

**ASB0038-2018**

## Standardized baseline

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# Grid emission factor for the electricity system of the Republic of Armenia for 2016

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 carbon dioxide (CO<sub>2</sub>) emission factors for the electricity system of the Republic of Armenia.

## 2. Scope, applicability, and entry into force

### 2.1. Scope

1. The scope of this standardized baseline covers the grid emission factors for the electricity system of the Republic of Armenia. It was derived using the ex-ante data vintage option of the version 05.0 of the “Tool to calculate the emission factor for an electricity system” (hereinafter referred to as “the tool”) based on 2014–2016 data vintage.

### 2.2. Applicability

2. This standardized baseline is applicable to clean development mechanism (CDM) projects in the Republic of Armenia.
3. CDM project activities can apply this standardized baseline under the following conditions:
  - (a) The project activity is connected to the project electricity system (see definitions in section 4);
  - (b) The CDM approved methodology that is applied to the project activity requires the determination of CO<sub>2</sub> emission factor(s) through the application of the tool, for the determination of baseline emissions, project emissions and/or leakage emissions;
  - (c) When applying the values of this standardized baseline to a CDM project activity, the requirements below are to be followed:
    - (i) If the CDM project activity uses the ex-ante option of data vintage, as per the tool, the latest approved values of table 1 below shall be used for the calculation of emission reduction for the entire first, or entire second or entire third crediting period;
    - (ii) If the CDM project activity uses the ex-post option of data vintage as per the tool, the latest approved values of table 1 below valid at the end of the monitoring period shall be used for the calculation of emission reduction for that monitoring period. As per the tool, ex-post values are required to be updated annually; however, for ex-post values approved under this standardized baseline, the validity as prescribed in paragraph 6 below applies.
4. Project participants who do not wish to use the latest approved and valid values of this standardized baseline may estimate the grid emission factor for their CDM project, using the latest applicable version of the tool.

### 2.3. Entry into force and validity

5. This standardized baseline enters into force upon adoption by the CDM Executive Board on 19 February 2018. This standardized baseline is valid from 19 February 2018 to 18 February 2021.

## 3. Normative references

6. This standardized baseline is based on the proposed new standardized baseline PSB0042 "Calculation of Grid Emission Factor for the Electricity System of the Republic of Armenia for 2016" submitted by the designated national authority (DNA) of the Republic of Armenia.
7. This standardized baseline is derived from version 05.0 of the tool.
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](http://cdm.unfccc.int/methodologies/standard_base/index.html).

## 4. Definitions

9. **Project electricity system** - the spatial extent of the power plants that are physically connected through transmission and distribution lines to supply electricity to the national power grid of the Republic of Armenia.
10. **Connected electricity systems** - the spatial extent of the power plants that are physically connected through transmission and distribution lines to supply electricity to the national power grid of Georgia and Islamic Republic of Iran.
11. The definitions contained in the Glossary of CDM terms shall apply.
12. The definitions contained in version 05.0 of the "Tool to calculate the emission factor for an electricity system" shall apply.

## 5. Parameters and values

13. This standardized baseline provides values for the parameters mentioned in table 1.

**Table 1. Grid emission factors for the project electricity system**

Parameter	SI unit	Description	Applicable crediting periods	Applicable project types	Value
EF <sub>grid,OM-adj,y</sub>	tCO <sub>2</sub> /MWh	Operating margin CO <sub>2</sub> emission factor for the project electricity system	First, second and third crediting periods	All project activities	0.4620
EF <sub>grid,BM,y</sub>	tCO <sub>2</sub> /MWh	Build margin CO <sub>2</sub> emission factor for the project electricity system	First, second and third crediting periods	All project activities	0.3456

Parameter	SI unit	Description	Applicable crediting periods	Applicable project types	Value
EF <sub>grid,CM,y</sub>	tCO <sub>2</sub> /MWh	Combined margin CO <sub>2</sub> emission factor for the project electricity system	First, second and third crediting periods	Wind and solar power generation project activities	0.4329
EF <sub>grid,CM,y</sub>	tCO <sub>2</sub> /MWh	Combined margin CO <sub>2</sub> emission factor for the project electricity system	First crediting period	All project activities except wind and solar power generation	0.4038
EF <sub>grid,CM,y</sub>	tCO <sub>2</sub> /MWh	Combined margin CO <sub>2</sub> emission factor for the project electricity system	Second and third crediting periods	All project activities except wind and solar power generation	0.3748

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### Document information

Version	Date	Description
01.0	19 February 2018	Initial publication. For the approval of the CDM Executive Board in accordance with the "Procedure for development, revision, clarification and update of standardized baselines" (CDM-EB63-A28-PROC).

Decision Class: Regulatory

Document Type: Standard

Business Function: Methodology

Keywords: Armenia, electricity generation, electric power transmission, grid emission factors, standardized baselines