

## Guidance on the Use of Global Warming Potential (GWP) Values

***Important notice: This document supersedes version 1.0 as of 04.09.2024 of this guidance, given currently prevailing voluntary market practices, and confirmation of Global Warming Potential values to be employed in relevant national and international carbon reporting, carbon taxation, carbon trade, ITMOs exchange mechanisms under Article 6 of the Paris Agreement, and as per provisions in current Article 6.4 mechanism's project activities (PA) and programme of activities (PoA) standards, allowing in turn CCMPs participating in Cercarbono's voluntary carbon certification programme fair consideration of their achieved mitigation outcomes and unbiased comparison of such outcomes with those participating in other certification standards / programmes.***

This guidance enters into force on March 15, 2025, and its application is mandatory for all CCMPs participating in Cercarbono's voluntary carbon certification programme from that time on.

Global Warming Potential (GWP) values for relevant Greenhouse Gases (GHGs) to be employed by CCMPs participating in Cercarbono's Voluntary Carbon Certification Programme in assessing and reporting their mitigation outcomes (aggregate GHG emissions reduction and/or net GHG removals), which shall be expressed in tonnes of carbon dioxide equivalent, shall be those corresponding to a 100-year time horizon as referred in the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC). Provisions regarding subsequent IPCC's Assessment Reports releases, and other applicable provisions, are as follows:

- For new CCMPs and active CCMPs in verification stages, and recognizing a certain CCMP could have a significant advance in its development or verification process by the time a new version of these guidelines (including revised provisions on 100-year time horizon GWP values), enters into force, a non-extendable six-month grace period from the time of such date is deemed as allowable for registering or verifying a CCMP in Cercarbono using the previous Assessment Report's 100-year time horizon global warming potential (GWP).
- From March 15, 2025 onwards, active CCMPs are required to reassess such GWPs at least every 5 years, according to applicable guidelines at that time and at each crediting period renewal event, performing the corresponding adjustments in the Project Description Document (PDD) and other relevant CCMP documentations and considering revised GWP values as applicable.
- In the case of migrated projects, such reassessment shall first take place optionally at the time the project migrates into Cercarbono, or on a mandatory basis either at the

end of their fifth year under Cercarbono, or when a renewal of the crediting period is requested, whichever comes first after such migration is effective.

- Where a particular jurisdiction, GHG program, or country has specific rules or policies for the use and consideration of specific GWP values, different from the above, then those rules shall be applied in lieu of those previously described, provided such rules or policies are duly justified and demonstrated the project must abide by them, and such situation is clearly explained in relevant CCMP documentation to avoid misrepresentations on the real magnitude of corresponding mitigation outcomes.

The following table contains information regarding IPCC AR5 GWP values for a 100-year time horizon for most common GHGs, applicable to all CCMPs participating in Cercarbono's voluntary carbon certification programme to date.

As referred to in previous paragraphs, mitigation outcomes shall be expressed in tonnes of carbon dioxide equivalent to provide a common quantification base.

GHG Name, Acronym, or Designator*	Formula	GWP (100-year time horizon)
<b>Carbon dioxide</b>	<b>CO<sub>2</sub></b>	<b>1</b>
<b>Methane</b>	<b>CH<sub>4</sub></b>	<b>28</b>
<b>Nitrous oxide</b>	<b>N<sub>2</sub>O</b>	<b>265</b>
<b>Hydrofluorocarbons (HFCs)*</b>		
<b>HFC-23</b>	<b>CHF<sub>3</sub></b>	<b>12400</b>
<b>HFC-32</b>	<b>CH<sub>2</sub>F<sub>2</sub></b>	<b>677</b>
<b>HFC-125</b>	<b>CHF<sub>2</sub>CF<sub>3</sub></b>	<b>3170</b>
<b>HFC-134</b>	<b>CHF<sub>2</sub>CHF<sub>2</sub></b>	<b>1120</b>
<b>HFC-134a</b>	<b>CH<sub>2</sub>FCF<sub>3</sub></b>	<b>1300</b>
<b>HFC-143</b>	<b>CH<sub>2</sub>FCHF<sub>2</sub></b>	<b>328</b>
<b>HFC-143a</b>	<b>CH<sub>3</sub>CF<sub>3</sub></b>	<b>4800</b>
<b>Perfluorocarbons (PFCs)*</b>		
<b>PFC-14</b>	<b>CF<sub>4</sub></b>	<b>6630</b>
<b>PFC-116</b>	<b>C<sub>2</sub>F<sub>6</sub></b>	<b>11100</b>
<b>PFC-218</b>	<b>C<sub>3</sub>F<sub>8</sub></b>	<b>6640</b>
<b>PFC-31-10</b>	<b>C<sub>4</sub>F<sub>10</sub></b>	<b>6870</b>
<b>Sulfur hexafluoride</b>	<b>SF<sub>6</sub></b>	<b>23500</b>
<b>Nitrogen trifluoride</b>	<b>NF<sub>3</sub></b>	<b>16100</b>

\*For GHGs not included in this table and their corresponding GWP values, please refer to Table 8.A.1 of AR5 full report (Climate Change 2015: Physical Science Basis - Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change), found at:

[http://www.climatechange2013.org/images/report/WG1AR5\\_ALL\\_FINAL.pdf](http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf)

## Document history

Version	Date	Comments or changes
2.0	19.03.2025	Revised document to harmonize criteria with applicable provisions as per current versions of Art. 6.4 mechanism PA/PoA standards', including GWP values for most common GHGs.
1.0	04.09.2024	Initial version (withdrawn).