

ASB0048-2020

Standardized baseline

Specific CO₂ emissions in Residential Buildings in Republic of Korea

Version 01.0



United Nations
Framework Convention on
Climate Change

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1. Introduction

1. This standardized baseline provides the values of the average specific CO₂ emissions per m² of new and existing residential building units located in the Republic of Korea.

2. Scope, applicability, and entry into force

2.1. Scope and applicability

2. The scope of this standardized baseline covers the average specific CO₂ emission factor per m² based on the top-20% best performing new and existing residential building units located in the Republic of Korea. It was derived using the “TOOL31: Determination of standardized baselines for energy efficiency measures in residential, commercial and institutional buildings”, version 01.0 (hereinafter referred as “TOOL31”). The data vintage is 2016-2018 in compliance with the requirements of data currentness and data coverage period of the standard “Determining coverage of data and validity of standardized baselines”, version 2.0.
3. Clean development mechanism (CDM) project activities and programmes of activities (hereinafter referred as project activities) may apply this standardized baseline under the following conditions:
 - (a) The project activity is located in the Central or Southern or Jeju climatic regions of the Republic of Korea;
 - (b) The project activity is implemented in new or existing residential building units. Commercial and institutional building units are not part of this standardized baseline;
 - (c) The building units included in the project activity can be classified into three different categories of gross floor area (GFA): A60, B85 and C85 as detailed under Section 4 below;
 - (d) The building units included in the project activity shall be supplied neither with heat from a district heating system nor from a building central heating system¹;
 - (e) The CDM approved methodology that is applied to the project activity allows the determination of the specific CO₂ emission factor(s) per m² through the application of the TOOL31;
4. Project participants who do not wish to use this standardized baseline may, alternatively, estimate their own values for specific CO₂ emission per m² by applying the latest valid version of the TOOL31.

¹ The heat supplied to residential building units in the Republic of Korea can come from district heating, building central heating systems or individual heating systems. As the underlying data of this SB includes only building units with individual heating systems, the application is limited to that area.

2.2. Entry into force and validity

5. This standardized baseline enters into force upon adoption by the CDM Executive Board on 11 August 2020. This standardized baseline is valid from 11 August 2020 to 10 August 2023.

3. Normative references

6. This standardized baseline is based on the proposed new standardized baseline PSB0054 “Specific CO₂ emissions in Residential Buildings in Republic of Korea” submitted by the designated national authority (DNA) of the Republic of Korea.
7. This standardized baseline is derived from version 01.0 of the TOOL31.
8. For more information regarding proposed new standardized baselines as well as their consideration by the CDM Executive Board, please refer to:
<http://cdm.unfccc.int/methodologies/standard_base/index.html>.

4. Definitions

9. For the purpose of this standardized baseline, the following definitions apply:
 - (a) **Existing residential building units:** building units that have finalized construction prior to 31 December 2013;
 - (b) **New residential building units:** building units that have finalized construction from 01 January 2014 onwards;
 - (c) **A60 building units:** building units with a gross floor area (GFA) below than or equal to 60m²;
 - (d) **B85 building units:** building units with a gross floor area (GFA) above 60m² and below than or equal to 85m²;
 - (e) **C85 building units:** building units with a gross floor area (GFA) above 85m².
10. The definitions contained in the Glossary of CDM terms shall apply.
11. The definitions contained in the TOOL31 shall apply.

5. Parameters and values

12. This standardized baseline provides values for the average specific CO₂ emissions per m² of the **existing building units** in Table 1.

Table 1. Average specific CO₂ emissions per m² of the EXISTING residential building units in the Republic of Korea

Parameter	Climatic Region	Residential building unit GFA category	Specific CO ₂ emission factor (tCO ₂ /m ² .year)
<i>SE_{CO2, Top20%, i}</i>	Central	A60	0.0378
		B85	0.0329
		C85	0.0271
	Southern	A60	0.0336
		B85	0.0294
		C85	0.0243
	Jeju	A60	0.0346
		B85	0.0292
		C85	0.0264

13. This standardized baseline also provides values for the average specific CO₂ emissions per m² of the **new building units** in Table 2.

Table 2. Average specific CO₂ emissions per m² of the NEW residential building units in the Republic of Korea

Parameter	Climatic Region	Residential building unit GFA category	Specific CO ₂ emission factor (tCO ₂ /m ² .year)
<i>SE_{CO2, Top20%, i}</i>	Central	A60	0.0378
		B85	0.0314
		C85	0.0271
	Southern	A60	0.0336
		B85	0.0294
		C85	0.0243
	Jeju	A60	0.0346
		B85	0.0285
		C85	0.0264

Document information

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