

المجلس العالمي للبصمة الكربونية  
GLOBAL CARBON COUNCIL



# Project Submission Form

V3.2 - 2020

Project Submission Form

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<b>COVER PAGE- Project Submission Form (PSF)</b>																
<i>Complete this form in accordance with the instructions attached at the end of this form.</i>																
<b>BASIC INFORMATION</b>																
<b>Title of the Project Activity</b>	<b>Çataltepe WPP</b>															
<b>PSF version number</b>	1															
<b>Date of completion of this form</b>	07/03/2022															
<b>Project Owner(s)</b> <small>(Shall be consistent with De-registered CDM Type B Projects)</small>	Süper Elektrik Üretim A.Ş. Sekans Enerji Limited ŞTİ.															
<b>Country where the Project Activity is located</b>	Turkey															
<b>GPS coordinates of the project site(s)</b>	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>No</th> <th>Latitude (North)</th> <th>Longitude (East)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>41°13'18.65"</td> <td>28°26'36.50"</td> </tr> <tr> <td>2</td> <td>41°13'9.11"</td> <td>28°26'39.63"</td> </tr> <tr> <td>3</td> <td>41°12'59.49"</td> <td>28°26'41.90"</td> </tr> <tr> <td>4</td> <td>41°12'50.35"</td> <td>28°26'46.41"</td> </tr> </tbody> </table>	No	Latitude (North)	Longitude (East)	1	41°13'18.65"	28°26'36.50"	2	41°13'9.11"	28°26'39.63"	3	41°12'59.49"	28°26'41.90"	4	41°12'50.35"	28°26'46.41"
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<b>Eligible GCC Project Type as per the Project Standard</b> <small>(Tick applicable project type)</small>	<input type="checkbox"/> <b>Type A:</b> <input type="checkbox"/> Type A1 <input checked="" type="checkbox"/> Type A2  <input type="checkbox"/> <b>Type B – De-registered CDM Projects:<sup>1</sup></b> <input type="checkbox"/> Type B1 <input type="checkbox"/> Type B2															

<sup>1</sup> Owners of Type B projects shall fill in the form provided in Appendix 7.

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<p><b>Minimum compliance requirements</b></p>	<input checked="" type="checkbox"/> Real and Measurable GHG Reductions <input checked="" type="checkbox"/> National Sustainable Development Criteria (if any) <input checked="" type="checkbox"/> Apply credible baseline and monitoring methodologies <input checked="" type="checkbox"/> Additionality <input checked="" type="checkbox"/> Local Stakeholder Consultation Process <input checked="" type="checkbox"/> Global Stakeholder Consultation Process <input checked="" type="checkbox"/> No GHG Double Counting <input checked="" type="checkbox"/> Contributes to United Nations Sustainable Development Goal 13 (Climate Action)																																			
<p><b>Choose optional and additional requirements</b> <small>(Tick applicable label categories)</small></p>	<input checked="" type="checkbox"/> Do-no-net-harm Safeguards to address Environmental Impacts <input checked="" type="checkbox"/> Do-no-net-harm Safeguards to address Social Impacts <input checked="" type="checkbox"/> Contributes to United Nations Sustainable Development Goals (in addition to Goal 13)																																			
<p><b>Applied methodologies</b> <small>(Shall be approved by the GCC or the CDM)</small></p>	<p>CDM Approved AMS-I.D. Grid-connected renewable electricity generation, version 18.0</p>																																			
<p><b>GHG Sectoral scope(s) linked to the applied methodology(ies)</b></p>	<p>1 Energy (renewable/non-renewable sources)</p>																																			
<p><b>Applicable Rules and Requirements for Project Owners</b> <small>(Tick applicable Rules and Requirements)</small></p>	<table border="1"> <thead> <tr> <th data-bbox="521 1226 1159 1276">Rules and Requirements</th> <th data-bbox="1159 1226 1328 1276">Reference</th> <th data-bbox="1328 1226 1456 1276">Version</th> </tr> </thead> <tbody> <tr> <td data-bbox="521 1276 1159 1327"><input checked="" type="checkbox"/> ISO 14064-2</td> <td data-bbox="1159 1276 1328 1327"></td> <td data-bbox="1328 1276 1456 1327"></td> </tr> <tr> <td data-bbox="521 1327 1159 1411"><input checked="" type="checkbox"/> Applicable host country legal requirements /rules</td> <td data-bbox="1159 1327 1328 1411"></td> <td data-bbox="1328 1327 1456 1411"></td> </tr> <tr> <td data-bbox="521 1411 805 1465"></td> <td data-bbox="805 1411 1159 1465"><input checked="" type="checkbox"/> Project Standard</td> <td data-bbox="1159 1411 1328 1465"></td> <td data-bbox="1328 1411 1456 1465">V3.1</td> </tr> <tr> <td data-bbox="521 1465 805 1549"></td> <td data-bbox="805 1465 1159 1549"><input type="checkbox"/> Approved GCC Methodology (XXXXX)</td> <td data-bbox="1159 1465 1328 1549"></td> <td data-bbox="1328 1465 1456 1549"></td> </tr> <tr> <td data-bbox="521 1549 805 1604"></td> <td data-bbox="805 1549 1159 1604"><input checked="" type="checkbox"/> Program Definitions</td> <td data-bbox="1159 1549 1328 1604"></td> <td data-bbox="1328 1549 1456 1604">V3.1</td> </tr> <tr> <td data-bbox="521 1604 805 1688"></td> <td data-bbox="805 1604 1159 1688"><input checked="" type="checkbox"/> Environment and Social Safeguards Standard</td> <td data-bbox="1159 1604 1328 1688"></td> <td data-bbox="1328 1604 1456 1688">V2.0</td> </tr> <tr> <td data-bbox="521 1688 805 1772"></td> <td data-bbox="805 1688 1159 1772"><input checked="" type="checkbox"/> Project Sustainability Standard</td> <td data-bbox="1159 1688 1328 1772"></td> <td data-bbox="1328 1688 1456 1772">V2.1</td> </tr> <tr> <td data-bbox="521 1772 805 1883"></td> <td data-bbox="805 1772 1159 1883"><input checked="" type="checkbox"/> Instructions in Project Submission Form (PSF)-template</td> <td data-bbox="1159 1772 1328 1883"></td> <td data-bbox="1328 1772 1456 1883">V3.2</td> </tr> </tbody> </table>			Rules and Requirements	Reference	Version	<input checked="" type="checkbox"/> ISO 14064-2			<input checked="" type="checkbox"/> Applicable host country legal requirements /rules				<input checked="" type="checkbox"/> Project Standard		V3.1		<input type="checkbox"/> Approved GCC Methodology (XXXXX)				<input checked="" type="checkbox"/> Program Definitions		V3.1		<input checked="" type="checkbox"/> Environment and Social Safeguards Standard		V2.0		<input checked="" type="checkbox"/> Project Sustainability Standard		V2.1		<input checked="" type="checkbox"/> Instructions in Project Submission Form (PSF)-template		V3.2
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	<input checked="" type="checkbox"/> GCC Rules and Requirements <sup>2</sup>	<input type="checkbox"/> Add rows if required		
	<input checked="" type="checkbox"/> CDM Rules <sup>3</sup>	<input checked="" type="checkbox"/> Approved CDM Methodology (AMS-I.D.)		V18.0
		<input type="checkbox"/> Tool for the demonstration and assessment of additionality	TOOL 01	V07.0.0
		<input type="checkbox"/> Combined tool to identify the baseline scenario and demonstrate additionality	TOOL 02	
		<input checked="" type="checkbox"/> Tool to calculate the emission factor for an electricity system	TOOL 07	V07.0
		<input type="checkbox"/> Demonstration of additionality of microscale project activities	TOOL 19	
		<input checked="" type="checkbox"/> Demonstration of additionality of small-scale project activities	TOOL 21	13.1
		<input type="checkbox"/> Additionality of first-of-its-kind project activities	TOOL 23	
		<input type="checkbox"/> Common practice	TOOL 24	
		<input checked="" type="checkbox"/> Investment analysis	TOOL 27	V11.0
		<input type="checkbox"/> Positive lists of technologies	TOOL 32	
		<input type="checkbox"/> Guidelines for objective demonstration and assessment of barriers		
		<input type="checkbox"/> Add rows if required		
<b>Choose Third Party External Project Verification by approved GCC Verifiers<sup>4</sup></b>	<input checked="" type="checkbox"/> GHG emission reductions (i.e., Approved Carbon Credits ( <b>ACCs</b> )) <input checked="" type="checkbox"/> Environmental No-net-harm Label ( <b>E<sup>+</sup></b> ) <input checked="" type="checkbox"/> Social No-net-harm Label ( <b>S<sup>+</sup></b> )			

<sup>2</sup> GCC Program rules and requirements: <https://www.globalcarboncouncil.com/resource-centre.html>

<sup>3</sup> CDM Program rules: <https://cdm.unfccc.int/Reference/index.html>

<sup>4</sup> **Note:** GCC Verifiers under the Individual Track are not eligible to conduct verifications for GCC Project Activities whose owners intend to supply carbon credits (ACCs) for use within CORSIA.

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<p>(Tick applicable verification categories)</p>	<p><input checked="" type="checkbox"/> United Nations Sustainable Development Goals (<b>SDG<sup>+</sup></b>)</p> <p><input type="checkbox"/> Bronze SDG Label</p> <p><input type="checkbox"/> Silver SDG Label</p> <p><input type="checkbox"/> Gold SDG Label</p> <p><input checked="" type="checkbox"/> Platinum SDG Label</p> <p><input type="checkbox"/> Diamond SDG Label</p> <p><input checked="" type="checkbox"/> CORSIA requirements (<b>C<sup>+</sup></b>)</p> <p><input type="checkbox"/> Host Country Attestation on Double counting</p>
<p><b>Declaration to be made by the Project Owner(s)<sup>5</sup></b></p> <p>(Tick all applicable statements)</p>	<p>The Project Owner(s) declares that:</p> <p><input checked="" type="checkbox"/> The Project Activity complies with the eligibility of the applicable project type (A1, A2, B1 or B2) as stipulated by the Project Standard.</p> <p><input checked="" type="checkbox"/> The Project Activity shall start operations, and start generating emission reductions, on or after 1 January 2016.</p> <p><input checked="" type="checkbox"/> The Project Activity is eligible to be registered under the GCC program.</p> <p><input checked="" type="checkbox"/> No carbon credits generated by the proposed Project Activity will be claimed as carbon credits in any other GHG program anywhere in the world, either for compliance or voluntary purposes, for the entire 10-year GCC crediting period.</p> <p><input checked="" type="checkbox"/> The proposed Project Activity, if Type A, is NOT registered as a GHG Project Activity in any other GHG program or any other voluntary program anywhere in the world.</p> <p><input checked="" type="checkbox"/> The proposed Project Activity is NOT included as a component Project Activity (CPA) in a registered GHG Programme of Activities (PoA) under any GHG program (such as the CDM or any other voluntary program) anywhere in the world.</p> <p><input checked="" type="checkbox"/> The proposed Project Activity is NOT a CPA that has been excluded from a registered PoA under any GHG program (such as the CDM or any other voluntary program) anywhere in the world.</p> <p>Provide details (if any) below for the boxes ticked above.</p> <p><input checked="" type="checkbox"/> If a GCC project chooses to apply to use ACCs under CORSIA, the Project Owner(s) is required to declare that they are aware that they must obtain and provide to the GCC and its Registry (operated by IHS Markit) a written</p>

<sup>5</sup> The "Project Owner" means the legal entity or organization that has overall control and responsibility for the Project Activity.



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	<p>attestation from the host country's national focal point (e.g., Ministry of Environment or Civil Aviation Authority) or focal point's designee, as required by CORSIA Emissions Unit Eligibility Criteria, which:</p> <p><input checked="" type="checkbox"/> Confirms the avoidance of double counting as required by CORSIA;</p> <p><input checked="" type="checkbox"/> Shall be made publicly available prior to the use of units from the host country under CORSIA; and</p> <p><input checked="" type="checkbox"/> Places all responsibility on the Project Owner(s) to replace any and all doubly claimed or counted ACCs by the host country, in the GCC registry operated by IHS Markit.</p> <p>Provide details below for the boxes ticked above</p>
	<p>The Project Owner(s) declares that:</p> <p><input checked="" type="checkbox"/> All of the information provided in this document, including any supporting documents submitted to the GCC or its registry operator IHS Markit at any time, is true and correct;</p> <p><input checked="" type="checkbox"/> They understand that a failure by them to provide accurate information or data, or concealing facts and information, can be considered as negligence, fraud or willful misconduct. Therefore, they are aware that they are fully responsible for any liability that arises as a result of such actions.</p> <p>Provide details below for the boxes ticked above</p>
<p><b>Appendixes 1-7</b></p>	<p>Details about the Project Activity are provided in Appendixes 1 through 6 to this document. Appendix 7 is not applicable as project is not deregistered from CDM.</p>
<p><b>Name, designation, date and signature of the Project Owner(s)</b></p>	<p><b>SILA DURAN</b>  <b>Süper Elektrik Üretim A.Ş. , Sekans Enerji Limited Şirketi</b></p> <hr/> <p>09/02/2022</p> <hr/> <p><b>On behalf of Project Owners;</b></p> <p><b>Sıla Duran</b></p> <p><b>SEKANS ENERJİ LTD. ŞTİ.</b>          Korkmaz Mah. MIMOZA Sk.          Başın Sitesi CBL-A No:1R No:11          Beşiktaş/İstanbul          Beşiktaş V.D.:7590988733</p>

## 1. PROJECT SUBMISSION FORM

### Section A. Description of the Project Activity

#### A.1. Purpose and general description of the Project Activity

Çataltepe WPP (hereafter referred as “Project”) is a new built wind-farm project, located in İstanbul Province, Turkey owned by Süper Elektrik Üretim A.Ş. The generation license of the project was issued in 04/01/2012 for 49 years. The project has an installed capacity of 12 MWm/10 MWe, and annual generation is estimated to be 37,856 MWh.

The purpose of the Project is to produce renewable electricity using wind as the power source and to contribute to Turkey’s growing electricity demand through a sustainable and low carbon technology. The project will displace the same amount of electricity generated by the grid dominated with fossil fired power plants. The annual emission reduction estimated by the project is 24,538 tonnes of CO<sub>2</sub>. During the crediting period, 245,379 tonnes of CO<sub>2</sub> are expected to be reduced.

Project has been developed to have four Nordex N1177/3000 turbines, each having a capacity of 3 MWm / 2,5 MWe. The electricity is transmitted to substation Büyükçekmece TM OG, via a 660 m, 34.5 kV transmission line.

The Project has started its commercial operation through the ministry acceptance of four turbines with the installed capacity of 12 MWm / 10 MWe on 20/05/2016.

The project will produce positive environmental and economic benefits through the following aspects:

- Displacing the electricity generated by fossil fuel fired power plants by utilizing the renewable resources so as to avoid environmental pollution and GHG emissions,
- Contributing the economic development of the region by providing sustainable energy resources,
- Increasing the income and local standard of living by providing job opportunities for the local people,
- Reducing the blackout because of low voltage by lowering required capacity of the transformer.

The project is expected to contribute SDG 7, 8, 9, 11 and 13.

- **Goal 7 Affordable and Clean Energy**

The project produces electricity from renewable energy sources using wind as the power source and to contribute to Turkey’s growing electricity demand through a sustainable and low carbon technology. The project displaces the same amount of electricity generated by the grid dominated with fossil fired power plants.

The project contributes to the following target 7.2. and following indicator 7.2.1.

- **Goal 8 Decent Work and Economic Growth**

During construction and operational period, the project has created employment opportunities for the local community. The project contributes the economic development of the region by providing sustainable energy resources.

The positions at the wind projects require skilled workers, which will be achieved by adequate training. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe work environments.

The project contributes to the following targets 8.5.; 8.8.and following indicators 8.5.2.; 8.8.1.

- **SDG 9 Industry, Innovation and Infrastructure**

Producing electricity from renewable energy sources using wind as the power source, the project contributes to the infrastructure for clean energy production.

The project contributes to the target 9.4 and the indicator 9.4.1.

- **SDG 11 Sustainable Cities and Communities**

As replacing with power plants using fossil fuels, the project decreases particulate matter caused by fossil fuel emissions in the cities, and thus contributes to air quality in the city.

The project contributes to the target 11.6 and the indicator 11.6.2.

- **Goal 13 Climate Action**

The project contributes to improve the environmental situation in the region and in the country as avoiding fossil fuel-based electricity will enhance the air quality and help to reduce the adverse effects on the climate. Through renewable technologies and wind-based electricity sustainable and climate friendly development is promoted. While emission reduction is realized, technology transfer is also realized as benefitting from wind energy.

The project contributes to the following target 13.3. and following indicator 13.3.2.

For the calculation of the emission reductions of the project activity, "Tool to calculate the emission factor of an electricity system" version 07.0.0. is taken into consideration.

## A.2. Location of the Project Activity

Address and geodetic coordinates of the physical site of the Project Activity		
Physical address	Latitude (North)	Longitude (East)
İstanbul Province, Çatalca Town, Subaşı Village, Devecipınarı Neighbourhood, Çataltepe	41°13'18.65"	28°26'36.50"
	41°13'9.11"	28°26'39.63"
	41°12'59.49"	28°26'41.90"
	41°12'50.35"	28°26'46.41"



Figure 1. Project layout

## A.3. Technologies/measures

The Project Scenario entails the installation of four Nordex N1177/3000 turbines, each having a

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capacity of 3 MWm / 2,5 MWe. The turbines are 3 bladed with a horizontal axis. The turbine blades have the ability to change angles according to wind direction. Turbines are connected to the substation to the grid via 0.66 km, 34.5 kV electricity transmission line. The metering has been done at substation before electricity is fed into the grid.

### A.4. Project Owner(s)

Location/ Country	Project Owner(s)	Where applicable <sup>6</sup> , indicate if the host country has provided approval (Yes/No)
Turkey	Süper Elektrik Üretim Anonim Şirketi	Not Applicable

Location/ Country	Project Owner(s)	Where applicable <sup>7</sup> , indicate if the host country has provided approval (Yes/No)
Turkey	Sekans Enerji Limited Şirketi	Not Applicable

### A.5. Declaration of intended use of Approved Carbon Credits (ACCs) generated by the Project Activity

The Project Activity is expected to generate ACCs for a full 10-year crediting period and supply the credits to offset the following GHG emissions:

Period		Name of the Entities	Purpose and Quantity of ACCs to be supplied
From	To		
20/05/2016	19/05/2026	CORSIA	245,379

. The project owner confirms that the ACC's generated from the project will not be double counting in any other mechanism like ETS. According to Clarification No. 01, under section 7 and paragraph 28, the project owner confirms that the project is not included/covered in any emission trading system and therefore emission reductions will not be subject to double accounting since the ACCs of the project are issued by GCC

<sup>6</sup> For example, *Project Coordination Form* is to be filled-in by Project Owners for projects located in Qatar. A written attestation from the host country's national focal point or the focal point's designee, as required by CORSIA (Refer section A.5 of the PSF guidelines).

<sup>7</sup> For example, *Project Coordination Form* is to be filled-in by Project Owners for projects located in Qatar. A written attestation from the host country's national focal point or the focal point's designee, as required by CORSIA (Refer section A.5 of the PSF guidelines).

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Program.

## A.6. Additional requirements for CORSIA

Please check sections E and F.

## Section B. Application of selected methodology(ies)

### B.1. Reference to methodology(ies)

AMS-I.D.: Grid connected renewable electricity generation - Version 18.0

AMS-I.D. refers to:

- “Demonstration of additionality of small-scale project activities” Version 13.1,
- Tool to calculate the emission factor for an electricity system, Version 07.0
- Investment analysis, tool 27, ver 11.0
- Tool to determine the remaining lifetime of equipment, Version 01

### B.2. Applicability of methodology(ies)

The methodology AMS-I.D “SmallGrid connected renewable electricity generation” is applicable to grid-connected renewable power generation project activities that a) install a Greenfield power plant; b) involve a capacity addition to (an) existing plant(s); c) involve a retrofit of (an) existing operating plants/units; d) involve a rehabilitation of (an) existing plant(s)/unit(s); or e) involve a replacement of (an) existing plant(s)/unit(s).

The project activity installs a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield), AMS-I.D “Small Grid connected renewable electricity generation is applicable. The applicability criteria are listed and justified below:

Table 1 - Applicability of AMS-I.D.

<b>Applicability Criteria</b>	<b>Justification</b>
This methodology is applicable to grid-connected renewable energy power generation project activities that: (a) Install a Greenfield power plant; (b) Involve a capacity addition to (an) existing plant(s); (c) Involve a retrofit of (an) existing operating	The project is installation of a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity.

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<p>plants/units;          (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or          (e) Involve a replacement of (an) existing plant(s)/unit(s)</p>	
<p>The methodology is applicable under the following conditions:</p> <p>(a) The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit;</p> <p>(b) (b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity</p>	<p>The project is wind power plant.</p>
<p>In case of hydro power plants, one of the following conditions shall apply:</p> <p>(a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or          (b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density, calculated using equation (3), is greater than 4 W/m<sup>2</sup>; or          (c) The project activity results in new single or</p>	<p>The project is not a hydropower plant.</p>

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<p>multiple reservoirs and the power density, calculated using equation (3), is greater than 4 W/m<sup>2</sup>.</p> <p>(d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (7), is lower than or equal to 4 W/m<sup>2</sup>, all of the following conditions shall apply:</p> <p>(i) The power density calculated using the total installed capacity of the integrated project, as per equation (8), is greater than 4 W/m<sup>2</sup> ; (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; (iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m<sup>2</sup> shall be: a. Lower than or equal to 15 MW; and b. Less than 10 per cent of the total installed capacity of integrated hydro power project.</p>	
<p>The methodology is not applicable to:</p> <p>(a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; (b) Biomass fired power plants/units.</p>	<p>The project does not involve switching from fossil fuels to renewable energy sources and is not a biomass fired power plant.</p>
<p>In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is “the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance”.</p>	<p>The project does not involve retrofits, rehabilitations, replacements, and it's not a capacity addition.</p>

**B.3. Project boundary, sources and greenhouse gases (GHGs)**

The project boundary encompasses the physical, geographical site of the renewable generation source. The wind power plant with all installation is the project boundary.

As the electricity generated by the project displaces the electricity generated by national grid, the baseline boundary is defined as the national grid. This includes the project site and all power plants



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connected physically to the national grid and excludes the off-grid power plants. Please see the diagram below:

The figure below provides an overview of the emissions sources included or excluded from the project boundary for determination of baseline and project emissions.

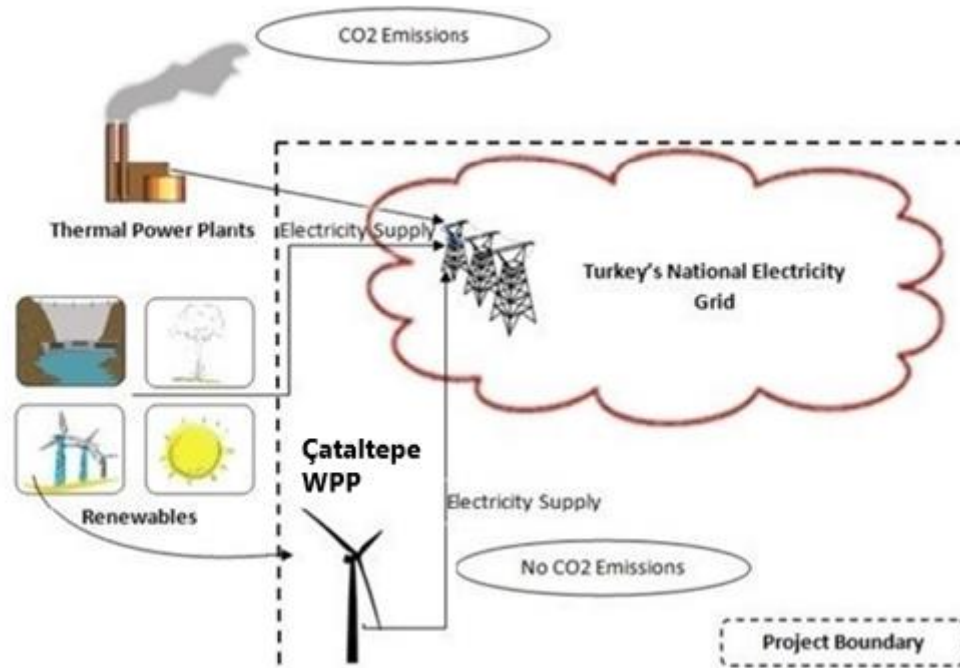


Figure 2. Project boundary

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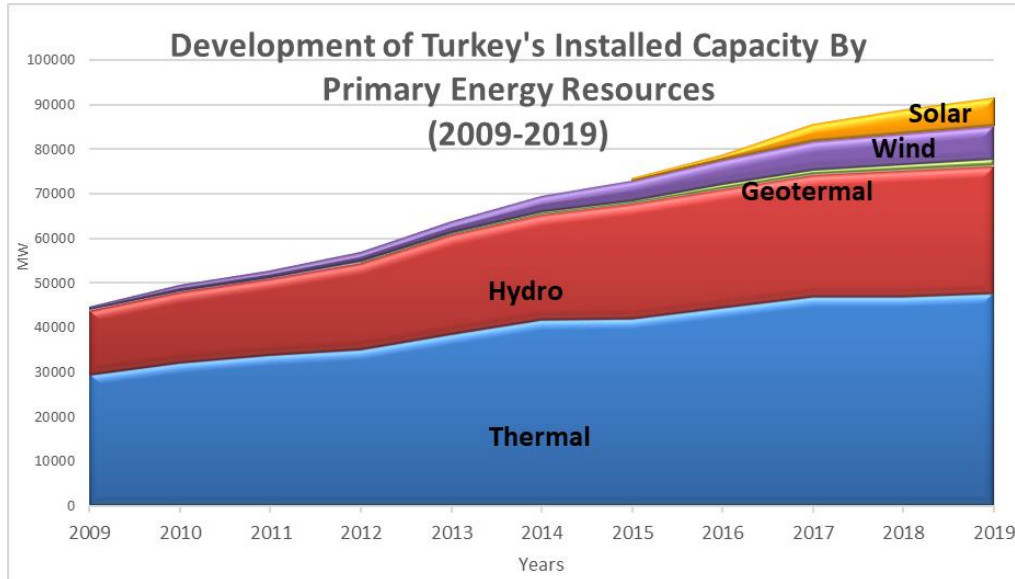
Source		GHG	Included?	Justification/Explanation
Baseline	CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity.	CO <sub>2</sub>	Yes	Main source. The dominant emissions from power plants are in the form of CO <sub>2</sub> , therefore CO <sub>2</sub> emissions from fossil fuel fired power plants connected to the grid will be accounted for in baseline calculations.
		CH <sub>4</sub>	No	Minor
		N <sub>2</sub> O	No	Minor
Project Activity	Emissions as a result of Project Activity	CO <sub>2</sub>	No	Not applicable
		CH <sub>4</sub>	No	Not applicable
		N <sub>2</sub> O	No	Not applicable

#### B.4. Establishment and description of the baseline scenario

According to AMS-I.D. (Version 18.0), if the project activity is the installation of a new grid-connected renewable power plant, the baseline scenario is the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources.

As it may be seen in Figure 3., The development of Turkey's installed capacity by primary energy resources between the years, 2009-2019<sup>8</sup>, the electricity generation has mainly been done by fossil fuel fired power plants in Turkey. Total Installed electricity generation capacity in Turkey has reached 91,267 megawatts (MW) as of 2019. As having a share of 8.32%, wind power projects have an installed capacity of 7,591.2MW.

<sup>8</sup> <https://www.teias.gov.tr/tr-TR/turkiye-elektrik-uretim-iletim-istatistikleri>



**Figure 3. The development of Turkey’s installed capacity by primary energy resources, 2009-2019**

Table 2 shows the comparison of renewable electricity generation share in Turkey total electricity generation and the distribution of the renewable energy resources within this share between the years of 2009 and 2019. It’s obvious that the renewable electricity generation has doubled during this period. Hydro has still the biggest share with 67.15%, whereas solar and wind have the portions of %6.99 and 16.43%, respectively. Geothermal and biomass have the smallest portions with 6.77% and 2.66%, respectively.

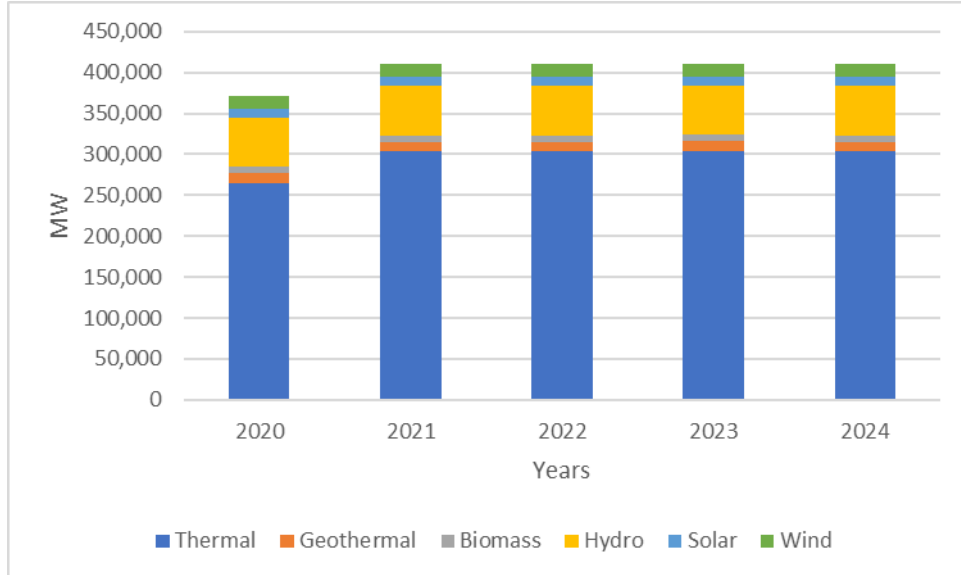
**Table 2- Comparison of Renewable Electricity Generation Share In Turkey Total Electricity Generation, 2009-2019**

YEARS	HYDRO	GEOTHERMAL	WIND	SOLAR	BIOMASS	RENEWABLE SHARE IN TOTAL GENERATION %
2009	94.25%	1.14%	3.92%	-	0.69%	19.6%
2019	67.15%	6.77%	16.43%	6.99%	2.66%	43.5%

In reference to 5-year capacity projection<sup>9</sup>, it is clear that fossil fuels will remain the main sources for electricity generation through until 2024. Fossil fuels will continue to dominate the market. Hydro will account for 15% of the mix whereas all non-hydro renewable combined (geothermal/ biomass/ solar/ wind) will only account for 11% of all electricity generation capacity. This projection is consistent with continuing fossil fuel dependent characteristics of Turkish electricity sector.

<sup>9</sup> <https://webapi.teias.gov.tr/file/abeac87d-3abc-4532-9cf4-d6f3a9d34c17?download>

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**Figure 4. 5-year capacity projection**

### B.5. Demonstration of additionality

For the demonstration of additionality, the GCC applies the following approach for demonstrating additionality, consisting of two components:

- (a) A Legal Requirement Test;

The project is not enforced by law.

and

- (b) An Additionality Test either based on a Positive List test or a projects-specific additionality test

Project Owners shall demonstrate the additionality of the Project Activity in accordance with the applied CDM or GCC methodologies, which requires demonstration that the anthropogenic emissions of GHG emissions by sources are reduced that would have occurred in the absence of the proposed GCC Project Activity.

According to Tool 21, Demonstration of additionality of small scale project activities, Version 13.1, project participants shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:

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- a) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions;
- b) Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions;
- c) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions;
- d) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher

Within the context of the proposed project activity, the most significant barrier is identified as the investment barrier.

### **Step 2 - Investment analysis**

Methodological tool: "Investment analysis version 11.0 (Tool 27)" is taken into account when applying this step.

#### **Sub-step 2a - Determine appropriate analysis method**

There are three options for investment analysis method:

- Simple Cost Analysis
- Investment Comparison Analysis and
- Benchmark Analysis

As the project gains revenue from the sale of generated electricity, Simple Cost Analysis is not applicable. Investment Comparison Analysis is also not applicable as no alternative investment is point at issue. Therefore, Benchmark Analysis will be used for the evaluation of the project investment.

#### **Sub-step 2b - Option III-Apply benchmark analysis**

For the purpose of benchmark analysis Project IRR before tax has been chosen as the indicator.

Benchmark rate is calculated in line with "Tool 27: Investment Analysis version 11.0" which suggests the applied benchmark shall be appropriate to the type of IRR calculated. Local commercial lending rates or WACC are appropriate benchmarks for a project IRR. Required/expected returns on equity are appropriate benchmarks for a project IRR.

State Planning Organization publishes "Main Economic Indicators" on a monthly basis. Since the project is a mid-term investment (exceeding one year), lending rate for medium term investment has been selected as the benchmark. The lending rate for the medium-term investment as estimated by

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the Turkish Development Bank is 11.50% for the June 2015 (01/06/2015 which is the investment decision date). Thus, 11.50% is taken as the benchmark value for Project IRR after tax.

. The lending rates for January-October 2015 have been given in Table-4.

Table 4 - Loan Interest rates for medium term investment loans<sup>10</sup>

Turkish Development Bank (TKB) Interest rates for credits		
Date	Month	Medium Term Investment Rate (%)
2015	1	11.5
	2	11.5
	3	11.5
	4	11.5
	5	11.5
	6	11.5
	7	11.5
	8	11.5
	9	11.5
	10	11.5

Assessment of likelihood conditions for each parameter to reach benchmark IRR is provided below:

### Electricity Price

In order to reach 11.50% project IRR benchmark, electricity price should increase as well 10.00% from assumed price. This feed-in-tariff price is already very high compared to general market price and not likely to increase. Thus, this 10.00% increase of the feed-in-tariff is not likely to happen. Additionally, feed-in-tariff would apply to renewable energy projects and thus to the project activity during 10 years which also equals to the crediting period of the project.

<sup>10</sup> Lending And Deposit Interest Rates by Development Investment Bank of Turkey ([https://www.sbb.gov.tr/wp-content/uploads/2020/07/13-faiz\\_orani-1.xls](https://www.sbb.gov.tr/wp-content/uploads/2020/07/13-faiz_orani-1.xls))

**Investment Cost**

In order to reach benchmark IRR, investment costs shall be decreased more than 10.00%. Since the equipment contract which has the higher share of the total costs is fixed, 10.00% decrease in the investment cost is unlikely. Thus, it is not likely for project activity to have threshold investment cost and reach to benchmark IRR.

**Energy Yield**

To have benchmark IRR, annual energy yield amount shall increase more than 10.00% more than base case electricity generation amount used in financial analysis. Although most of the wind power project uses electricity generation amount from energy yield reports, to be conservative in financial investment analysis of the project activity. These figures are annual electricity generation to be sold except transmission loss. Using electricity generation amount in financial analysis, which have less than 10.00% probability of occurrence is not rational. Thus, it is not likely for project activity to generate threshold energy yield to reach benchmark IRR. If energy yield will increase by 10.00%, project IRR can reach up to 11.97%.

**Operation Cost**

In order to reach benchmark IRR, annual operation decrease more than 10.00%. Such huge decrease in annual operation cost is not likely. Even if operation cost will decrease by 10%, project IRR cannot reach up to 11.5%.

**Sub-step 2c - Calculation and comparison of financial indicators**

The following table summarizes the financial figures for the project operation:

Table 5 - Summary of financial data

Parameter used for financial analysis	Unit	Value	Source
Expected Electricity Generation	MWh	37,856	Generation License
Total Investment	-	Confidential	Cost Information related these items will be submitted to GCC Verifier
Operational Cost	-	Confidential	Cost Information related these items will be submitted to GCC Verifier
Electricity tariff	USD/MWh	2015-2025 73	Tariff Regulation for renewables: <a href="https://www.mevzuat.gov.tr/Mevzua">https://www.mevzuat.gov.tr/Mevzua</a>

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		After 2025	41.20	<a href="#">tMetin/1.5.5346.pdf</a> <a href="https://seffaflik.epias.com.tr/transparency/piyasalar/gop/ptf.xhtml">https://seffaflik.epias.com.tr/transparency/piyasalar/gop/ptf.xhtml</a>
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The Internal Rate of Return (IRR) before taxation for the project is calculated as 9.9% without the ER revenue.

The revenue acquired from the operation of the power plant is not financially attractive to do the investment. Therefore, it is contended that the ACC revenues are required to make the project more financially attractive.

**Sub-step 2d - Sensitivity analysis**

The sensitivity analysis is applied in order to show that investment decision is not the most attractive alternative financially.

- Investment Cost
- Operating Cost
- Electricity Sales revenue

For a range of ±10% fluctuations in parameters above as advised in “Tool for the demonstration and assessment of additionality”, Table 6 below has been obtained.

Table 6 - Sensitivity analysis for the project IRR

<b>IRR w/o carbon</b>	<b>-10%</b>	<b>-5%</b>	<b>5%</b>	<b>10%</b>
Investment Cost	11.78	10.78	9.05	8.29
Operational Cost	10.12	10.00	9.75	9.63
Electricity Revenue	7.71	8.80	10.93	11.97

The sensitivity analysis confirms that the proposed project activity is unlikely to be economically attractive without the revenues from ACCs.

The project IRR becomes 11.97 % with a 10% rise in in electricity revenue. However, it’s clear that electricity generation may differ due to the fluctuations in wind and it’s not controllable or optimized energy resource. The investment cost is not likely to decrease as it is fixed with the contract. On the other hand, the cost may increase due to the unexpected expenses, i.e. contingency, faced by the project. Still, the sensitivity analysis has been carried out within the range -10% and -10% deviation. Even an increase in electricity revenue would make the IRR



slightly higher than 11.5%, the project is not financially attractive without ACC revenues.

## B.6. Estimation of emission reductions

### B.6.1. Explanation of methodological choices

Operating, Build and Combined Margin Emission Factors have been published by the Ministry of Energy and Natural resources. The Ministry has calculated the factors as using the “Tool to calculate the emission factor for an electricity system”. Since it’s the latest available data, published by the ministry, these factors have been considered.

#### **Calculation of the Operating Margin Emission Factor**

It’s been published as 0.7258 tCO<sub>2</sub>/MWh by the Ministry of Energy and Natural Resources.<sup>11</sup>.

#### **Calculation of the Build Margin Emission Factor**

It’s been published as 0.4153 tCO<sub>2</sub>/MWh by the Ministry of Energy and Natural Resources.<sup>12</sup>.

#### **Calculating of the Combined Margin Emission Factor**

It’s been published as 0,6482 tCO<sub>2</sub>/MWh by the Ministry of Energy and Natural Resources.<sup>13</sup>. The combined margin is calculated ex-post and has been fixed for the crediting period.

#### **Baseline Emissions**

In accordance with AMS-I.D., the baseline emissions are calculated as the net electricity generated by the project activity, multiplied with the baseline emission factor of the project grid.

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<sup>11</sup> Please see;

[https://enerji.enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular//Bilgi\\_Formu\\_Web\\_Sitesi\\_2019\\_202110071443.pdf](https://enerji.enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular//Bilgi_Formu_Web_Sitesi_2019_202110071443.pdf)

<sup>12</sup> Please see;

[https://enerji.enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular//Bilgi\\_Formu\\_Web\\_Sitesi\\_2019\\_202110071443.pdf](https://enerji.enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular//Bilgi_Formu_Web_Sitesi_2019_202110071443.pdf)

<sup>13</sup> Please see;

[https://enerji.enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular//Bilgi\\_Formu\\_Web\\_Sitesi\\_2019\\_202110071443.pdf](https://enerji.enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular//Bilgi_Formu_Web_Sitesi_2019_202110071443.pdf)

$$BE_y = EG_{PJ,y} \times EF_{grid,y} \quad \text{Equation (1)}$$

where:

$BE_y$  = Baseline Emissions in year y (tCO<sub>2</sub>e)

$EG_{PJ,y}$  = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)

$EF_{grid,y}$  = Combined margin CO<sub>2</sub> emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system"(t CO<sub>2</sub>/MWh)

$$\begin{aligned} BE_y &= 37,856 \times 0.6482 \\ &= 24,538 \text{ tCO}_2/\text{MWh} \end{aligned}$$

The net electricity is measured continuously by a power meter at the grid interface and recorded monthly. EPIAS records are the source of the exact electricity generation of the project and the imports from the grid. The quantity of net electricity delivered to the grid is cross checked with the meter reading records (OSF forms-OSOS) which are provided to the company by TEIAS.

$$\begin{array}{rcl} \text{Net electricity generation} & & \text{Electricity} \\ \text{supplied by the project} & = & \text{supplied to the} \\ \text{plant to the grid [MWh]} & & \text{grid [MWh]} \\ & & - \text{Electricity} \\ & & \text{consumption} \\ & & \text{from the grid [MWh]} \end{array}$$

### Project Emissions

Since the project activity is a wind project,

PEy=0.

### Leakage

In accordance with the AMS-I.D. (Version 18), leakage is taken as zero since the project is a new power plant is taken as zero,

LEy= 0.

### Emission Reductions

ERy = BEy-PEy-LEy

Equation (2)

ERy = 24,538 tCO2/MWh

## B62. Data and parameters fixed ex ante

### Data / Parameter Table 1.

Data / Parameter:	EFgrid,CM,y
Methodology reference	AMS-I.D.
Data unit	tCO2/MWh
Description	Emission factor of the Turkish grid determined ex-ante. It's been published by the Ministry of Energy for 2019 on 07/10/2021.
Measured/calculated /default	Calculated
Data source	Ministry of Energy. Please see: <a href="https://enerji.enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular//Bilgi_Formu_Web_Sitesi_2019_202110071443.pdf">https://enerji.enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular//Bilgi_Formu_Web_Sitesi_2019_202110071443.pdf</a>
Value(s) of monitored parameter	0.6482

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Measurement/ Monitoring equipment (if applicable)	N/A
Measuring/reading/ recording frequency (if applicable)	Once for each crediting period
Calculation method (if applicable)	-
QA/QC procedures	Official data
Purpose of data	Calculation of the baseline emissions-to demonstrate contribution to SDG Target 13.3.: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
Additional comments	-

**B.6.3. Ex-ante calculation of emission reductions**

**Baseline Emissions**

In accordance with AMS-I.D., the baseline emissions are calculated as the net electricity generated by the project activity, multiplied with the baseline emission factor of the project grid.

$$BE_y = EG_{PJ,y} \times EF_{grid,y} \quad \text{Equation (1)}$$

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where:

$BE_y$  = Baseline Emissions in year y (tCO<sub>2</sub>e)

$EGPJ_y$  = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)

$EF_{grid,y}$  = Combined margin CO<sub>2</sub> emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system"(t CO<sub>2</sub>/MWh)

$$\begin{aligned} BE_y &= 37,856 \times 0.6482 \\ &= 24,538 \text{ tCO}_2/\text{MWh} \end{aligned}$$

The net electricity is measured continuously by a power meter at the grid interface and recorded monthly. EPIAS records are the source of the exact electricity generation of the project and the imports from the grid. The quantity of net electricity delivered to the grid is cross checked with the meter reading records (OSF forms-OSOS) which are provided to the company by TEIAS.

$$\begin{array}{rcl} \text{Net electricity generation} & & \text{Electricity} \\ \text{supplied by the project} & = & \text{supplied to the} \\ \text{plant to the grid [MWh]} & & \text{grid [MWh]} \end{array} \quad - \quad \begin{array}{l} \text{Electricity} \\ \text{consumption} \\ \text{from the grid [MWh]} \end{array}$$

### Project Emissions

Since the project activity is a wind project,

$PE_y=0$ .

### Leakage

In accordance with the AMS-I.D. (Version 18.0), leakage is taken as zero since the project is a new power plant is taken as zero,

$LE_y= 0$ .

### Emission Reductions

$$ER_y = BE_y - PE_y - LE_y$$

Equation (2)

$$ER_y = 24,538 \text{ tCO}_2/\text{MWh}$$

#### B.6.4. Summary of ex ante estimates of emission reductions

Year	Baseline emissions (t CO <sub>2</sub> e)	Project emissions (t CO <sub>2</sub> e)	Leakage (t CO <sub>2</sub> e)	Emission reductions (t CO <sub>2</sub> e)
20.05.2016 - 31.12.2016	15,193	0	0	15,193
2017	24,538	0	0	24,538
2018	24,538	0	0	24,538
2019	24,538	0	0	24,538
2020	24,538	0	0	24,538
2021	24,538	0	0	24,538
2022	24,538	0	0	24,538
2023	24,538	0	0	24,538
2024	24,538	0	0	24,538
2025	24,538	0	0	24,538
01.01.2026 - 19.05.2026	9,344	0	0	9,344
<b>Total</b>	245,379	0	0	245,379
<b>Total number of crediting years</b>	10			
<b>Annual average over the crediting period</b>	24,538	0	0	24,538

#### B.7. Monitoring plan

##### B.7.1. Data and parameters to be monitored

**Data / Parameter Table 1**

<b>Data / Parameter:</b>	<b>EGPJ, grid, y (SDG7)</b>																			
Methodology reference	AMS-I.D.																			
Data unit	MWh/yr																			
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y																			
Measured/calculated /default	Measured																			
Data source	Direct measurement																			
Value(s) of monitored parameter	The annual electricity fed to the grid is estimated as 37,856 MWh																			
Measurement/ Monitoring equipment	<table border="1"> <thead> <tr> <th></th> <th>Main meter</th> <th>Back-Up meter</th> </tr> </thead> <tbody> <tr> <td>Type of meter</td> <td>On site</td> <td>On site</td> </tr> <tr> <td>Location of meter</td> <td>S2</td> <td>S2</td> </tr> <tr> <td>Accuracy of meter</td> <td>40184700</td> <td>40184699</td> </tr> <tr> <td>Serial number of meter</td> <td>Every 10 year</td> <td>Every 10 year</td> </tr> <tr> <td>Calibration frequency</td> <td></td> <td></td> </tr> </tbody> </table>			Main meter	Back-Up meter	Type of meter	On site	On site	Location of meter	S2	S2	Accuracy of meter	40184700	40184699	Serial number of meter	Every 10 year	Every 10 year	Calibration frequency		
	Main meter	Back-Up meter																		
Type of meter	On site	On site																		
Location of meter	S2	S2																		
Accuracy of meter	40184700	40184699																		
Serial number of meter	Every 10 year	Every 10 year																		
Calibration frequency																				
Measuring/reading/ recording frequency	Continuous measurement and monthly recording																			
Calculation method (if applicable)	The net electricity is measured continuously by a power meter at the grid interface and recorded monthly. EPIAŞ records are the source of the exact electricity generation of the project and the imports from the grid. The quantity of net electricity delivered to the grid is cross checked with the meter reading records (OSF forms-OSOS) which are provided to the company by TEİAŞ.																			
QA/QC procedures	Please check section B.7.4 for the monitoring plan																			
Purpose of data	<p>Calculation of emission reductions</p> <p>SDG 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix</p>																			
Additional comments	-																			

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<b>Data / Parameter:</b>	<b>Number of employments (SDG8)</b>
Methodology reference	GCC Project Sustainability Standard_V2.1.
Data unit	Number
Description	Number of people permanently working for the operation of the project
Measured/calculated/default	Measured
Data source	Social Security System (SGK) records
Value(s) of monitored parameter	6
Measurement/Monitoring equipment	N/A
Measuring/reading/recording frequency	Yearly
Calculation method (if applicable)	Number of the employees can be seen through the SGK records.
QA/QC procedures	SGK records for the number of employees are provided during each monitoring period
Purpose of data	SDG 8.5. By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
Additional comments	

<b>Data / Parameter:</b>	<b>ER/y (SDG13)</b>
Methodology reference	GCC Project Sustainability Standard_V2.1.
Data unit	tCO2/y
Description	Emission reductions by the project activity in year y (t CO2/yr) In accordance with AMS-I.D., baseline emissions include CO2 from electricity generation in powerplants that are displaced due to the project activity. And baseline emissions correspond to emission reductions and are calculated as the net electricity generated by the project activity, multiplied with combined margin CO2 emission factor for grid connected power generation in year y.
Measured/calculated/default	Both measured and calculated
Data source	Emission reductions will be calculated as considering the EPIAS records for the net electricity generated and the emission factor for the grid, 0.6482 tCO2/MWh, published by the Ministry of Energy



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Value(s) of monitored parameter	24,538
Measurement/ Monitoring equipment	N/A
Measuring/reading/ recording frequency	Yearly
Calculation method (if applicable)	The baseline emissions are the product of electrical energy baseline EGPJ, grid, y expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor
QA/QC procedures	Please check section B.7.4 for more detailed description of the monitoring plan.
Purpose of data	Calculation of combined margin CO2 emission factor and thus the baseline emissions-to demonstrate contribution to SDG Target 13.3.: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
Additional comments	-

**B.7.2. Monitoring-program of risk management actions**

No parameter is evaluated as “Harmful” in Section E.

**B.7.3. Sampling plan**

N/A

**B.7.4. Other elements of the monitoring plan**

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The Project Owner will be responsible for the overall management of the monitoring procedures including recording, data collection and store. The consultant calculates emission reductions based on these monitored data and prepare monitoring report.

According to the methodology applied, the electricity supplied to the national grid by the project and the electricity consumed by the project activity shall be monitored. The net electricity is the difference of the electricity supplied and consumed by the project and shall be taken into account for emission reduction calculations.

Two power meters are installed at the grid interface of the project. One is the main meter, and the other is back-up meter of the main meter for cross-checking. Both meters are jointly inspected and sealed in order to be protected from interference by any of the parties.

The capacity of the transmission line connected is 34.5 kVA, the accuracy class for main power meters have been defined in the Communiqué for Power Meters as 0.2S class. The back-up meter has the same accuracy class of 0.2S. The calibration will be implemented in accordance with the related standard procedures (IEC-EN 62053-22 and 62053-23) by either Turkish Electricity Transmission Corporation (TEİAŞ) or the provider company in the name of TEİAŞ. The meters are calibrated every ten years. Additionally, the meters are tested every two years.

TEİAŞ is performing remote reading of the meters and monthly power meter readings are the basis for monitoring net electricity fed into the grid. EPIAŞ records will used as the source of net generated electricity value and meter reading forms or OSF forms issued by TEİAŞ will be used for the crosscheck.

The website of EPIAŞ (<https://cas.epias.com.tr/cas/login> ) is accessible to Project owner with their unique user ID and password. Once accessed, the Project owner is able to call electricity generation and consumption reports of their own projects. The same reports are used by the Project owner for invoicing TEİAŞ. The electricity generation data is reported monthly basis.

All data collected as part of monitoring will be archived electronically by the project owner and be kept at least for 2 years after the end of the last crediting period.

## Section C. Start date, crediting period type and duration

### C.1. Start date of the Project Activity

20/05/2016

### C.2. Expected operational lifetime of the Project Activity

25 years

### **C.3. Crediting period of the Project Activity**

#### **C.3.1. Fixed crediting period**

10 years

#### **C.3.2. Start date of the crediting period**

20/05/2016<sup>14</sup>

#### **C.3.3. Duration of the crediting period**

Crediting period is between 20/05/2016 – 19/05/2026

## **Section D. Environmental impacts**

### **D.1. Analysis of environmental impacts**

Please see Section E.

### **D.2. Environmental impact assessment**

Approval from Ministry of Environment and Urbanization was taken on 11/05/2009 as assessing the environmental impacts of the project activity.

Additionally, Noise Impact Assessment was conducted, and it was concluded that no negative impact was considered. Regarding impact on bird and bats carcasses and nests Ornithological and Ecological Evaluation Report was prepared and it's been reported that no negative impact was considered.

## **Section E. Environmental and social safeguards**

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<sup>14</sup> Ministry Acceptance Protocol

E.1. Environmental safeguards

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Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards										Project Owner's Conclusion	
		Description of Impact (both positive and negative)	Legal requirement / Limit	Do-No-Harm Risk Assessment			Risk Mitigation Action Plans		Do-No-Harm Residual Risk Assessment		Self-Declaration		
				Not Applicable (No actions required)	Harmless (No actions required)	Harmful (Actions required)	Operational Controls	Program of Risk Management Actions	Re-evaluate Risks	Monitoring	Explanation of Conclusion	The Project Activity will not cause any harm	
<b>Environmental impacts on the identified categories<sup>15</sup> indicated below.</b>	Indicators for environmental impacts	Describe anticipated environmental impacts, both positive and negative from all sources (stationary and mobile), that may result from the Project Activity, within and outside the project boundary, over which the Project Owner(s) has control, and beyond what would reasonably be expected to occur in the absence of the Project Activity.	Describe the applicable national regulatory requirements /legal limits related to the identified risks of environmental impacts.	If no environmental impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Not Applicable</b> (No actions required)	If environmental impacts are anticipated, but are expected to be in compliance with applicable national regulatory requirements/ below the legal limits, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Harmless</b> (No actions required)	If environmental impacts are anticipated that will not be in compliance with the applicable national regulatory requirements or are likely to exceed legal limits, then the Project Activity is likely to cause harm (may be un-safe) and shall be indicated as <b>Harmful</b> (Actions required).	Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as <b>Harmful</b> .	Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., installation of pollution control equipment) that will be adopted to reduce the risk of impacts that have been identified as <b>Harmful</b> .	Re-evaluate risks after Risk Mitigation Action Plans have been developed (refer to previous two columns) for impacts that have been identified as Harmful. Indicate whether the risks have been eliminated or reduced and, where appropriate, indicate them as <b>Harmless</b> (No actions required)	Describe the monitoring approach and the parameters to be monitored for each impact that has been identified as Harmful and described in the PSF (refer to Table 3).	Describe how the Project Owner has concluded that the Project Activity is likely to achieve the identified Risk Mitigation Action Plan targets for managing risks to levels that are unlikely to cause any harm.	Confirm that the Project Activity risks of negative environmental impacts are expected to be managed to levels that are unlikely to cause any harm (Mark +1 for <b>Yes</b> or and -1 for <b>No</b> )	
<b>Environmental Safeguards</b>													
Environment - Air	SO <sub>x</sub> emissions	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A		
	NO <sub>x</sub> emissions	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A		
	CO <sub>2</sub> emissions	The dominant emissions from power			-	-				The generated electricity by	In the baseline scenario	+1	

<sup>15</sup> sourced from the CDM SD Tool and the sample reports are available ( <https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx> )

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		plants are in the form of CO2, therefore CO2 emissions from fossil fuel fired power plants connected to the grid will be accounted for in baseline calculations. Thus, the project activity reduces CO2 emissions.								the project activity will be continuously measured and the related CO2 emission reduction will be calculated according to the applied methodology.	(grid) some of the fossil fuel power plants may have emitted CO2 emissions, which has been calculated by the combined margin emission factor. Therefore, emission reductions are expected to be reduced which will be regularly monitored and verified ex -post and therefore is eligible to be scored.	
<i>CO emissions</i>	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Suspended particulate matter (SPM) emissions</i>	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Fly ash emissions</i>	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Non-Methane Volatile Organic Compounds (NMVOCs)</i>	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Odor emissions</i>	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Noise Pollution</i>	Noise impact of the turbines. Measured noise levels differs	According to the Regulation on the Ambient Noise	-	Harmless	-	N/A	N/A	N/A	N/A	Interviews with local people will be considered.	Due to the technical specification of the wind turbine and the distance	+1

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		between 39.2 – 52.5dBA.	Evaluation and Control the limits are 60-70dBA.								between two wind farms maintained at site, it is expected that noise will be significantly low from the project activity.	
<b>Environment - Land</b>	<i>Solid waste Pollution from Plastics</i>	Domestic wastes including plastics are properly stored and dispose in accordance with the related regulation.	According to the Waste Management Regulation <sup>16</sup> , domestic solid wastes shall be collected in waste bins and disposed by the related municipality.	-	Harmless	-	N/A	N/A	N/A	N/A	No significant plastic waste is expected from the project activity during operational phase.	N/A
	<i>Solid waste Pollution from Hazardous wastes</i>	Oil wastes will be handled appropriately in closed containers and transported by licensed transporters to the licensed processing and disposal facilities.	According to the Regulation on Waste Oil Management <sup>17</sup> , hazardous wastes shall be transported by licensed transporters to the licensed processing and disposal facilities.	-	Harmless	-	N/A	N/A	N/A	The records for the transfer of the wastes will prove the disposal of hazardous wastes.	As hazardous wastes shall be transported by licensed transporters to the licensed processing and disposal facilities, the records for the transfer of the wastes will prove the disposal.	N/A
	<i>Solid waste Pollution from Bio-medical wastes</i>	No Bio-medical wastes on site	N/A	N/A	-	-	-	N/A	N/A	N/A	N/A	N/A

<sup>16</sup> <https://www.resmigazete.gov.tr/eskiler/2015/04/20150402-2.htm>

<sup>17</sup> <https://www.resmigazete.gov.tr/eskiler/2019/12/20191221-1.htm>

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	<i>Solid waste Pollution from E-wastes</i>	No E-wastes on site	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	
	<i>Solid waste Pollution from Batteries</i>	No battery wastes on site	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	
	<i>Solid waste Pollution from end-of-life products/ equipment</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	
	<i>Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury)</i>	No soil pollution from chemicals on site	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	
	<i>Soil erosion</i>	N/A	N/A	-	-	-	N/A	N/A	N/A	N/A	N/A	
<b>Environment - Water</b>	<i>Reliability/ accessibility of water supply</i>	N/A	N/A	-	-	-	N/A	N/A	N/A	N/A	N/A	
	<i>Water Consumption from ground and other sources</i>	The project activity does not consume groundwater, drinking water is supplied by bottled water.	N/A	-	-	-	N/A	N/A	N/A	N/A	N/A	
	<i>Generation of wastewater</i>	Wastewater is generated for domestic use only.	According to the Water Pollution Control Regulation <sup>18</sup> , wastewater produced by workers during operation was collected in an	-	Harmless	-	N/A	N/A	N/A	Wastewater transfer records will prove the disposal of wastewater.	There is no significant effect as provisions of septic tank and soak pits will be provided onsite for treatment and disposal of sewage, thereby minimizing the impacts	+1

<sup>18</sup> <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=7221&MevzuatTur=7&MevzuatTertip=5>

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			impermeable septic tank and later they were periodically transferred to wastewater treatment plant.									of wastewater discharge.	
	<i>Wastewater discharge without/with insufficient treatment</i>	The project activity does not discharge any wastewater with insufficient treatment.	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Pollution of Surface, Ground and/or Bodies of water</i>	The project activity does not consume surface or groundwater, or discharge wastes to these	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Environment – Natural Resources</b>	<i>Conserving mineral resources</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Protecting/enhancing plant life</i>	Floras are protected within the project area.	CITES and Bern Convention	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Protecting/enhancing species diversity</i>	Regarding impact on bird and bats carcasses and nests, Ornithological and Ecological Evaluation Report was prepared and it's been reported that no negative impact was considered.	CITES and Bern Convention	-	Harmless	-	N/A	N/A	N/A	Site personnel will monitor bird and bats carcasses and any negative impact will be reported.	As ornithology report states, no negative impact is expected on bird and bats carcasses and nests.	+1	



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<i>Protecting/enhancing forests</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	
<i>Protecting/enhancing other depletable natural resources</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	
<i>Conserving energy</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	
<i>Replacing fossil fuels with renewable sources of energy</i>	The project activity replaces fossil fuels with wind energy as it's based on the baseline.	No legal limit	N/A	-	-	N/A	N/A	N/A	The electricity generated from wind power will be monitored throughout the crediting period	The generated electricity by the project activity will be continuously measured and the related CO2 emission reduction will be calculated according to the applied methodology.	+1
<i>Replacing ODS with non-ODS refrigerants</i>	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	

**Note:** If the score is: (a) zero or greater, the overall impact is neutral or positive and there is no net harm; and (b) less than zero, the overall impact is negative and there is net harm to Environment. Score is obtained after adding the individual scores in each of the rows in the last column of the above table.

<b>Net Score:</b>	<b>+5</b>
<b>Project Owner's Conclusion in PSF:</b>	The Project Owner confirms that the Project Activity will not cause any net harm to the environment.

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E.2. Social Safeguards

Impact of Project Activity on		Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards										Project Owner's Conclusion	
		Description of Impact (both positive and negative)	Legal requirement /Limit	Do-No-Harm Risk Assessment			Risk Mitigation Action Plans		Do-No-Harm Residual Risk Assessment		Self-Declaration		
				Not Applicable (No actions required)	Harmless (No actions required)	Harmful (Actions required)	Operational Controls	Program of Risk Management Actions	Re-evaluate Risks	Monitoring	Explanation of Conclusion	The Project Activity will not cause any harm	
<b>Social impacts on the identified categories<sup>19</sup> indicated below.</b>	Indicators for social impacts	Describe the impacts on society and stakeholders, both positive and negative, that may result from constructing and operating of the Project Activity.	Describe the applicable national regulatory requirements / legal limits related to the identified risks of social impacts.	If no social impacts are anticipated, then the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Not Applicable</b> (No actions required)	If social impacts are anticipated, but are expected to be in compliance with applicable national regulatory requirements/ legal limits, then it the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as <b>Harmless</b> (No actions required)	If social impacts are anticipated that will not be in compliance with the applicable national regulatory requirements/ legal limits, then the Project Activity is likely to cause harm (may be unsafe) and shall be indicated as <b>Harmful</b> (Actions required).	Describe the operational controls and best practices, focusing on how to implement and operate the Project Activity, to reduce the risk of impacts that have been identified as <b>Harmful</b> .	Describe the Program of Risk Management Actions (refer to Table 3), focusing on additional actions (e.g., construction of creche for workers) that will be adopted to reduce the risk of impacts that have been identified as <b>Harmful</b> .	Re-evaluate risks after Risk Mitigation Actions plans have been developed (refer to previous two columns) for impacts that have been identified as <b>Harmful</b> . Indicate whether the risks have been eliminated or reduced and, where appropriate, indicate them as <b>Harmless</b> (No actions required)	Describe the monitoring approach and the parameters to be monitored for each impact that has been identified as <b>Harmful</b> and to be described in the PSF (refer to Table 3).	Describe how the Project Owner has concluded that the Project Activity is likely to achieve the identified Risk Mitigation Action Plan targets for managing risks to levels that are unlikely to cause any harm.	Confirm that the Project Activity risks of negative social impacts are expected to be managed to levels that are unlikely to cause any harm (Mark +1 for <b>Yes</b> or and -1 for <b>No</b> )	
<b>Social Safeguards</b>													
<b>Social - Jobs</b>	Long-term jobs (> 1 year) created/ lost	The project activity has created permanent job opportunities.	Employments have been realized in accordance with the Labor Law. <sup>20</sup>	N/A	-	-	N/A	N/A	N/A	Records of People employed (Social Security Records) by the project will be maintained.	Thanks to project activity, there is positive impact on income generation of local people.	+1	

<sup>19</sup> sourced from the CDM SD Tool and the sample reports are available ( <https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx> )

<sup>20</sup> <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.4857.pdf>

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											Social Insurance Operations Regulation was rearranged on 31st of May, 2016 in Turkey. <a href="https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=13973&amp;MevzuatTur=7&amp;MevzuatTertip=5">https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=13973&amp;MevzuatTur=7&amp;MevzuatTertip=5</a> Under this regulation, within the border of Turkey, without social insurance, employees cannot be worked in any shape or form.	
	<i>New short-term jobs (&lt; 1 year) created/ lost</i>	The project activity created temporary job opportunities for the construction activities.	Employments have been realized in accordance with the Labor Law.	N/A	-	-	N/A	N/A	N/A	Local people will be interviewed on created temporary job opportunities.	N/A	+1
	<i>Sources of income generation increased / reduced</i>	Income generation has been provided with the project activity.	Employments have been realized in accordance with the Labor Law and Social Security Regulations .	N/A	-	-	N/A	N/A	N/A	Site personnel will be interviewed on permanent job opportunities.  The total number of persons working in the plant would be calculated based on	According to the labor law of the Republic of Turkey,34 employers are obliged to insure their employees for the duration of their employment . Employers' insurance records are proof that	+1

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										the Social Security records.	there are income generation by the employer which is project owner	
<b>Social - Health &amp; Safety</b>	<i>Disease prevention</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Reducing / increasing accidents</i>	Occupational accidents are probable within the scope of the projects. Job training are given to the employees.	Employees are trained in line the HSE Law. <sup>21</sup>	-	Harmless	-	N/A	N/A	N/A	Participant lists for HSE trainings will prove the attended trainings.	According to the occupational health and safety law <sup>22</sup> , the employer is obliged to provide this training to its employees. Training records can also be considered as proof of that there are income generation by the employer which is project owner.	+1
	<i>Reducing / increasing crime</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Reducing / increasing food wastage</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Reducing / increasing indoor air pollution</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	

<sup>21</sup> <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6331.pdf>

<sup>22</sup> <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6331.pdf>

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	<i>Efficiency of health services</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Sanitation and waste management</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Social - Education</b>	<i>Job related training imparted or not</i>	<i>Job related and technical trainings are provided to the employees.</i>	-	N/A	-	-	N/A	N/A	N/A	HSE trainings will be provided for all employees at the power plant. Participant lists for HSE trainings will be used as proof of the attended trainings. According to the "REGULATION ON PROCEDURES AND PRINCIPLES OF EMPLOYEES' OCCUPATIONAL HEALTH AND SAFETY TRAINING" which was come into force on 15th May, 2013, all of the legal employees that are working within the border of Republic of Turkey should be provided health and safety trainings by their employers.	According to the occupational health and safety law, 37the employer is obliged to provide this training to its employees. Training records can also be considered as proof of that there are income generation by the employer which is project owner.	+1

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										Employers are obliged to provide this. (https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=18371&MevzuatTur=7&MevzuatTertip=5)		
	<i>Educational services improved or not</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Project-related knowledge dissemination effective or not</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Social - Welfare</b>	<i>Improving/deteriorating working conditions</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Community and rural welfare</i>	Employment opportunities and thus income generation have been created for local people.	Labor Law <sup>23</sup>	N/A	-	-	N/A	N/A	N/A	Site personnel will be interviewed on permanent job opportunities.	The fact that the employees working in the project area are generally local people is the indicator of this situation. Their employment records may be seen as a proof of this assessment	+1
	<i>Poverty alleviation (more people</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	

<sup>23</sup> <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.4857.pdf>

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	<i>above poverty level)</i>											
	<i>Improving / deteriorating wealth distribution/ generation of income and assets</i>	Income generation have been created for local people.	Labor Law <sup>24</sup>	N/A	-	-	N/A	N/A	N/A	Site personnel will be interviewed on permanent job opportunities.	The fact that the employees working in the project area are generally local people is the indicator of this situation. Their employment records may be seen as a proof of this assessment	+1
	<i>Increased or / deteriorating municipal revenues</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Women's empowerment</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
	<i>Reduced / increased traffic congestion</i>	Not related	N/A	-	-	N/A	N/A	N/A	N/A	N/A	N/A	
<p><b>Note:</b> If the score is: (a) zero or greater, the overall impact is neutral or positive and there is no net harm; and (b) less than zero, the overall impact is negative and there is net harm to society. Score is obtained after adding the individual scores in each of the rows in the last column of the above table.</p>												
<b>Net Score:</b>		+7										
<b>Project Owner's Conclusion in PSF:</b>		The Project Owner confirms that the Project Activity will not cause any net harm to society.										

<sup>24</sup> <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.4857.pdf>





## Section F. United Nations Sustainable Development Goals (SDG)

UN-level SDGs	UN-level Target	Declared Country-level SDG	Defining Project-level SDGs					Project Owner(s)'s Conclusion	
			Project-level SDGs	Project-level Targets/ Actions	Project-level Indicators	Contribution of Project-level Actions to SDG Targets	Monitoring	Explanation of Conclusion	Are Goal/ Targets Likely to be Achieved?
<p><b>Describe UN SDG targets and indicators</b></p> <p>See: <a href="https://unstats.un.org/sdgs/indicators/indicators-list/">https://unstats.un.org/sdgs/indicators/indicators-list/</a></p>	<p>Describe the UN-level target(s) and corresponding indicator no(s)</p>	<p>Has the host country declared the SDG to be a national priority? Indicate Yes or No</p>	<p>Define project-level SDGs by suitably modifying and customizing UN/ Country-level SDGs to the project scope.</p> <p><b>For guidance see:</b> Integrating the SDGs into Corporate Reporting- A Practical Guide: <a href="https://www.unglobalcompact.org/docs/publications/Practical_Guide_SDG_Reporting.pdf">https://www.unglobalcompact.org/docs/publications/Practical_Guide_SDG_Reporting.pdf</a></p> <p>Case-study from Coca-Cola and other organizations to develop organization-wide SDGs (page 114): <a href="https://pub.iges.or.jp/pub/realising-transformative-potential-sdgs">https://pub.iges.or.jp/pub/realising-transformative-potential-sdgs</a></p>	<p>Define project-level targets/actions, by suitably modifying and customizing UN/Country-level targets to the project scope. Define the target date by which the Project Activity is expected to achieve the project-level SDG target(s). Refer to the previous column for guidance</p>	<p>Define project-level indicators by suitably modifying and customizing UN/Country-level indicators to the project scope or creating a new indicator(s). Refer to the previous column for guidance</p>	<p>Describe and justify how actions taken under the Project Activity are likely to result in a direct positive effect that contributes to achieving the defined project-level SDG targets and is additional to what would have occurred in the absence of the Project Activity</p>	<p>Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG target and Indicator</p>	<p>Describe how the Project Owner has concluded that the project is likely to achieve the identified Project level SDGs target(s).</p>	<p>Describe whether the project-level SDG target(s) is likely to be achieved by the target date (Yes or No)</p>
<p><b>Goal 1: End poverty in all its forms everywhere</b></p>									
<p><b>Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture</b></p>									

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<p><b>Goal 3. Ensure healthy lives and promote well-being for all at all ages</b></p>									
<p><b>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</b></p>									
<p><b>Goal 5. Achieve gender equality and empower all women and girls</b></p>									
<p><b>Goal 6. Ensure availability and sustainable management of water and sanitation for all</b></p>									
<p><b>Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all</b></p>	<p>Target: 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix</p> <p>Indicator: 7.2.1. Renewable energy share in the total final energy</p>	<p>No</p>	<p>Generation of 24,538 MWh annually</p>		<p>7.2.1. Renewable energy share in the total final energy consumption</p>	<p>The project contributes to renewable energy share of Turkey's energy mix, as generating 24,538 MWh/yr clean energy.</p>	<p>The net electricity supplied to the grid by the project activity is continuously monitored through energy meter (main and spare meters) installed at the substation.</p>	<p>The Project Owner operates the project activity since 2016.</p>	<p>Yes</p>

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	consumption								
<p><b>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b></p>	<p>Target: 8.5. By 2030, achieve full and productive employment and decent work for all women and men</p> <p>Indicator: 8.5.2. Unemployment rate, by sex, age and persons with disabilities</p> <p>Target: 8.8. Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular</p>	<p>No</p>	<p>Generation of job opportunities</p> <p>Given training on HSE</p>		<p>8.5.2. Unemployment rate, by sex, age and persons with disabilities</p> <p>8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status</p>	<p>Both temporary and permanent jobs have been created during the construction and operational phase of the project activity. In total 6 employees are working for permanently.</p>	<p>The total number of persons working in the plant would be calculated based on the Social Security records.</p>	<p>The Project Owner operates the project activity since 2016.</p>	<p>Yes</p>

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	<p>women migrants, and those in precarious employment</p> <p>Indicator:</p> <p>8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status</p>								
<p><b>Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b></p>	<p>Target: 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial</p>	<p>No</p>	<p>Greater adoption of clean and environmentally sound technology</p>		<p>9.4.1 CO2 emission per unit of value added</p>	<p>The project enables the adoption of clean and environmentally sound technology as using wind energy</p>	<p>The net electricity supplied to the grid by the project activity is continuously monitored through energy meter (main and spare meters) installed at the substation. CO2 emission reductions realized by the project activity will represent the added value.</p>	<p>The Project Owner operates the project activity since 2016.</p>	<p>Yes</p>

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	<p>processes, with all countries taking action in accordance with their respective capabilities</p> <p>Indicator:</p> <p>9.4.1 CO2 emission per unit of value added</p>								
<b>Goal 10. Reduce inequality within and among countries</b>									
<b>Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable</b>	<p>Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management</p>	No	<p>PM2.5 and PM10 emissions are decreased compared to the baseline in cities</p>		<p>11.6.2 Annual mean levels of fine particulate matter (e.g., PM2.5 and PM10) in cities (population weighted)</p>	<p>Fossil fuel fired power plants are displaced due to the project activity, thus the project helps to improve air quality in cities.</p>	<p>Since the project activity uses wind energy source, it reduces PM2.5 and PM10 emissions as compared to Fossil fuel fired power plants.</p> <p>The net electricity supplied to the grid by the project activity is continuously monitored through energy meter (main and spare</p>	<p>The Project Owner operates the project activity since 2016.</p>	Yes

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	<p>Indicator: 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)</p>						<p>meters) installed at the substation.</p>		
<p><b>Goal 12. Ensure sustainable consumption and production patterns</b></p>									
<p><b>Goal 13. Take urgent action to combat climate change and its impacts</b></p>	<p>Target 13.3.: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</p>	<p>No</p>	<p>Emission reduction of 24,538 tCO2 annually</p>		<p>13.3.2 Number of countries that have communicated the strengthening of institutional, systemic, and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions</p>	<p>The project activity reduces emission 24,538 tCO2 annually</p>	<p>Electricity produced by the project activity (measured with electricity meters) multiplied by the CO2 emission factor would provide the emission reduction realized by using the renewable energy.</p>	<p>The Project Owner operates the project activity since 2016.</p>	<p>Yes</p>

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	<p>Indicator: 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions</p>								
<p><b>Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development</b></p>									
<p><b>Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat</b></p>									

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desertification, and halt and reverse land degradation and halt biodiversity loss									
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels									
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development									
<b>SUMMARY</b>						<b>Targeted</b>		<b>Likely to be Achieved</b>	
Total Number of SDGs						5		5	
Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF						Platinum		Platinum	



## **Section G. Local stakeholder consultation**

### **G.1. Modalities for local stakeholder consultation**

The promotion of the Çataltepe WPP project was made on 05/01/2022 with the participation of the local people and the representatives of the relevant institution in the Devecipınarı neighbourhood of the Subaşı Village, Çataltepe District of Çatalca Town, in İstanbul Province.

The project was introduced to the local people and the questions of the participants were answered.

The announcement letters were sent to the mukhtars of the nearby settlements and presented in the mukhtars' offices. The meetings comprised of presentation that includes the Project information and record of comments. To ensure the communication of the meeting, project brochures were shared with the heads.

#### **Agenda**

- Introduction of the project activity
- Clarifying the exact locations of the turbines
- Locating as much as turbines on the route of the existing roads (and explaining the reasons if otherwise)
- Presenting the area of influence of each turbine in accordance with the sample in the "Regulation on the Technical Assessment of Applications for Electricity Generation Based on Wind Sources" and showing those on map (in the EIA report, under the title of 'Selection of the Turbine Location')
- Presenting the cumulative impact with the other close WPPs and showing those on the map

Local stakeholders were also informed on environment and social impacts on SDG elements of the project during the meetings.

It is important for the Project Owner to monitor the on-going stakeholder engagement process to ensure that consultation and disclosure efforts are effective, and stakeholders delivering grievances have been meaningfully consulted throughout the process. Therefore, Stakeholder Engagement Plan is executed by the Project Owner.

### **G.2. Summary of comments received**

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Stakeholders considered clear signs of climate change in the region in recent years. The common outcome of the stakeholder consultation was positive, and stakeholders were in favour of the Project. Local people were employed during construction and are being employed during operation. Contribution to local economy and lead to improvement in living standards were also supported by the stakeholders. There was no negative comment from the participants during the meeting.

### G.3. Consideration of comments received

The contact information of the plant responsible was shared with the stakeholders and it was stated that the project owner and local community would always be in touch. Additionally, the participants were informed about the feedback round. The stakeholder engagement plan will be reviewed and revised (if needed) every six months during construction phase and annually during the operation phase, while the grievance mechanism will be continuously reviewed. In addition, the project stakeholders list will be reviewed and updated.

## Section H. Approval and authorization

### Appendix 1. Contact information of project owners

<b>Organization name</b>	SÜPER ELEKTRİK ÜRETİM A.Ş.
<b>Country</b>	TURKEY
<b>Address</b>	İKİTELLİ – MEHMET AKİF MAH. BAHARİYE CAD. ATMACA SOK. NO: 53/55 KÜÇÜKÇEKMECE/İSTANBUL/TURKEY
<b>Telephone</b>	
<b>Fax</b>	
<b>E-mail</b>	
<b>Website</b>	<a href="http://supergrup.com.tr/super-elektrik">http://supergrup.com.tr/super-elektrik</a>
<b>Contact person</b>	

<b>Organization name</b>	SEKANS ENERJİ LİMİTED ŞİRKETİ
<b>Country</b>	TURKEY
<b>Address</b>	EMNİYET EVLERİ MAH. ESKİ BÜYÜKDERE CAD. NO: 1 /1 İÇ KAPI NO: 1B04 KAGITHANE/ İSTANBUL
<b>Telephone</b>	-
<b>Fax</b>	-
<b>E-mail</b>	<a href="mailto:sila@sekansdanismanlik.com">sila@sekansdanismanlik.com</a>
<b>Website</b>	
<b>Contact person</b>	SILA DURAN

**Appendix 2. Affirmation regarding public funding**

**Appendix 3. Applicability of methodology(ies)**

**Appendix 4. Further background information on ex ante calculation of emission reductions**

**Appendix 5. Further background information on monitoring plan**

**Appendix 6. Summary report of comments received from local stakeholders**

**Appendix 7. Summary of de-registered CDM project (Type B)**

<i>Complete this form in accordance with the instructions attached at the end of this form.</i>	
<b>CDM Project registration number</b>	
<b>Date of registration of CDM Project</b>	
<b>Title of the Project Activity</b>	
<b>CDM Project de-registration reference number</b>	
<b>Date of de-registration of the CDM Project</b>	
<b>Project Participants</b> (authorized by the host / annex 1 country letter of approval)	
<b>Country where the project is located</b>	

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<p><b>Applied CDM methodology(ies)</b> (provide reference and version number(s))</p>				
<p><b>Pre-registration changes to the CDM Project Activity</b> (Tick as applicable)</p>	<p><b>CDM Pre-registration Changes</b></p>	<p><b>Reference number</b></p>	<p><b>Approved</b></p>	<p><b>Provide a summary of pre-registration changes</b></p>
	<p>Deviations from the CDM methodology</p>		<p><input type="checkbox"/></p>	
	<p>Deviations from the CDM Tool</p>		<p><input type="checkbox"/></p>	
	<p>Deviations from the CDM rules</p>		<p><input type="checkbox"/></p>	
	<p>Other.....</p>		<p><input type="checkbox"/></p>	

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<p><b>Post-registration changes to the CDM Project Activity</b> (Tick as applicable)</p>	<p><b>CDM Post registration Changes</b></p>	<p><b>Reference number</b></p>	<p><b>Approved</b></p>	<p><b>Provide a summary of post-registration changes</b></p>
	Change in project design		<input type="checkbox"/>	
	Request for revision of monitoring plan		<input type="checkbox"/>	
	Request for change in start date of crediting period		<input type="checkbox"/>	
	Renewal of crediting period		<input type="checkbox"/>	
	Temporary deviations		<input type="checkbox"/>	
	Other.....		<input type="checkbox"/>	

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Crediting Period(s)	Crediting period(s)		Period (start & end dates)	ERs as per registered PDD/MR	CERs issued	
	Crediting Period (shall start on or after 1 Jan 2016)	Fixed 10 year				
		Renewable (7 years, with 2 approved renewals)	1 <sup>st</sup>			
			2 <sup>nd</sup>			
			3 <sup>rd</sup>			
	Period for which CERs have been issued					
	Period for which CERs have been requested but not issued					-
	Period for which CERs have never been requested for issuance (no monitoring reports submitted)					-
Period for which CERs have never been requested for issuance prior to CDM de- registration					-	
Remaining Crediting period, after CDM de-registration, for which CERs have not been issued by the UNFCCC CDM Executive Board, subject to a ceiling of 10 years as allowed under the GCC Program					-	

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<b>Details of Previous CDM Issuance Requests</b>	<b>Issuance Request</b>	<b>Period</b> (start & end dates)	<b>ERs as per registered PDD</b>	<b>Quantity of CERs requested to be issued</b>	<b>Quantity of CERs issued</b>
	1 <sup>st</sup>				
	2 <sup>nd</sup>				
	3 <sup>rd</sup>				
	4 <sup>th</sup>				
	5 <sup>th</sup>				
	Add rows .....				
	<b>Total</b>				
<b>List any open issues in the Validation and last Verification Report (e.g., FARs, if any) and how they have been addressed</b>					
<b>Any other relevant information that has not been reported in the registered CDM documents and that may have adverse impacts on the environmental integrity of the Project Activity</b>					
<b>Provide the list of all the registered documents related to this project, as available on the UNFCCC/CDM website and the corresponding URLs.</b>					



## DOCUMENT HISTORY

Version	Date	Comment
V 3.2	31/12/2020	<ul style="list-style-type: none"> <li>▪ The name of GCC Program’s emission units has been changed from “Approved Carbon Reductions” or ACRs to “Approved Carbon Credits” or ACCs.</li> </ul>
V 3.1	17/08/2020	<ul style="list-style-type: none"> <li>▪ Editorial revisions made               <ul style="list-style-type: none"> <li>○ Revised Table in section B.7.2 on Monitoring-program of risk management actions</li> <li>○ Revised Table in section E.1 on Environmental Safeguards</li> <li>○ Revised Table in section E.1 on Social Safeguards</li> <li>○ Revised Table in section F on United Nations Sustainable Development Goals (SDG)</li> </ul> </li> </ul>
V 3.0	05/07/2020	<ul style="list-style-type: none"> <li>▪ Revised version released on approval by Steering Committee as per GCC Program Process;</li> <li>▪ Revised version contains following changes:               <ul style="list-style-type: none"> <li>○ Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC);</li> <li>○ Considered and addressed comments raised by Steering Committee:                   <ul style="list-style-type: none"> <li>➤ during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and</li> <li>➤ electronic consultations EC01-Round 01 (15.09.2019 – 25.09.2019), EC01-Round 02 (27.03.2020 – 27.06.2020).</li> </ul> </li> <li>○ Feedback from Technical Advisory Board (TAB) of ICAO on GCC submission for approval under CORSIA<sup>25</sup>;</li> </ul> </li> </ul>
V 2.0	25/06/2019	<ul style="list-style-type: none"> <li>▪ Revised version released for approval by the GCC Steering Committee.</li> <li>▪ Revised version includes additional details and instructions on the information to be provided, consequent to the latest developments world-wide (e.g., CORSIA EUC).</li> </ul>
V 1.0	01/11/2016	Initial version released under the GCC Program Version 1

<sup>25</sup>See ICAO recommendation for conditional approval of GCC at [https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt\\_TAB\\_Report\\_Jan\\_2020\\_final.pdf](https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf)

# Project Submission Form

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