum (supply)</b>	<b>20 319 627 205</b>
<b>Demand</b>	
(a) Tonnes of verified emissions from stationary installations under the EU ETS from 1 January 2013 to 31 December 2022	16 182 965 083
(b) Allowances cancelled under Article 12(4) of Directive 2003/87/EC up to 31 December 2022	644 597
<b>Sum (demand)</b>	<b>16 183 609 680</b>
<b>Holdings of the Market Stability Reserve</b>	
Allowances in the Market Stability Reserve on 31 December 2022	3 001 222 787
<b>Total number of allowances in circulation</b>	<b>1 134 794 738</b>
<b>Allowances that became invalid on 1 January 2023</b>	<b>2 515 135 787</b>