

المجلس العالمي للبصمة الكربونية  
GLOBAL CARBON COUNCIL



# Project Submission Form

V3.2 - 2020

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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>MASFEN-3 Solar Bundle</b>   |                  |         |               |           |         |  |                  |               |                                    |                 |
| <b>PSF version number</b>   | 01   |                  |         |               |           |         |  |                  |               |                                    |                 |
| <b>Date of completion of this form</b>  | 24/03/2022   |                  |         |               |           |         |  |                  |               |                                    |                 |
| <b>Project Owner(s)</b><br><small>(Shall be consistent with De-registered CDM Type B Projects)</small>        | Masfen İnşaat Enerji San. Ve Tic. A.Ş.   |                  |         |               |           |         |  |                  |               |                                    |                 |
|   | <table border="1"> <thead> <tr> <th>Project</th> <th colspan="2">Project Owner</th> </tr> </thead> <tbody> <tr> <td>Gitaş-1</td> <td colspan="2">AAB ENERJİ ÜRETİM TARIMSAL ÜRÜNLER GIDA İNŞAAT SANAYİ TİCARET A.Ş.</td> </tr> <tr> <td>Metges Burdur</td> <td colspan="2">METGES ENERJİ ELEKTRİK ÜRETİM A.Ş.</td> </tr> </tbody> </table> |                  | Project | Project Owner |           | Gitaş-1 | AAB ENERJİ ÜRETİM TARIMSAL ÜRÜNLER GIDA İNŞAAT SANAYİ TİCARET A.Ş. |                  | Metges Burdur | METGES ENERJİ ELEKTRİK ÜRETİM A.Ş. |                 |
| Project   | Project Owner  |                  |         |               |           |         |  |                  |               |                                    |                 |
| Gitaş-1   | AAB ENERJİ ÜRETİM TARIMSAL ÜRÜNLER GIDA İNŞAAT SANAYİ TİCARET A.Ş.   |                  |         |               |           |         |  |                  |               |                                    |                 |
| Metges Burdur   | METGES ENERJİ ELEKTRİK ÜRETİM A.Ş.   |                  |         |               |           |         |  |                  |               |                                    |                 |
| <b>Country where the Project Activity is located</b>  | Turkey   |                  |         |               |           |         |  |                  |               |                                    |                 |
| <b>GPS coordinates of the project site(s)</b>   | <table border="1"> <thead> <tr> <th>Project</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>Gitaş-1</td> <td>N 37° 43' 53.76"</td> <td>E 33° 33' 20.16"</td> </tr> <tr> <td>Metges Burdur</td> <td>N 37° 40' 52.32"</td> <td>E 30° 15' 2.88"</td> </tr> </tbody> </table>  |                  | Project | Latitude      | Longitude | Gitaş-1 | N 37° 43' 53.76"   | E 33° 33' 20.16" | Metges Burdur | N 37° 40' 52.32"                   | E 30° 15' 2.88" |
| Project   | Latitude   | Longitude        |         |               |           |         |  |                  |               |                                    |                 |
| Gitaş-1   | N 37° 43' 53.76"   | E 33° 33' 20.16" |         |               |           |         |  |                  |               |                                    |                 |
| Metges Burdur   | N 37° 40' 52.32"   | E 30° 15' 2.88"  |         |               |           |         |  |                  |               |                                    |                 |
| <b>Eligible GCC Project Type as per the Project Standard</b><br><small>(Tick applicable project type)</small> | <input checked="" type="checkbox"/> <b>Type A:</b><br><input type="checkbox"/> Type A1<br><input checked="" type="checkbox"/> Type A2<br><br><input type="checkbox"/> <b>Type B – De-registered CDM Projects:<sup>1</sup></b><br><input type="checkbox"/> Type B1<br><input type="checkbox"/> Type B2                                      |                  |         |               |           |         |  |                  |               |                                    |                 |

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

| <b>Minimum compliance requirements</b>   | <input checked="" type="checkbox"/> Real and Measurable GHG Reductions<br><input checked="" type="checkbox"/> National Sustainable Development Criteria (if any)<br><input checked="" type="checkbox"/> Apply credible baseline and monitoring methodologies<br><input checked="" type="checkbox"/> Additionality<br><input checked="" type="checkbox"/> Local Stakeholder Consultation Process<br><input checked="" type="checkbox"/> Global Stakeholder Consultation Process<br><input checked="" type="checkbox"/> No GHG Double Counting<br><input checked="" type="checkbox"/> Contributes to United Nations Sustainable Development Goal 13 (Climate Action)   |         |      |                        |           |         |   |  |  |   |  |  |  |  |  |      |  |   |  |      |  |   |  |      |  |  |  |      |  |   |  |      |  |  |  |      |
|--|--|---------|------|------------------------|-----------|---------|---|--|--|---|--|--|--|--|--|------|--|---|--|------|--|---|--|------|--|--|--|------|--|---|--|------|--|--|--|------|
| <b>Choose optional and additional requirements</b><br><small>(Tick applicable label categories)</small>                | <input checked="" type="checkbox"/> Do-no-net-harm Safeguards to address Environmental Impacts<br><input checked="" type="checkbox"/> Do-no-net-harm Safeguards to address Social Impacts<br><input checked="" type="checkbox"/> Contributes to United Nations Sustainable Development Goals (in addition to Goal 13)  |         |      |                        |           |         |   |  |  |   |  |  |  |  |  |      |  |   |  |      |  |   |  |      |  |  |  |      |  |   |  |      |  |  |  |      |
| <b>Applied methodologies</b><br><small>(Shall be approved by the GCC or the CDM)</small>                               | AMS-I.D.: Grid connected renewable electricity generation --- Version 18.0   |         |      |                        |           |         |   |  |  |   |  |  |  |  |  |      |  |   |  |      |  |   |  |      |  |  |  |      |  |   |  |      |  |  |  |      |
| <b>GHG Sectoral scope(s) linked to the applied methodology(ies)</b>  | GHG-SS #1. Energy (renewable/non-renewable sources)  |         |      |                        |           |         |   |  |  |   |  |  |  |  |  |      |  |   |  |      |  |   |  |      |  |  |  |      |  |   |  |      |  |  |  |      |
| <b>Applicable Rules and Requirements for Project Owners</b><br><small>(Tick applicable Rules and Requirements)</small> | <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 1459 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 1459 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 1459 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 1459 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 1459 1549">V2.0</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 1459 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 1459 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 1459 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 1459 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) |  | V2.0 |  | <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 |
| 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)  |         | V2.0 |                        |           |         |   |  |  |   |  |  |  |  |  |      |  |   |  |      |  |   |  |      |  |  |  |      |  |   |  |      |  |  |  |      |
|  | <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 |                        |           |         |   |  |  |   |  |  |  |  |  |      |  |   |  |      |  |   |  |      |  |  |  |      |  |   |  |      |  |  |  |      |

Project Submission Form

|  |   |  |  |       |
|--|---|--|--|-------|
|  | <input checked="" type="checkbox"/> GCC Rules and Requirements <sup>2</sup>   | <input checked="" type="checkbox"/> Clarification No. 01   |  | V1.1  |
|  | <input checked="" type="checkbox"/> CDM Rules <sup>3</sup>  | <input checked="" type="checkbox"/> Approved CDM Methodology (XXXXX)                                   | AMS-I.D.:<br>Grid connected renewable electricity generation | V18.0 |
|  |   | <input type="checkbox"/> Tool for the demonstration and assessment of additionality                    | TOOL 01  |       |
|  |   | <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 type="checkbox"/> Demonstration of additionality of small-scale project activities              | TOOL 21  |       |
|  |   | <input type="checkbox"/> Additionality of first-of-its-kind project activities                         | TOOL 23  |       |
|  |   | <input type="checkbox"/> Common practice   | TOOL 24  |       |
|  |   | <input type="checkbox"/> Investment analysis   | TOOL 27  |       |
|  |   | <input checked="" type="checkbox"/> Positive lists of technologies                                     | TOOL 32  | V03.0 |
|  |   | <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</b> | <input checked="" type="checkbox"/> GHG emission reductions (i.e., Approved Carbon Credits <b>(ACCs)</b> )<br><input checked="" type="checkbox"/> Environmental No-net-harm Label <b>(E<sup>+</sup>)</b><br><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>

|   |   |
|---|---|
| <p><b>approved GCC Verifiers<sup>4</sup></b><br/>(Tick applicable verification categories)</p>                | <p><input checked="" type="checkbox"/> United Nations Sustainable Development Goals (<b>SDG+</b>)</p> <p><input type="checkbox"/> Bronze SDG Label</p> <p><input type="checkbox"/> Silver SDG Label</p> <p><input checked="" type="checkbox"/> Gold SDG Label</p> <p><input type="checkbox"/> Platinum SDG Label</p> <p><input type="checkbox"/> Diamond SDG Label</p> <p><input checked="" type="checkbox"/> CORSIA requirements (<b>C+</b>)</p> <p><input checked="" type="checkbox"/> Host Country Attestation on Double counting</p>  |
| <p><b>Declaration to be made by the Project Owner(s)<sup>5</sup></b><br/>(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> |

<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.

<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><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 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> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Confirms the avoidance of double counting as required by CORSIA;</li> <li><input checked="" type="checkbox"/> Shall be made publicly available prior to the use of units from the host country under CORSIA; and</li> <li><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.</li> </ul> <p>Provide details below for the boxes ticked above</p> |
|   | <p>The Project Owner(s) declares that:</p> <ul style="list-style-type: none"> <li><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;</li> <li><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.</li> </ul> <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 7 to this document.</p>   |
| <p><b>Name, designation, date and signature of the Project Owner(s)</b></p> | <p>On behalf of<br/> <b>AAB ENERJİ ÜRETİM TARIMSAL ÜRÜNLER GIDA İNŞAAT SANAYİ TİCARET A.Ş.</b><br/> <b>METGES ENERJİ ELEKTRİK ÜRETİM A.Ş.</b></p> <p><b>Masfen İnşaat Enerji San. Ve Tic. A.Ş.</b><br/> <b>Recep Çıldarul</b></p> <p><b>14/03/2022</b></p>    |



## 1. PROJECT SUBMISSION FORM

### Section A. Description of the Project Activity

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

MASFEN-3 Solar Bundle is operated by Masfen İnşaat Enerji San. Ve Tic. A.Ş.. The project is reducing national energy deficit and development of local industries as it allows the use of local sources for energy generation to meet the increasing demands.

The purpose of the project is to generate clean energy by harnessing the solar power and providing the energy to the Turkish national grid. By implementing the project, investors also aim to reduce dependency to the fossil fuels thereby reducing the sources of environmental pollution.

In this scope, project owners installed total number of 46,076 PV panels with the purpose of contributing to the national economy the meeting the increased electricity demand. Total number of PVs under Gitaş-1 name is 23,712 and under the name Metges Burdur is 22,364. Gitaş-1 is located in Karapınar district in Konya Province. Metges Burdur is located in Merkez district, in Burdur Province.

Total output of the plant will be limited at 14 MWe.

The project activity will generate greenhouse gas (GHG) emission reductions by avoiding CO<sub>2</sub> emissions from electricity generation by fossil fuel power plants connected to Turkish National Power Grid. The average annual generated energy of 28,000 MWh, will be able to deliver a reduction in emissions of around 18,148 tCO<sub>2</sub>e (tons of carbon dioxide equivalent) per annum and 181,480 tCO<sub>2</sub>e in the first crediting period.

Main goals of the MASFEN-3 Solar Bundle include;

- Utilization of the solar potential of Turkey in order to meet increasing electricity demand and maintain energy security. In total, the solar energy capacity of Turkey is lower than 7% of the total installed capacity.<sup>6</sup>
- Reduction of GHG emissions through increasing share of renewable resources.
- Contribution to economic development by creating direct and indirect job opportunities during construction and operation phases.
- Reduction of import dependency on fossil fuel weighed electricity sector and diversify generation mix through use of local resources.
- Contribution to sustainable development through supporting local community and local economy.

In terms of local benefits, the project mainly contributes to the reduction of local air pollutants and local employment.

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<sup>6</sup> <https://webapi.teias.gov.tr/file/39abb292-4b3e-4e70-9e08-914d0ba9bd43?download>

**Table 1. Milestones of the Project**

| <b>Milestone</b>   | <b>Date</b> |
|--|-------------|
| Connection agreement of Metges Burdur                                      | 4/12/2018   |
| Panel Engineering, Procurement and Construction Agreement of Metges Burdur | 06/08/2021  |
| EIA (out of scope) for Metges Burdur                                       | 25/08/2020  |
| EIA (out of scope) for Gitaş-1   | 31/08/2020  |
| Connection agreement of Gitaş-1  | 10/09/2020  |
| System usage agreement of Metges Burdur                                    | 15/10/2020  |
| System usage agreement of Gitaş-1  | 21/10/2020  |
| Panel Engineering, Procurement and Construction Agreement of Gitaş-1       | 09/09/2021  |
| Provisional acceptance of Gitaş-1  | 20/10/2021  |
| Provisional acceptance of Metges Burdur                                    | 20/12/2021  |

In terms of local benefits, the project mainly contributes to the reduction of local air pollutants and local employment.

The project is expected to contribute 4 SDGs which are SDG 7, 8, 9 and 13.

**SDG 7 Energy:** The project contributes SDG Target 7.2 “By 2030, increase substantially the share of renewable energy in the global energy mix” by the utilization of biomass as a renewable energy source.

**SDG 8 Economic Growth:** The project creates direct and indirect employment opportunities during construction and operation phases, so it contributes to SDG Target 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”.

**SDG 9 Infrastructure, Industrialization:** SDG Target 9.4 requires “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 processes, with all countries taking action in accordance with their respective capabilities”. The project helps the Target 9.4 by implementing a clean, reliable and environmental-friendly infrastructure for clean energy production / up-to-date industrialization.

**SDG 13 Climate Change:** The project produces clean renewable energy by diminishing CO<sub>2</sub> emissions. Therefore, it contributes SDG Target 13.3 “Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning”.

## A.2. Location of the Project Activity

| Address and geodetic coordinates of the physical site of the Project Activity |                                     |   |           |
|---|-------------------------------------|---|-----------|
| Physical address  |                                     | Latitude  | Longitude |
| <b>Gitaş-1</b>  | <b>Metges Burdur</b>                |   |           |
| Karapınar district in Konya Province.   | Merkez district, in Burdur Province | Gitaş-1: N 37° 43' 53.76" E 33° 33' 20.16"<br>Metges Burdur: N 37° 40' 52.32" E 30° 15' 2.88" |           |

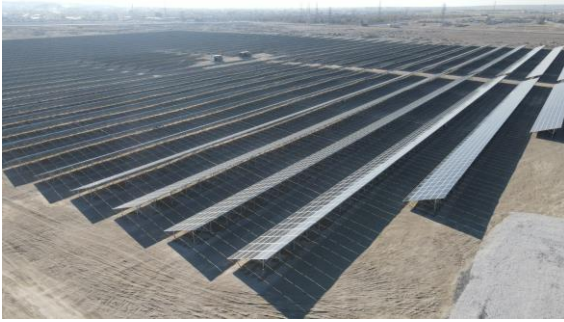


Figure 1. Site photographs of Gitaş-1



Figure 2. Site photographs of Metges Burdur

Table 1. GPS location

| Gitaş-1                                    |                              |            |                                       |               |
|--|------------------------------|------------|---------------------------------------|---------------|
| SANTRAL SAHASI KOORDİNATLARI               |                              |            |                                       |               |
| Santral Sahası Alanına Ait Köşe Numaraları | UTM Koordinatları (6 Derece) |            | Köşenin Dilim Orta Boylamı (6 Derece) | Kot Değerleri |
|  | Sağa(Y)                      | Yukarı(X)  |                                       |               |
| K1   | 548969.00                    | 4176738.20 | 33                                    | 989,00        |
| K2   | 549328.47                    | 4176738.20 | 33                                    | 989,00        |
| K3   | 549328.47                    | 4176304.45 | 33                                    | 988,50        |
| K4   | 548969.00                    | 4176304.45 | 33                                    | 988,50        |

| <b>Metges Burdur</b>                       |                              |            |                                       |               |
|--|------------------------------|------------|---------------------------------------|---------------|
| SANTRAL SAHASI KOORDİNATLARI               |                              |            |                                       |               |
| Santral Sahası Alanına Ait Köşe Numaraları | UTM Koordinatları (6 Derece) |            | Köşenin Dilim Orta Boylamı (6 Derece) | Kot Değerleri |
|  | Sağa(Y)                      | Yukarı(X)  |                                       |               |
| K1   | 257618.83                    | 4174078.74 | 27                                    | 1291,13       |
| K2   | 257649.72                    | 4174095.28 | 27                                    | 1292,36       |
| K3   | 257718.33                    | 4174135.93 | 27                                    | 1297,12       |
| K4   | 257747.95                    | 4174154.00 | 27                                    | 1297,57       |
| K5   | 257781.22                    | 4174175.29 | 27                                    | 1297,01       |
| K6   | 257843.01                    | 4174212.17 | 27                                    | 1294,61       |
| K7   | 257901.59                    | 4174260.18 | 27                                    | 1297,06       |
| K8   | 257950.59                    | 4174322.37 | 27                                    | 1295,60       |
| K9   | 257996.86                    | 4174336.13 | 27                                    | 1292,63       |
| K10  | 258040.18                    | 4174341.88 | 27                                    | 1292,00       |
| K11  | 258027.36                    | 4174042.63 | 27                                    | 1292,68       |
| K12  | 257995.05                    | 4174003.05 | 27                                    | 1282,68       |
| K13  | 257981.81                    | 4174003.42 | 27                                    | 1289,53       |
| K14  | 257975.28                    | 4174018.64 | 27                                    | 1289,15       |
| K15  | 257949.90                    | 4174015.17 | 27                                    | 1286,90       |
| K16  | 257889.44                    | 4174031.96 | 27                                    | 1285,19       |
| K17  | 257905.69                    | 4173981.43 | 27                                    | 1285,00       |
| K18  | 257822.20                    | 4173965.05 | 27                                    | 1286,21       |
| K19  | 257830.26                    | 4173928.79 | 27                                    | 1286,41       |
| K20  | 257820.00                    | 4173897.84 | 27                                    | 1291,20       |
| K21  | 257796.84                    | 4173885.33 | 27                                    | 1290,07       |
| K22  | 257755.63                    | 4173886.57 | 27                                    | 1289,77       |
| K23  | 257702.57                    | 4173887.85 | 27                                    | 1289,72       |
| K24  | 257633.29                    | 4173888.83 | 27                                    | 1289,32       |
| K25  | 257570.12                    | 4173892.00 | 27                                    | 1288,31       |
| K26  | 257589.43                    | 4173957.26 | 27                                    | 1284,69       |
| K27  | 257597.52                    | 4174057.63 | 27                                    | 1283,82       |



Figure 3. Location of Gitaş-1 and Metges Burdur

### A.3. Technologies/measures

Technical information on each plant are given in the tables below. Lifetime of the equipment are considered 25 years.

**Table 2. Technical information on the solar panels**

|               | Brand      | Model            | Maximum module power (Wp) <sup>7</sup> | Number of modules |
|---------------|------------|------------------|--|-------------------|
| Gitaş-1       | Alfa Solar | A3S72M-400       | 400                                    | 23712             |
| Metges Burdur | CW Enerji  | CWT455-144HCMBPM | 400                                    | 22364             |

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

| Location/Country | Project Owner(s)   | Where applicable <sup>8</sup> , indicate if the host country has provided approval (Yes/No) |
|------------------|--|---|
| Turkey           | MASFEN İNŞAAT ENERJİ SAN. VE TİC. A.Ş.<br><br>AAB ENERJİ ÜRETİM TARIMSAL ÜRÜNLER GIDA İNŞAAT SANAYİ TİCARET A.Ş.<br><br>METGES ENERJİ ELEKTRİK ÜRETİM A.Ş. | No  |

#### 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         |                      |   |
| 20/10/2021 | 19/10/2031 | CORSIA               | 18,148 tCO <sub>2</sub>                     |

Carbon credits (ACCs) from the Project Activity would not be double counted.

#### A.6. Additional requirements for CORSIA

Please see Section E and F.

<sup>7</sup> [https://naturalsolar.com.au/wp-content/uploads/2017/03/Hanwha\\_Q\\_CELLS\\_Data\\_sheet\\_QPRO-G4.1\\_TL\\_260-270\\_2017-01\\_Rev01\\_AU.pdf](https://naturalsolar.com.au/wp-content/uploads/2017/03/Hanwha_Q_CELLS_Data_sheet_QPRO-G4.1_TL_260-270_2017-01_Rev01_AU.pdf)

<sup>8</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).

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

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

The United Nations approved consolidated baseline methodology applicable to this project is AMS-I.D.: Grid connected renewable electricity generation --- Version 18.0<sup>9</sup>

AMS-I.D refers to the following tools:

- “Tool to calculate the emission factor for an electricity system”, Version 7<sup>10</sup>, and
- “Positive lists of Technologies”, Version 03.0<sup>11</sup>

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

The selected methodology is in line with the requirements and is therefore justified to be used because of the following reasons:

Project meets the applicability criteria defined by the selected methodology, which is AMS-I.D, ver 18.0:

| No. | Applicability Conditions   | The Project   |
|-----|--|---|
| 1   | This methodology is applicable to project activities that:<br>(a) Install a Greenfield plant;<br>(b) Involve a capacity addition in (an) existing plant(s);<br>(c) Involve a retrofit of (an) existing plant(s);<br>(d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or<br>(e) Involve a replacement of (an) existing plant(s).   | The project activity is a greenfield, grid connected renewable electricity generation project.    |
| 2   | Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:<br>(a) The project activity is implemented in an existing reservoir with no change in the volume of reservoir;<br>(b) The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m <sup>2</sup> ;<br>(c) The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m <sup>2</sup> | The project activity is the installation of solar power plant. Hence this condition is N/A.       |
| 3   | If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit   | The Project is a solar plant with renewable components only, with a capacity of less than 15 MWe. |

<sup>9</sup> <https://cdm.unfccc.int/methodologies/DB/W3TINZ7KKWCK7L8WTFQOQFQQH4SBK>

<sup>10</sup> <https://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-07-v7.0.pdf>

<sup>11</sup> <https://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-32-v3.0.pdf>



|   |   |   |
|---|---|---|
|   | of 15 MW.   |   |
| 4 | Combined heat and power (co-generation) systems are not eligible under this category  | The project does not involve combined heat and power generation activity.   |
| 5 | In the case of project activities that involve the capacity addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.  | The Project is a solar plant with renewable components only, with a capacity of less than 15 MWe. The project does not involve capacity addition. |
| 6 | In the case of retrofit, rehabilitation or replacement, to qualify as a small-scale project, the total output of the retrofitted, rehabilitated or replacement power plant/unit shall not exceed the limit of 15 MW.  | The project does not involve capacity addition, a retrofit of (an) existing plant(s) or a replacement of (an) existing plant(s).                  |
| 7 | In the case of landfill gas, waste gas, wastewater treatment and agro-industries projects, recovered methane emissions are eligible under a relevant Type III category. If the recovered methane is used for electricity generation for supply to a grid then the baseline for the electricity component shall be in accordance with procedure prescribed under this methodology. If the recovered methane is used for heat generation or cogeneration other applicable Type-I methodologies such as "AMS-I.C.: Thermal energy production with or without electricity" shall be explored. | The project is the installation of solar power plant. Hence, this condition is N/A.   |
| 8 | In case biomass is sourced from dedicated plantations, the applicability criteria in the tool "Project emissions from cultivation of biomass" shall apply.  | The project is the installation of solar power plant. Hence, this condition is N/A.   |

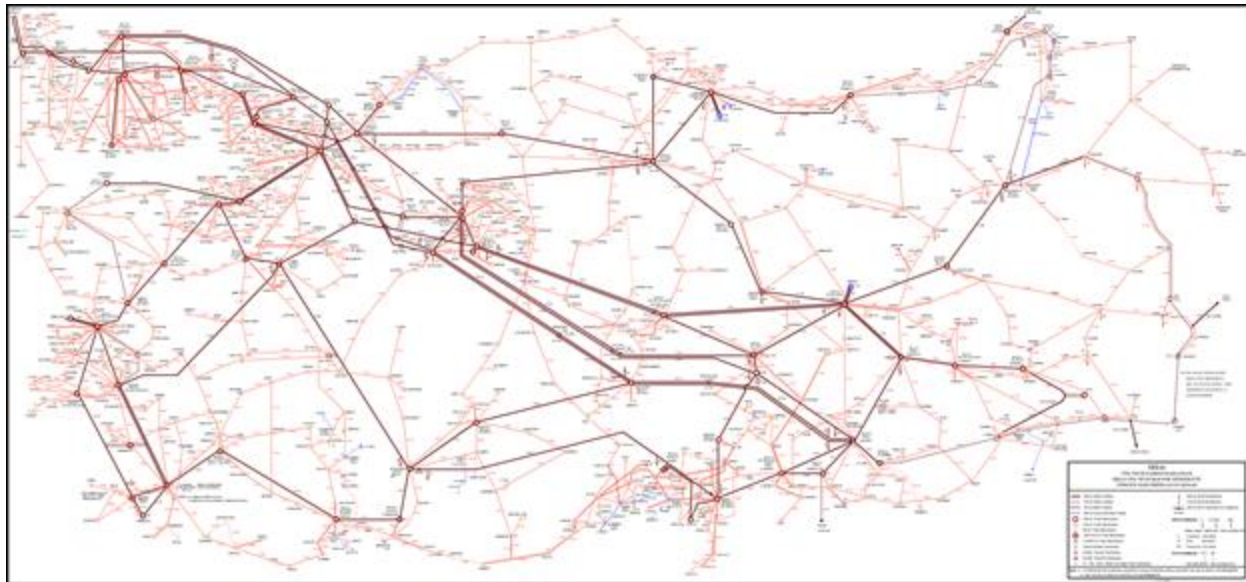
- The geographic and system boundaries for the relevant electricity grid can be clearly identified and information on the characteristics of the grid is available.

Since there exists no delineation of project electricity system or connected electricity systems by DNA, following criteria has been used to determine the existence of significant transmission constraints:

- In case of electricity systems with spot markets for electricity: there are differences in electricity prices (without transmission and distribution costs) of more than 5 percent between the systems during 60 percent or more of the hours of the year.
- The transmission line is operated at 90% or more of its rated capacity during 90% percent or more of the hours of the year.

Since the project output is fed to the Turkish electricity grid which does not involve any distinct electricity systems that applies different price, first criteria defined above is not applicable. Also, since the transmission line between the proposed projects and nearest substation is built within the scope of the project and there exist no information on grid capacity utilization, second criteria is also inapplicable. Based on assessment above, it is difficult to conclude with a significant transmission constraint or grid boundary. Since there is no dispatch grid system in Turkey, the project boundary is considered as the National Electricity Grid of Turkey according to applied tool. The geographical and physical boundaries of the Turkish grid and location of the power plants are well identified as given diagram below.

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**Figure 4. Turkish electricity grid**

As per AMS-I.D methodology Section 2.2.9, the applicability conditions included in the tools used shall also be discussed.<sup>12</sup>

- Tool 07 “Tool to calculate the emission factor for an electricity system”, Version 7<sup>13</sup>: This tool is applicable and used for the calculation of OM, CM and CM since the project activity includes grid power plants and supplies electricity to the grid.
- Tool 32 “Positive lists of Technologies”, Version 03.0<sup>14</sup>: This tool is used as a reference that solar photovoltaic grid-connected electricity generation technologies are considered for the positive list, which shows technologies that confer automatic additionality.

Applicability as per “Tool 07 : Tool to calculate the emission factor for an electricity system, version 07.0”

| No. | Applicability Conditions   | The Project  |
|-----|--|--|
| 1   | This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects). | The project activity supplies electricity to a grid. Hence, this condition is met. |
| 2   | Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include  | CO <sub>2</sub> emission factor for the displacement of                            |

<sup>12</sup>[https://cdm.unfccc.int/filestorage/2/P/7/2P7F56ZQAR84LG3NMKYUH50WI9ODBC/EB81\\_repan24\\_AMS-I.D\\_ver18.pdf?t=UHp8cjNzZHhlfDD9s5G5hUiUHORGy-hX3U\\_z](https://cdm.unfccc.int/filestorage/2/P/7/2P7F56ZQAR84LG3NMKYUH50WI9ODBC/EB81_repan24_AMS-I.D_ver18.pdf?t=UHp8cjNzZHhlfDD9s5G5hUiUHORGy-hX3U_z)

<sup>13</sup> <https://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-07-v7.0.pdf>

<sup>14</sup> <https://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-32-v3.0.pdf>



|   |  |   |
|---|--|---|
|   | off-grid power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project participants, i.e. option IIa and option IIb. If option IIa is chosen, the conditions specified in “Appendix 1: Procedures related to off-grid power generation” should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity. | electricity generated by power plants in an electricity system is determined by calculating the “combined margin” emission factor (CM) of the electricity system. |
| 3 | In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.  | The project electricity system is not located partially or totally in an Annex I country. Hence, this condition is N/A.   |
| 4 | Under this tool, the value applied to the CO <sub>2</sub> emission factor of biofuels is zero.   | The project does not involve biofuels in any way.   |

#### Applicability as per “Tool 32 : Positive lists of technologies, version 03.0”

| No. | Applicability Conditions  | The Project   |
|-----|---|---|
| 1   | The use of this methodological tool is not mandatory for the project participants of a CDM project activity or CDM PoA for demonstrating their additionality.   | The project applies a small-scale methodology that refers to this tool. Hence, this condition is met.       |
| 2   | This methodological tool shall be applied in conjunction with a small-scale or large-scale methodology which refers to this tool.   | The project applies a small-scale methodology that refers to this tool. Hence, this condition is met.       |
| 3   | The positive lists as contained in section 5 of this tool are valid up to 28 November 2022. Notwithstanding the provisions on the validity of new, revised and previous versions of methodologies and methodological tools in the “Procedure: Development, revision and clarification of baseline and monitoring methodologies and methodological tools”, there will be no grace period for the application of this tool and the validity of the positive list after this date, including in cases where further technologies are added to the positive list through revisions of this tool before this date. | “Solar photovoltaic technologies” is included in section 5.2.1. of this tool. Hence, this condition is met. |

#### Two-level analysis for formulation of homogeneous bundles

The project also meets Clarification No. 01 criteria as per GCC Rules & Requirements. A single bundled project is developed by organizing several homogeneous bundles of activities put together. Two-level analysis is needed for determination of homogeneous bundles for a bundled project.

| No. | Condition  | The Project   |
|-----|--|---|
| 1   | <u>Level-1 analysis</u> – Consideration of key aspects for developing Homogeneous Bundles: A homogeneous bundle shall be formed based on | The project is a bundle of projects which apply the |

## Project Submission Form

|   |   |   |
|---|---|---|
|   | <p>the analysis of multiple activities to find out similarity in technological, economic and environmental/methodological considerations. These are explained as follows.</p> <p>(i) Similarity in Technological Considerations: All activities in a bundle shall apply same type of technology as allowed by the applicable methodology or combination of methodologies<sup>3</sup>, if allowed, addressing ‘cross-effects’ (e.g., a single project developed to include only solar PV technology and applying ACM0002 and AMS- I.D).</p> <p>(ii) ...</p> <p>(iii) ...</p> | <p>same type of technology. The project is a single project developed to include only solar PV technology and applying AMS- I.D. Hence, the project complies with the clarifications.</p> |
| 2 | <p><u>Level-2 analysis</u> – Criteria for differentiating the bundles: Formulate a separate bundle of activities if any of the following criteria is not complied with.</p> <p>(a) Same baseline of each activity within a bundle;</p> <p>(b) Same output of each activity (e.g., heat or power or cogeneration);</p> <p>(c) Same Technology of each activity (e.g., wind or solar);</p>  | <p>Level-2 analysis is not required since the project meets criteria (c).</p>   |

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

The project boundary is considered as the National Electricity Grid of Turkey according to applied tool. The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the power plant is connected to.



Figure 5. Project boundary of Gitaş-1 SPP

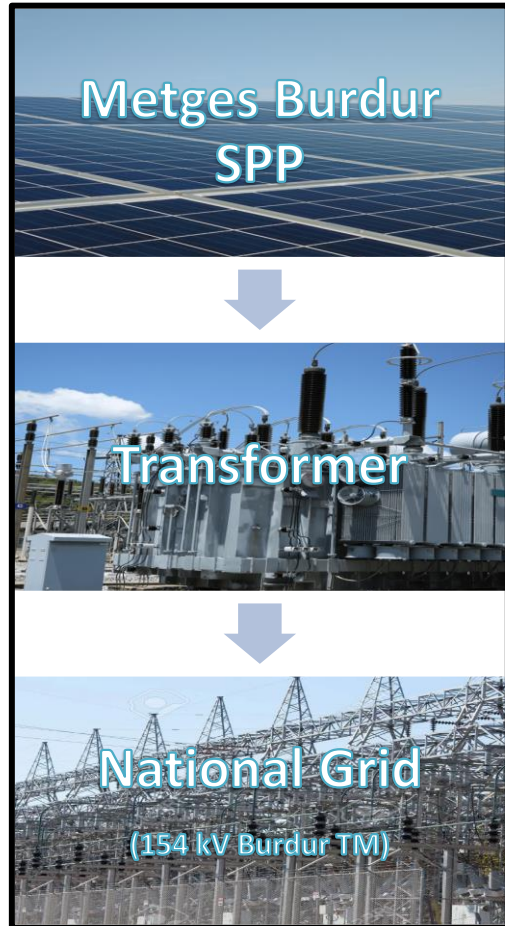


Figure 6. Project boundary of Metges Burdur SPP

The project does not involve any other emissions sources not foreseen by the methodologies. The greenhouse gases and emission sources included in or excluded from the project boundary are shown in table below.

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

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| Source           |  | GHG              | Included? | Justification/Explanation                                |
|------------------|--|------------------|-----------|--|
| Baseline         | Electricity generation   | CO <sub>2</sub>  | Yes       | Main emission source                                     |
|                  |  | CH <sub>4</sub>  | No        | Minor emission source. Excluded for simplification       |
|                  |  | N <sub>2</sub> O | No        | Minor emission source. Excluded for simplification       |
| Project Activity | For geothermal power plants, fugitive emissions of CH <sub>4</sub> and CO <sub>2</sub> from non-condensable gases contained in geothermal steam. | CO <sub>2</sub>  | No        | Not Applicable. Project is not a geothermal power plant. |
|                  |  | CH <sub>4</sub>  | No        | Not Applicable. Project is not a geothermal power plant. |
|                  |  | N <sub>2</sub> O | No        | Not Applicable. Project is not a geothermal power plant. |
|                  | CO <sub>2</sub> emissions from combustion of fossil fuels for electricity generation in solar thermal power plants and geothermal power plants.  | CO <sub>2</sub>  | No        | Not Applicable. Project is a solar power plant.          |
|                  |  | CH <sub>4</sub>  | No        | Not Applicable. Project is a solar power plant.          |
|                  |  | N <sub>2</sub> O | No        | Not Applicable. Project is a solar power plant.          |
|                  | For hydro power plants, emissions of CH <sub>4</sub> from the reservoir.   | CO <sub>2</sub>  | No        | Not Applicable. Project is not a hydro power plant.      |
|                  |  | CH <sub>4</sub>  | No        | Not Applicable. Project is not a hydro power plant.      |
|                  |  | N <sub>2</sub> O | No        | Not Applicable. Project is not a hydro power plant.      |

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

This project follows an approved small-scale UNFCCC methodology which is AMS-I.D.: Grid connected renewable electricity generation --- Version 18.0 . Selected methodology has been applied together with the “tool to calculate the emission factor for an electricity system, version 7”, “positive lists of technologies, version 03.0” has also been used.

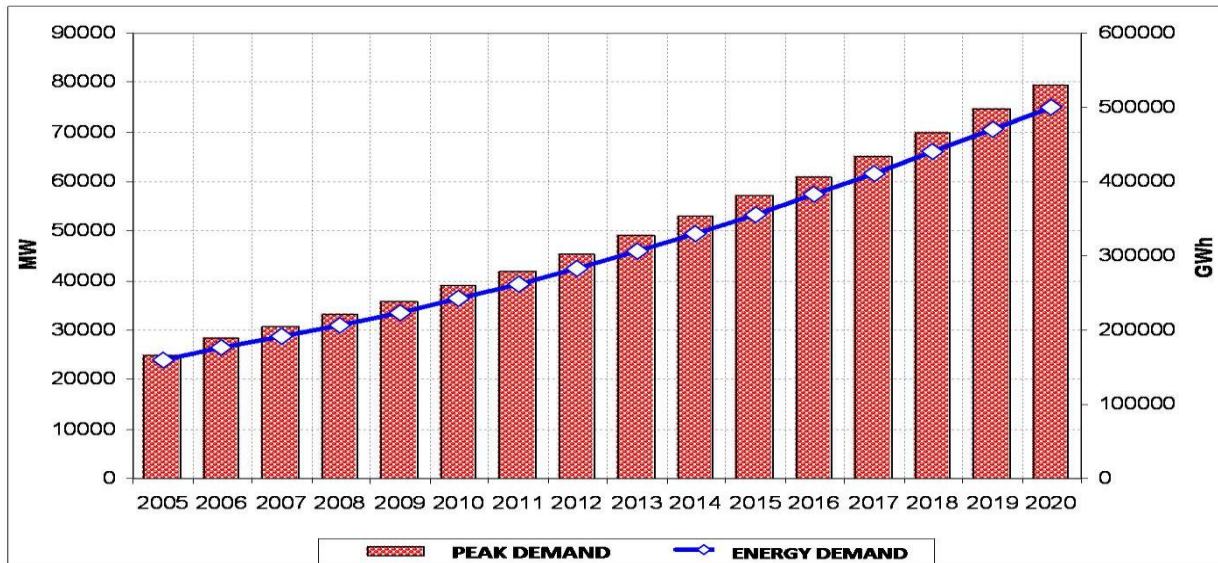
According to the methodology baseline scenario has been identified as “the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources”.

Turkish electricity generation is mainly composed of thermal power plants and the share of renewable resources; especially hydroelectric power plants have decreased significantly in recent years whereas share of wind power plants are still very low. Since Turkey is an advanced developing country, there is an increasing demand for electricity which is fully expected to continue in the foreseeable future (Figure below).

The trend in Turkey to date and given historically slow development of alternative energy resources is to build an increasing number of thermal power plants in the future to satisfy the annual growth in energy consumption demand. Turkey as an advanced developing nation has looked at dealing with energy security by developing and constructing high capacity coal and natural gas power plants. The development of thermal power plants has been also encouraged by the large natural resource

availability in Turkey, especially the abundance of economically accessible lignite.

In the absence of the proposed project activity, the same amount of electricity is required to be supplied via either the current power plants or by increasing the number of thermal power plants thus increasing GHG emissions.



**Figure 7. Peak Load and consumption projection for Turkish electricity system between 2005-2020<sup>15</sup>**

The project is estimated to reduce CO<sub>2</sub> emissions by 18,148 tonnes, annually.

### B.5. Demonstration of additionality

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

- (i) A Legal Requirement Test; and
- (ii) An Additionality Test either based on a Positive List test or a projects-specific additionality test.

(i) The project is not required by a law that is enforced. The project passes the legal requirement test since there are no enforced laws, statutes, regulations, court orders, environmental-mitigation agreements, permitting conditions or other legally-binding mandates that are requiring this project's implementation, or requiring the implementation of a similar technology/measure that would achieve equivalent levels of GHG emission reductions with this project. Voluntary commitments/agreements within a sector or by an entity do not constitute the legal requirements. Hence, the project is additional as per paragraph 46 of Project Standard.

<sup>15</sup><http://www.teias.gov.tr/apkuretimplani/veriler.htm>

(ii) According to the CDM tool “Positive lists of Technologies”, version 03.0, section 5.2.3, solar photovoltaic technologies are included in the positive list that confer automatic additionality to CDM project activities.

## B.6. Estimation of emission reductions

### B.6.1. Explanation of methodological choices

Emission factor will remain same over the crediting period.

#### **Emission Reduction**

Ex-ante emission reductions (ER<sub>y</sub>) are calculated as follows:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER<sub>y</sub> = Emission reductions in year y (tCO<sub>2</sub>)

BE<sub>y</sub> = Baseline emissions in year y (tCO<sub>2</sub>)

PE<sub>y</sub> = Project Emissions in year y (tCO<sub>2</sub>)

LE<sub>y</sub> = Leakage emissions in year y (tCO<sub>2</sub>)

#### **Baseline Emissions**

Baseline emission is calculated according to the formula:

$$BE_y = E_{Gy} \times EF_y$$

Where:

E<sub>Gy</sub> = Net electricity delivered to the grid by the project activity in year y excluding transmission losses of the grid

EF<sub>y</sub> = Emission factor calculated according to selected methodology and according to the Ministry of Energy and Natural Resources document named as Turkey’s National Electricity Network Emission Factor Factsheet (06/10/2021), OM is calculated as 0.7258 tCO<sub>2</sub>/MWh whereas BM is 0.4153 tCO<sub>2</sub>/MWh)<sup>16</sup> Therefore, CM is calculated as 0.6482 whereas 0.75 and 0.25 weightage factor given to OM and BM, respectively.

Considering this project is a solar power plant project, combined margin is calculated as follows:

$$CM = (OM \times 0.75) + (BM \times 0.25)$$

As given by the Ministry of Energy and Natural Resources, built margin is 0.7258 and operating margin is 0.4153.

$$(0.7258 \times 0.75) + (0.4153 \times 0.25) = 0.6482 \text{ tCO}_2/\text{MWh}$$

#### **Project Emissions**

Since the project is classified as a renewable energy project, parameter PE<sub>FF,y</sub> is neglected.

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<sup>16</sup>

<https://enerji.gov.tr//Media/Dizin/EVCED/tr/%C3%87evreVe%C4%B0klim/%C4%B0klimDe%C4%9Fi%C5%9Fikli%C4%9Fi/T%C3%BCrkiyeUlusalElektrik%C5%9EebekesiEmisyonFakt%C3%B6r%C3%BC/Belgeler/EK-2.pdf>



Therefore,  
 $PE_y = 0$

### **Leakage Emissions**

No leakage emissions are considered. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport). These emissions sources are neglected

Also, the energy generating equipment is not transferred from or to another activity. Therefore, leakage is considered as “0”.

### **Total Emission Reduction**

As a result, Total Emission Reduction is:

$$ER_y = BE_y$$

## **B.6.2 Data and parameters fixed ex ante**

**Data / Parameter Table 1.**

|   |   |
|---|---|
| <b>Data / Parameter:</b>                          | <b>EF<sub>grid,CM,y</sub></b>   |
| Methodology reference                             | AMS-I.D   |
| Data unit   | tCO <sub>2</sub> /MWh   |
| Description                                       | Combined margin CO2 emission factor for the project electricity system in year  |
| Measured/calculated /default                      |   |
| Data source                                       | Tool 07 Tool to calculate the emission factor for an electricity system<br>Ministry of Energy and Natural Resources, OM & BM values <sup>17</sup> |
| Value(s) of monitored parameter                   | 0.6482 tCO <sub>2</sub> /MWh  |
| Measurement/ Monitoring equipment (if applicable) | The coefficients are taken as 0.25 and 0.75 for BM and OM, respectively according to the methodology.   |

<sup>17</sup>

<https://enerji.gov.tr//Media/Dizin/EVCED/tr/%C3%87evreVe%C4%B0klim/%C4%B0klimDe%C4%9Fi%C5%9Fikli%C4%9Fi/T%C3%BCrkiyeUlusalElektrik%C5%9EebekesiEmisyonFakt%C3%B6r%C3%BC/Belgeler/EK-2.pdf>

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|   |   |
|---|---|
| Measuring/reading/recording frequency (if applicable) | Once in each crediting period   |
| Calculation method (if applicable)                    | $CM = (BM \times 0.25) + (OM \times 0.75)$<br>As given by the Ministry of Energy and Natural Resources, built margin is 0.4153 and operating margin is 0.7258.<br>$(0.4153 \times 0.25) + (0.7258 \times 0.75) = 0.6482 \text{ tCO}_2/\text{MWh}$ |
| QA/QC procedures                                      | -   |
| Purpose of data                                       | To calculate baseline emission  |
| Additional comments                                   | -   |

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

#### **Emission Reduction**

Ex-ante emission reductions (ER<sub>y</sub>) are calculated as follows:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER<sub>y</sub> = Emission reductions in year y (tCO<sub>2</sub>)

BE<sub>y</sub> = Baseline emissions in year y (tCO<sub>2</sub>)

PE<sub>y</sub> = Project Emissions in year y (tCO<sub>2</sub>)

LE<sub>y</sub> = Leakage emissions in year y (tCO<sub>2</sub>)

#### **Baseline Emissions**

Baseline emission is calculated according to the formula:

$$BE_y = EG_y \times EF_y$$

Where:

EG<sub>y</sub> = Net electricity delivered to the grid by the project activity in year y excluding transmission losses of the grid (28,000 MWh)

EF<sub>y</sub> = Emission factor calculated according to selected methodology and according to the Ministry of Energy and Natural Resources document named as Turkey's National Electricity Network Emission Factor Factsheet (06/10/2021), OM is calculated as 0.7258 tCO<sub>2</sub>/MWh whereas BM is 0.4153 tCO<sub>2</sub>/MWh<sup>18</sup> Therefore, CM is calculated as 0.6482 whereas 0.75 and 0.25 weightage factor given to OM and BM, respectively.

Considering this project is a solar power plant project, combined margin is calculated as follows:

$$CM = (OM \times 0.75) + (BM \times 0.25)$$

As given by the Ministry of Energy and Natural Resources, built margin is 0.7258 and operating margin is 0.4153.

$$(0.7258 \times 0.75) + (0.4153 \times 0.25) = 0.6482 \text{ tCO}_2/\text{MWh}$$

<sup>18</sup>

<https://enerji.gov.tr//Media/Dizin/EVCED/tr/%C3%87evreVe%C4%B0klim/%C4%B0klimDe%C4%9Fi%C5%9Fikli%C4%9Fi/T%C3%BCrkiyeUlusalElektrik%C5%9EebekesiEmisyonFakt%C3%B6r%C3%BC/Belgeler/EK-2.pdf>



$$BE_y = 28,000 \text{ MWh} \times 0.6482 \text{ tCO}_2\text{e/MWh} = 18,148 \text{ tCO}_2\text{e}$$

### **Project Emissions**

Since the project is classified as a renewable energy project, parameter  $PE_{FF,y}$  is neglected. Therefore,  
 $PE_y = 0$

### **Leakage Emissions**

No leakage emissions are considered. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport). These emissions sources are neglected  
 Also, the energy generating equipment is not transferred from or to another activity. Therefore, leakage is considered as “0”.

### **Total Emission Reduction**

As a result, Total Emission Reduction is:

$$ER_y = BE_y$$

So, final emission reduction value is 18,148 **tCO<sub>2</sub>/year**, and 181,480 **tCO<sub>2</sub>** for the whole crediting period of 10 years.

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

| <b>Year</b>                           | <b>Baseline emissions (tCO<sub>2</sub>e)</b> | <b>Project emissions (tCO<sub>2</sub>e)</b> | <b>Leakage (tCO<sub>2</sub>e)</b> | <b>Emission reductions (tCO<sub>2</sub>e)</b> |
|---------------------------------------|--|---|-----------------------------------|---|
| <b>2021 (20/10/2021 - 31/12/2021)</b> | 3,630  | 0   | 0                                 | 3,630   |
| <b>2022</b>                           | 18,148                                       | 0   | 0                                 | 18,148  |
| <b>2023</b>                           | 18,148                                       | 0   | 0                                 | 18,148  |
| <b>2024</b>                           | 18,148                                       | 0   | 0                                 | 18,148  |
| <b>2025</b>                           | 18,148                                       | 0   | 0                                 | 18,148  |
| <b>2026</b>                           | 18,148                                       | 0   | 0                                 | 18,148  |
| <b>2027</b>                           | 18,148                                       | 0   | 0                                 | 18,148  |
| <b>2028</b>                           | 18,148                                       | 0   | 0                                 | 18,148  |
| <b>2029</b>                           | 18,148                                       | 0   | 0                                 | 18,148  |
| <b>2030</b>                           | 18,148                                       | 0   | 0                                 | 18,148  |
| <b>2031 (01/01/2031- 19/10/2031)</b>  | 14,518                                       | 0   | 0                                 | 14,518  |
| <b>Total</b>                          | 181,480                                      | 0   | 0                                 | 181,480                                       |

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|   |          |   |   |        |
|---|----------|---|---|--------|
| <b>Total number of crediting years</b>          | 10 years |   |   |        |
| <b>Annual average over the crediting period</b> | 18,148   | 0 | 0 | 18,148 |

**B.7. Monitoring plan**

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

**Data / Parameter Table 2.**

|  |  |                 |          |          |
|--|--|-----------------|----------|----------|
| <b>Data / Parameter:</b>               | EGfacility,y   |                 |          |          |
| Methodology reference                  | AMS-I.D  |                 |          |          |
| Data unit                              | MWh  |                 |          |          |
| Description                            | Net Electricity generated and delivered to the grid by the power plant in year y   |                 |          |          |
| Measured/calculated/default            | Measured   |                 |          |          |
| Source of data                         | Electricity meter readings on-site   |                 |          |          |
| Value(s) of monitored parameter        | Estimated annual generation forming the basis for emission reduction calculation is 28,000 MWh.                                |                 |          |          |
| Measurement/<br>Monitoring equipment   |  |                 |          |          |
|  | Type of meter  | Gyr E550 - LUN6 |          |          |
|  | Location of meter  |                 |          |          |
|  | Accuracy of meter  | 0.5S            |          |          |
|  | Serial number of meter   |                 | Main     | Spare    |
|  |  | Gitaş-1         | 40304881 | 75002204 |
|  | Metges Burdur  | 69206308        | 80281407 |          |
|  | Calibration frequency  | 10 years        |          |          |
|  | Date of Calibration/ validity  |                 |          |          |
|  | Reference No. of Calibration Certificate   |                 |          |          |
| Calibration Status                     | Calibrated   |                 |          |          |
| Measuring/reading/ recording frequency | Monthly  |                 |          |          |
| Calculation method (if applicable)     | EGy calculation is used by EPIAS (which is one of the TEIAS association) records and which are more conservative than the site |                 |          |          |

|                     |   |
|---------------------|---|
|                     | <p>records. Generation is recorded via remote reading system. The values are cross-check with the on-site meter records.</p> <p>Generation data is recorded by two metering devices continuously. These records provide the data for the monthly invoicing to TEIAS. Generation is recorded via remote reading system. The quantity of electricity supplied by the project plant/unit to the grid (ISVM) and the quantity of electricity delivered to the project plant/unit from the grid (UECM) are measured. Net generation is calculated via subtracting energy delivered by the project activity to the grid for internal consumption from electricity fed to the grid.</p>                          |
| QA/QC procedures:   | <p>Calibration of the meters are valid for 10 years based on related regulation<sup>19</sup>. Maintenance and calibration of the metering devices are made by TEIAS. If there is a significant difference between the readings of two devices, maintenance and tests of the metering devices and the associated equipment are done before waiting for the periodical maintenance. The meters should comply with EPDK regulations which define the accuracy class of the meters as 0.2 or 0.5 depending on the capacity of the circuit as given in document in link (<a href="https://www.epdk.gov.tr/Detay/Icerik/3-0-0-128/tebligler">https://www.epdk.gov.tr/Detay/Icerik/3-0-0-128/tebligler</a>).</p> |
| Purpose of data     | <p>To calculate the baseline emission value</p> <p>To assess the contribution SDG 7 Energy / 7.2 “By 2030, increase substantially the share of renewable energy in the global energy mix by the utilization of biomass as a renewable energy source.</p> <p>To assess the contribution SDG 9 Infrastructure, Industrialization / 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 processes, with all countries taking action in accordance with their respective capabilities</p>  |
| Additional comments | -   |

**Data / Parameter Table 3.**

|                              |  |
|------------------------------|--|
| <b>Data / Parameter:</b>     | <b>CO2 Emissions</b>   |
| Methodology reference        | GCC Environment-and-Social-Safeguards-Standard-v2  |
| Data unit                    | tonnes   |
| Description                  | Reduction of CO <sub>2</sub> emissions due to implementation of project activity that would otherwise be emitted by thermal power plants |
| Measured/calculated /default | Calculated   |

<sup>19</sup>

<https://www.mevzuat.gov.tr/anasayfa/MevzuatFihristDetayIframe?MevzuatTur=7&MevzuatNo=6381&MevzuatTertip=5>

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|  |   |
|--|---|
| Source of data                         | Electricity generated by MASFEN-3 Solar Bundle and OM&BM calculations   |
| Value(s) of monitored parameter        | 18,148 tonnes of CO <sub>2</sub> annually   |
| Measurement/ Monitoring equipment      | -   |
| Measuring/reading/ recording frequency | Continuous reading, monthly recording   |
| Calculation method (if applicable)     | The net electricity supplied by the Project will be continuously measured and recorded by EPIAS; and will be kept by the Project Owner  |
| QA/QC procedures:                      | -   |
| Purpose of data                        | To assess the contribution SDG 13 Climate Action / 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 development |
| Additional comments                    | -   |

**Data / Parameter Table 4.**

| <b>Data / Parameter:</b>               | <b>Quantitative Employment</b>   |
|--|--|
| Methodology reference                  | GCC Environment-and-Social-Safeguards-Standard-v2  |
| Data unit                              | Number of recruited staff during operation   |
| Description                            | Creating new employment opportunities  |
| Measured/calculated /default           | Measured   |
| Source of data                         | Employment records   |
| Value(s) of monitored parameter        | Project created employment opportunity. Masfen İnşaat Enerji San. Ve Tic. A.Ş. creates around 70 job opportunities.  |
| Measurement/ Monitoring equipment      | Employees working under the main company Masfen İnşaat Enerji San. Ve Tic. A.Ş. works for the projects in the bundle. They are employed also to work in the other bundles of the main company as shifting. |
| Measuring/reading/ recording frequency | Annually   |
| Calculation method (if applicable)     | Employment records will be checked   |
| QA/QC procedures:                      | -  |

|                     |   |
|---------------------|---|
| Purpose of data     | To assess the contribution to SDG 8 Economic Growth - SDG Target 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 | -   |

**Data / Parameter Table 5.**

|  |   |
|--|---|
| <b>Data / Parameter:</b>               | <b>Solid Waste Pollution from E-wastes and Batteries</b>  |
| Methodology reference                  | GCC Environment-and-Social-Safeguards-Standard-v2   |
| Data unit                              | -   |
| Description                            | No solid waste pollution caused due to e-wastes and batteries from the project activity   |
| Measured/calculated /default           | Measured  |
| Source of data                         | Records of any incidents of panel damage  |
| Value(s) of monitored parameter        | No solid waste pollution due to e-wastes and batteries in the baseline  |
| Measurement/ Monitoring equipment      | -   |
| Measuring/reading/ recording frequency | Annually  |
| Calculation method (if applicable)     | Any e-waste and battery wastes will be handled according to the national regulations: Regulation on Waste Management <sup>20</sup> , Regulation on Electrical and Electronic Waste Control <sup>21</sup> , and Regulation on Battery and Accumulator Wastes <sup>22</sup> . |
| QA/QC procedures:                      | The panels are under warranty. In any case of problems, the panels are returned to the manufacturer and further handling of the wastes are done by the manufacturer.  |
| Purpose of data                        | To comply with GCC Environment-and-Social-Safeguards-Standard-v2  |
| Additional comments                    | -   |

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

There is no parameter evaluated as “Harmful” in Section E.

<sup>20</sup> <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=20644&MevzuatTur=7&MevzuatTertip=5>

<sup>21</sup> <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=16159&MevzuatTur=7&MevzuatTertip=5>

<sup>22</sup> <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=7118&MevzuatTur=7&MevzuatTertip=5>

### B.7.3. Sampling plan

N/A

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

Monitoring is a key procedure to verify the real and measurable emission reductions from the proposed project. To guarantee the proposed project's real, measurable and long-term GHG emission reductions, the monitoring plan is established.

Net electricity generation is measured and recorded via meters sealed by TEIAS for billing purposes. Therefore, no new additional protocol is needed for monitoring emission reduction. Power Plant Manager, is responsible for the electricity generated, gathering all relevant data and keeping the records.

Generation data collected during crediting period is submitted to GTE who is responsible for calculating the emission reduction subject to verification: Generation data is used to prepare monitoring reports which are used to determine the vintage from the project activity.

Verification Team Members is expected to include the following staff :

**Plant Manager:** Responsibility for running the plant and compliance with monitoring plan

**Accounting Manager:** Responsible for keeping data about generation and consumption.  
and

**GTE Karbon Sürdürülebilir Enerji Eğitim Danışmanlık Ve Tic. A.Ş.:** Responsible for emission reduction calculations, preparing monitoring report and periodical verification process.

Installation of meter and data monitoring are carried out according to the regulations by TEIAS. Two metering devices (one of them used as spare) are used for monitoring the electricity generated by the power plant. Readings are be done using main metering devices and spare metering device is used for comparison only. Data from metering devices is recorded by TEIAS monthly (through remote reading).

Two calibrated meters backup each other. Maintenance and calibration of the metering devices are made by TEIAS. If there is a significant difference between the readings of two devices, maintenance and tests of the metering devices and the associated equipment are done before waiting for the periodical maintenance. The meters should comply with EPDK regulations which define the accuracy class of the meters as 0.2 or 0.5 depending on the capacity of the circuit as given in document in link (<http://www.epdk.gov.tr/web/elektrik-piyasasi-dairesi/44>). EPIAS records will be taken in consideration while calculating net electricity generation by the plant. ISVM (Electricity fed to the grid) and UECM (Electricity consumed from the grid) data given in the EPIAS records are used for emission reduction calculations. Meters at the site will be used for crosscheck.

All data is kept for at least two years after the crediting period for QA/QC purposes.

Calibration of the metering devices is made by TEIAS and sealed before the commissioning of the power plant. The meters are calibrated by TEIAS when there is an inconsistency between two devices. Calibrations are done according to the Measuring Instruments Directive.<sup>23</sup>

**Table 3. Technical information on electricity meters**

|                      | Main Meter |          |       |            | Spare Meter |              |       |            |
|----------------------|------------|----------|-------|------------|-------------|--------------|-------|------------|
|                      | Brand      | Type     | Class | Serial Nr. | Brand       | Type         | Class | Serial Nr. |
| <b>Gitaş-1</b>       | Landis     | Gyr E550 | 0.5S  | 40304881   | Makel       | C520.AMT2556 | 0.5S  | 75002204   |
| <b>Metges Burdur</b> | Luna       | LUN6     | 0.5S  | 69206308   | Makel       | C520.AMT2556 | 0.5S  | 80281407   |

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

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

Start date of project activity is 20/10/2021, after the first provisional acceptance.

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

Expected operational lifetime of the project activity is considered as 25 years, according to the technical sheets of the solar panels.

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

#### C3.1. Fixed crediting period

The crediting period is fixed as 10 years.

#### C3.2. Start date of the crediting period

Start date of the crediting period is 20/10/2021, after the first provisional acceptance.

#### C3.3. Duration of the crediting period

Crediting period is between 20/10/2021 and 19/10/2031, fixed as 10 years.

<sup>23</sup>

<https://www.mevzuat.gov.tr/anasayfa/MevzuatFihristDetayIframe?MevzuatTur=7&MevzuatNo=6381&MevzuatTertip=5>

## **Section D. Environmental impacts**

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

Please see section E.

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

Gitaş-1 received their environmental impact assessment out of scope approval on 22/11/2016, due to the capacities of the projects being below the limit for EIA requirement. And, Metges Burdur received environmental impact assessment out of scope approval on 17/04/2018, due to the capacities of the projects being below the limit for EIA requirement.

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



## E.1. Environmental 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>Environmental impacts on the identified categories<sup>24</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  | N/A  |    |
|   | NO <sub>x</sub> emissions            | N/A   | N/A  | N/A  | -  | -  | N/A  | N/A   | N/A  | N/A  | N/A  | N/A  |    |
|   | CO <sub>2</sub> emissions            | The project reduces CO <sub>2</sub> emissions   | N/A  | N/A  | -  | -  | N/A  | N/A   | N/A  | Electricity generated by the   | N/A  | N/A  | +1 |

<sup>24</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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|                           |   |  |                              |     |          |   |     |     |     |  |                                     |   |
|---------------------------|---|--|------------------------------|-----|----------|---|-----|-----|-----|--|-------------------------------------|---|
|                           |   | since it reduces the amount of fossil fuel used. In case of "no project", stated amount of electricity would be generated from fossil fuels and cause air pollution. |                              |     |          |   |     |     |     | power plant will be used to calculate emission reductions achieved by the project. |                                     |   |
|                           | CO emissions                                    | N/A  | N/A                          | N/A | -        | - | N/A | N/A | N/A | N/A  | N/A                                 |   |
|                           | Suspended particulate matter (SPM) emissions    | N/A  | N/A                          | N/A | -        | - | N/A | N/A | N/A | N/A  | N/A                                 |   |
|                           | Fly ash emissions                               | N/A  | N/A                          | N/A | -        | - | N/A | N/A | N/A | N/A  | N/A                                 |   |
|                           | Non-Methane Volatile Organic Compounds (NMVOCs) | N/A  | N/A                          | N/A | -        | - | N/A | N/A | N/A | N/A  | N/A                                 |   |
|                           | Odor emissions                                  | N/A  | N/A                          | N/A | -        | - | N/A | N/A | N/A | N/A  | N/A                                 |   |
|                           | Noise Pollution                                 | N/A  | N/A                          | N/A | -        | - | N/A | N/A | N/A | N/A  | N/A                                 |   |
| <b>Environment - Land</b> | Solid waste Pollution from Plastics             | N/A  | N/A                          | N/A | -        | - | N/A | N/A | N/A | N/A  | N/A                                 |   |
|                           | Solid waste Pollution from Hazardous wastes     | N/A  | N/A                          | N/A | -        | - | N/A | N/A | N/A | N/A  | N/A                                 |   |
|                           | Solid waste Pollution from Bio-medical wastes   | N/A  | N/A                          | N/A | -        | - | N/A | N/A | N/A | N/A  | N/A                                 |   |
|                           | Solid waste Pollution from E-wastes             | No e-waste pollution is expected   | Regulation on Waste Manageme | N/A | Harmless | - | N/A | N/A | N/A | If any e-waste is generated,   | In any case of problems, the panels | 0 |

|  |   |  |   |     |          |   |     |     |     |  |   |   |
|--|---|--|---|-----|----------|---|-----|-----|-----|--|---|---|
|  |   | from the project activity. If any e-waste is generated, they will be handled according to national regulations.                                  | nt <sup>25</sup> , Regulation on Electrical and Electronic Waste Control <sup>26</sup> , and Regulation on Battery and Accumulator Wastes <sup>27</sup> . |     |          |   |     |     |     | disposal records will be present.                              | are returned to the manufacturer and further handling of the wastes are done by the manufacturer.                                     |   |
|  | <i>Solid waste Pollution from Batteries</i>                       | No e-waste pollution is expected from the project activity. If any e-waste is generated, they will be handled according to national regulations. | Regulation on Waste Management, Regulation on Electrical and Electronic Waste Control, and Regulation on Battery and Accumulator Wastes.                  | N/A | Harmless | - | N/A | N/A | N/A | If any e-waste is generated, disposal records will be present. | In any case of problems, the panels are returned to the manufacturer and further handling of the wastes are done by the manufacturer. | 0 |
|  | <i>Solid waste Pollution from end of life products/ equipment</i> | If any end-of-life products or equipment that is generated on site will be handled according to national regulations..                           | Regulation on Waste Management, Regulation on Electrical and Electronic Waste Control, and Regulation on Battery and Accumulator Wastes.                  | N/A | Harmless | - | N/A | N/A | N/A | If such waste is generated, disposal records will be present.  | In any case of problems, the panels are returned to the manufacturer and further handling of the wastes are done by the manufacturer. | 0 |

<sup>25</sup> <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=20644&MevzuatTur=7&MevzuatTertip=5>

<sup>26</sup> <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=16159&MevzuatTur=7&MevzuatTertip=5>

<sup>27</sup> <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=7118&MevzuatTur=7&MevzuatTertip=5>

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|  |  |     |     |     |   |     |     |     |     |     |     |  |
|--|--|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|--|
|  | <i>Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury)</i> | N/A | 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 | 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 | N/A | N/A |  |
|  | <i>Water Consumption from ground and other sources</i>                                   | N/A | N/A | N/A | - | -   | N/A | N/A | N/A | N/A | N/A |  |
|  | <i>Generation of wastewater</i>  | N/A | N/A | N/A | - | -   | N/A | N/A | N/A | N/A | N/A |  |
|  | <i>Wastewater discharge without/with insufficient treatment</i>                          | 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>                               | 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 |  |
|  | <i>Protecting/ enhancing plant life</i>  | N/A | N/A | N/A | - | -   | N/A | N/A | N/A | N/A | N/A |  |
|  | <i>Protecting/ enhancing species diversity</i>   | N/A | N/A | N/A | - | -   | N/A | N/A | N/A | N/A | N/A |  |
|  | <i>Protecting/ enhancing forests</i>   | N/A | N/A | N/A | - | -   | N/A | N/A | N/A | N/A | N/A |  |

|   |     |     |     |   |   |     |     |     |     |     |  |
|---|-----|-----|-----|---|---|-----|-----|-----|-----|-----|--|
| <i>Protecting/<br/>enhancing<br/>other<br/>depletable<br/>natural<br/>resources</i> | N/A | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
| <i>Conserving<br/>energy</i>  | N/A | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
| <i>Replacing<br/>fossil fuels<br/>with<br/>renewable<br/>sources of<br/>energy</i>  | N/A | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
| <i>Replacing<br/>ODS with<br/>non-ODS<br/>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>+1</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. |

## 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>28</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 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 crèche 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 creates long term job opportunities.   | All employment s are done according to the national employment regulations.  | N/A   | -   | -   | N/A  | N/A  | N/A   | Employees working under the main company Masfen İnşaat Enerji San. Ve Tic. A.Ş. works for the projects in   | Employees working under the main company Masfen İnşaat Enerji San. Ve Tic. A.Ş. works for the projects in  | +1  |  |

<sup>28</sup> sourced from the CDM SD Tool and the sample reports are available ( <https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx> )

|                                     |   |      |     |     |   |   |     |     |     |     |  |  |  |
|-------------------------------------|---|------|-----|-----|---|---|-----|-----|-----|-----|--|--|--|
|                                     |   |      |     |     |   |   |     |     |     |     | the bundle. They are employed also to work in the other bundles of the main company as shifting. Masfen İnşaat Enerji San. Ve Tic. A.Ş. creates around 70 job opportunities. | the bundle. They are employed also to work in the other bundles of the main company as shifting. Masfen İnşaat Enerji San. Ve Tic. A.Ş. creates around 70 job opportunities. |  |
|                                     | <i>New short-term jobs (&lt; 1 year) created/ lost</i>  | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A  | N/A  |  |
|                                     | <i>Sources of income generation increased / reduced</i> | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A  | N/A  |  |
| <b>Social - Health &amp; Safety</b> | <i>Disease prevention</i>                               | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A  | N/A  |  |
|                                     | <i>Reducing / increasing accidents</i>                  | N/A. | N/A |     | - | - | N/A | N/A | N/A | N/A | N/A  | N/A  |  |
|                                     | <i>Reducing / increasing crime</i>                      | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A  | N/A  |  |
|                                     | <i>Reducing / increasing food wastage</i>               | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A  | N/A  |  |
|                                     | <i>Reducing / increasing indoor air pollution</i>       | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A  | N/A  |  |
|                                     | <i>Efficiency of health services</i>                    | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A  | N/A  |  |
|                                     | <i>Sanitation and waste management</i>                  | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A  | N/A  |  |

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|                           |   |      |     |     |   |   |     |     |     |     |     |  |
|---------------------------|---|------|-----|-----|---|---|-----|-----|-----|-----|-----|--|
| <b>Social - Education</b> | <i>Job related training imparted or not</i>   | N/A. | -   | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
|                           | <i>Educational services improved or not</i>   | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
|                           | <i>Project-related knowledge dissemination effective or not</i>                       | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
| <b>Social - Welfare</b>   | <i>Improving/deteriorating working conditions</i>                                     | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
|                           | <i>Community and rural welfare</i>  | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
|                           | <i>Poverty alleviation (more people above poverty level)</i>                          | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
|                           | <i>Improving / deteriorating wealth distribution/ generation of income and assets</i> | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
|                           | <i>Increased or / deteriorating municipal revenues</i>                                | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
|                           | <i>Women's empowerment</i>  | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |
|                           | <i>Reduced / increased traffic congestion</i>   | N/A  | N/A | N/A | - | - | N/A | N/A | N/A | N/A | N/A |  |



|   |  |
|---|--|
| <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. |  |
| <b>Net Score:</b>   | +1   |
| <b>Project Owner's Conclusion in PSF:</b>   | The Project Owner confirms that the Project Activity will not cause any net harm to society. |

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

The project is expected to contribute 4 SDGs which are SDG 7, 8, 9, and 13.

**SDG 7 Energy:** The project contributes SDG Target 7.2 “By 2030, increase substantially the share of renewable energy in the global energy mix” by the utilization of solar power as a renewable energy source.

**Related indicator:** 7.2.1 Renewable energy share in the total final energy consumption

**SDG 8 Economic Growth:** The project creates direct and indirect employment opportunities during construction and operation phases, so it contributes to SDG Target 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”.

**Related indicator:** 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities

**SDG 9 Infrastructure, Industrialization:** SDG Target 9.4 requires “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 processes, with all countries taking action in accordance with their respective capabilities”. The project helps the Target 9.4 by implementing a clean, reliable and environmental-friendly infrastructure for clean energy production / up-to-date industrialization.

**Related indicator:** 9.4.1 CO<sub>2</sub> emission per unit of value added

**SDG 13 Climate Change:** The project produces clean renewable energy by diminishing CO<sub>2</sub> emissions. Therefore, it contributes SDG

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Target 13.3 “Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning”.

**Related 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

| 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> | Describe the UN-level target(s) and corresponding indicator no(s) | Has the host country declared the SDG to be a national priority? Indicate Yes or No | <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> | 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 | 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 | 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 | Describe the monitoring approach and the monitoring parameters to be applied for each project-level SDG target and Indicator | Describe how the Project Owner has concluded that the project is likely to achieve the identified Project level SDGs target(s). | Describe whether the project-level SDG target(s) is likely to be achieved by the target date (Yes or No) |
| <b>Goal 1: End poverty in all its forms everywhere</b>   | N/A   | N/A   | N/A  | N/A   | N/A  | N/A   | N/A  | N/A   | N/A  |
| <b>Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture</b>  | N/A   | N/A   | N/A  | N/A   | N/A  | N/A   | N/A  | N/A   | N/A  |

|   |   |     |  |   |   |   |  |  |     |
|---|---|-----|--|---|---|---|--|--|-----|
| <b>Goal 3. Ensure healthy lives and promote well-being for all at all ages</b>                                      | N/A   | N/A | N/A  | N/A                                       | N/A   | N/A   | N/A  | N/A  | N/A |
| <b>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</b> | N/A   | N/A | N/A  | N/A                                       | N/A   | N/A   | N/A  | N/A  | N/A |
| <b>Goal 5. Achieve gender equality and empower all women and girls</b>  | N/A   | N/A | N/A  | N/A                                       | N/A   | N/A   | N/A  | N/A  | N/A |
| <b>Goal 6. Ensure availability and sustainable management of water and sanitation for all</b>                       | N/A   | N/A | N/A  | N/A                                       | N/A   | N/A   | N/A  | N/A  | N/A |
| <b>Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all</b>                         | SDG Target 7.2 "By 2030, increase substantially the share of renewable energy in the global energy mix" by the utilization of solar power as a renewable energy source." Indicator 7.2.1 Renewabl | Yes | Increase the share of renewables in the total installed power capacity connected to the national grid. | Provide 28,000 MWh clean energy annually. | Enhance the share of installed electricity generation capacity from renewable energy sources. | The project increases the renewable energy share in Turkey's energy production mix. It provides 28,000 MWh annual clean energy to the grid. | Calculate the share of installed capacity from renewable energy. | Gitaş-1 commissioned on 20/10/2021 and Metges Burdur commissioned on 29/11/2021. The project fully commissioned and generates electricity from a clean resource without any problem. | Yes |

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|   |  |     |                                      |                                 |                                 |                                 |                          |  |     |
|---|--|-----|--------------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--|-----|
|   | e energy share in the total final energy consumption   |     |                                      |                                 |                                 |                                 |                          |  |     |
| <b>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b> | SDG Target 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”. Indicator 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities | Yes | Generated job opportunity and income | Creates employment opportunity. | Creates employment opportunity. | Creates employment opportunity. | Check employment records | Employees working under the main company Masfen İnşaat Enerji San. Ve Tic. A.Ş. works for the projects in the bundle. They are employed also to work in the other bundles of the main company as shifting. | Yes |

|   |  |            |  |   |   |   |   |   |            |
|---|--|------------|--|---|---|---|---|---|------------|
| <p><b>Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b></p> | <p>SDG Target 9.4 requires “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 processes, with all countries taking action in accordance with their respective capabilities”.<br/>Indicator 9.4.1 CO2 emission per unit of value added</p> | <p>Yes</p> | <p>Provides clean and resilient energy generation facility</p> | <p>Project implementation is a 28,000 MWh resilient energy generation facility.</p> | <p>Project provides clean energy as 28,000 MWh.</p> | <p>The project helps adaptation of clean energy technologies by implementing a solar power plant.</p> | <p>Check that the project implementation continues and electricity generated.</p> | <p>Gitaş-1 commissioned on 20/10/2021 and Metges Burdur commissioned on 29/11/2021. The project fully commissioned and generates electricity from a clean resource without any problem. The project is still implemented.</p> | <p>Yes</p> |
|---|--|------------|--|---|---|---|---|---|------------|

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|  |  |     |                                 |   |  |   |   |  |     |
|--|--|-----|---------------------------------|---|--|---|---|--|-----|
| <b>Goal 10. Reduce inequality within and among countries</b>                                 | N/A  | N/A | N/A                             | N/A   | N/A  | N/A   | N/A   | N/A  | N/A |
| <b>Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable</b> | N/A  | N/A | N/A                             | N/A   | N/A  | N/A   | N/A   | N/A  | N/A |
| <b>Goal 12. Ensure sustainable consumption and production patterns</b>                       | N/A  | N/A | N/A                             | N/A   | N/A  | N/A   | N/A   | N/A  | N/A |
| <b>Goal 13. Take urgent action to combat climate change and its impacts</b>                  | SDG Target 13.3 "Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning". Indicator 13.3.2 Number of countries that have communicated the strengthening of | Yes | Eliminates 18,148 tCO2 annually | Commission 28,000 MWh renewable energy plant. | Reduce greenhouse gas emissions by 18,148 tonnes annually. | Since the project uses solar energy, there is no GHG emissions related to the project activity. It eliminates 18,148 tCO2 annually. | Calculate avoided GHG emissions every year. | Gitaş-1 commissioned on 20/10/2021 and Metges Burdur commissioned on 29/11/2021 and goes on without any problem. Project owner operates the plant since, and complies with targeted SDGs so far. | Yes |

|  |   |     |     |     |     |     |     |     |     |
|--|---|-----|-----|-----|-----|-----|-----|-----|-----|
|  | institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions |     |     |     |     |     |     |     |     |
| <b>Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development</b>   | N/A   | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| <b>Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</b> | N/A   | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| <b>Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective,</b>   | N/A   | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

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|   |     |     |     |     |     |     |                 |                              |     |  |
|---|-----|-----|-----|-----|-----|-----|-----------------|------------------------------|-----|--|
| accountable and inclusive institutions at all levels  |     |     |     |     |     |     |                 |                              |     |  |
| Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development | N/A | N/A | N/A | N/A | N/A | N/A | N/A             | N/A                          | N/A |  |
| <b>SUMMARY</b>  |     |     |     |     |     |     | <b>Targeted</b> | <b>Likely to be Achieved</b> |     |  |
| Total Number of SDGs  |     |     |     |     |     |     | 4               | 4                            |     |  |
| Certification label (Bronze, Silver, Gold, Platinum, or Diamond) for the ACCs as defined in the PSF               |     |     |     |     |     |     | Gold            | Gold                         |     |  |



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

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

The projects received environmental impact assessment out of scope approvals, due to the capacities of the projects being below the limit for EIA requirement. Hence, a local stakeholder consultation (LSC) meeting was not required during the project implementation.

In line with GCC Standard requirement of a LSC process, LSC was done remotely due to the Covid-19 precautions in Turkey. An information sheet was provided to the local stakeholders via project employees. Also, a sustainable development form for them to fill were provided with an attached evaluator information sheet with sections to write their input on positive and negative impacts of the project. The information sheet included both technical and non-technical information about the project, such as information on the project owner, information on solar panels (their number, capacity etc.), photographs from the project sites, commissioning and decision-making dates. Forms were given in person or e-mailed to stakeholders of the solar power plants which are located in different cities. This process took place from 02/02/2022 to 11/03/2022. People with different occupations were contacted in the process. The filled-out forms are provided in Appendix 6.

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

Stakeholders pointed out that it is beneficial to harness solar power to generate electricity without creating air pollution on arid land and that the project benefits the national economy. Also, they commented on the employment opportunities created by the project. No negative comments were received from the stakeholders. The original forms as well as their English versions are provided in Appendix 6.

### **G.3. Consideration of comments received**

The project owner is willing to meet stakeholders' wishes at any stage of the project activity. The comments received from the stakeholders are recorded and considered by the project owner.

It can be deduced from stakeholders' comments on the evaluation forms, that the stakeholders have positive opinions about the project.

## **Section H. Approval and authorization**

N/A

## Appendix 1. Contact information of project owners

|                          |   |
|--------------------------|---|
| <b>Organization name</b> | Masfen İnşaat Enerji San. Ve Tic. A.Ş.                                |
| <b>Country</b>           | Turkey  |
| <b>Address</b>           | Çağlayan Mahallesi 2000. Sokak No:2/2 07230<br>Lara/Muratpaşa/Antalya |
| <b>Telephone</b>         | +90 242 732 32 32   |
| <b>Fax</b>               | +90 242 732 32 32   |
| <b>E-mail</b>            | repecildarul@masfen.com.tr info@masfen.com.tr                         |
| <b>Website</b>           | -   |
| <b>Contact person</b>    | Recep ÇİLDARUL  |

|                          |   |
|--------------------------|---|
| <b>Organization name</b> | AAB ENERJİ ÜRETİM TARIMSAL ÜRÜNLER GIDA İNŞAAT SANAYİ<br>TİCARET A.Ş. |
| <b>Country</b>           | Turkey  |
| <b>Address</b>           | Çağlayan Mahallesi 2000. Sokak No:2/2 07230<br>Lara/Muratpaşa/Antalya |
| <b>Telephone</b>         | +90 242 732 32 32   |
| <b>Fax</b>               | +90 242 732 32 32   |
| <b>E-mail</b>            | repecildarul@masfen.com.tr info@masfen.com.tr                         |
| <b>Website</b>           | -   |
| <b>Contact person</b>    | Recep ÇİLDARUL  |

|                          |   |
|--------------------------|---|
| <b>Organization name</b> | METGES ENERJİ ELEKTRİK ÜRETİM A.Ş.                                    |
| <b>Country</b>           | Turkey  |
| <b>Address</b>           | Çağlayan Mahallesi 2000. Sokak No:2/2 07230<br>Lara/Muratpaşa/Antalya |
| <b>Telephone</b>         | +90 242 732 32 32   |
| <b>Fax</b>               | +90 242 732 32 32   |
| <b>E-mail</b>            | repecildarul@masfen.com.tr info@masfen.com.tr                         |
| <b>Website</b>           | -   |
| <b>Contact person</b>    | Recep ÇİLDARUL  |

## Appendix 2. Affirmation regarding public funding

N/A

## Appendix 3. Applicability of methodology(ies)

N/A

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

N/A

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

N/A

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

The forms filled by the local stakeholders are provided in this section. Their personal phone numbers are covered in order to respect their privacy.

## Project Submission Form

| MASFEN-3 SOLAR BUNDLE SOLAR POWER PLANT<br>SUSTAINABLE DEVELOPMENT EVALUATION FORM |                      |          |           |
|--|----------------------|----------|-----------|
| Sustainable Development Indicators   | Participant Comments |          |           |
|  | Positive             | Negative | No Effect |
| Air quality (Sulfur dioxide, nitrogen oxides, soot, etc.)                          |                      |          |           |
| Water quality and quantity (Access to water resources)                             |                      |          |           |
| Soil quality (Fight against erosion, soil pollution, etc.)                         |                      |          |           |
| Other pollution sources (noise, light, etc. pollution sources)                     |                      |          |           |
| Biodiversity (Effect on protected species)   |                      |          |           |
| Employment Quality (Working conditions, job security)                              |                      |          |           |
| Combating Poverty (Impact on standard of living, access to health services, etc.)  |                      |          |           |
| Access to clean energy sources (Reliable, cheap energy, impact on energy imports)  |                      |          |           |
| Personal and institutional capacity (Education, awareness raising)                 |                      |          |           |
| Contribution to employment and income level (New job opportunity, income increase) |                      |          |           |
| Balance of Payments (Reducing foreign dependency, increasing investment)           |                      |          |           |
| Technology transfer and technological competence (Using, adapting, etc.)           |                      |          |           |

| EVALUATOR INFORMATION   | Name surname       |  |
|---|--------------------|--|
|   | Phone              |  |
|   | Institution / Duty |  |
| What are the aspects that you find <b>positive</b> about the project? |                    |  |
|   |                    |  |
| What are the aspects that you find <b>negative</b> about the project? |                    |  |
|   |                    |  |
| <b>CONTACT:</b>   |                    |  |
| Masfen İnşaat Enerji San. ve Tic. A.Ş.                                |                    |  |
| Address: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Muratpaşa/Antalya     |                    |  |
| Phone: +90 242 732 32 32  |                    |  |
| E-mail: info@masfen.com.tr  |                    |  |

**Figure 8. Sustainable development evaluation form provided to local stakeholders**

|   |             |              |
|---|-------------|--------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ                                   | Ad Soyad    | Farden Akman |
|   | Telefon     | [REDACTED]   |
|   | Kurum/Görev | Ev kadını    |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |              |
| Ekonomiye katkısı için Hava Kirliliği Yok                     |             |              |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir? |             |              |
|   |             |              |

**İLETİŞİM:**

Masfen İnşaat Enerji San. ve Tic. A.Ş.

Adres: Çağlayan Mah., 2060. Sk. No:2/2, 07230 Muratpaşa/Antalya

Tel: +90242 732 32 32

E-posta: carbon@masfen.com.tr

Sayfa: 5/5

MASFEN-3 Solar Sıvı GES PROJESİ

|   |                         |              |
|---|-------------------------|--------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Farden Akman |
|   | <b>Institution/Duty</b> | Housewife    |
| What are the aspects that you find <b>positive</b> about the project? |                         |              |
| Benefits the economy. No air pollution.                               |                         |              |
| What are the aspects that you find <b>negative</b> about the project? |                         |              |
|   |                         |              |

## Project Submission Form

|   |             |              |
|---|-------------|--------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ   | Ad Soyad    | Nurgül Erkan |
|   | Telefon     | [REDACTED]   |
|   | Kurum/Görev | ev hanımı    |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |              |
| Bölgemizde iş imkanı sağlam istiyoruz.  |             |              |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir?   |             |              |
| [Empty]   |             |              |
| <b>İLETİŞİM:</b><br>Masfen İnşaat Enerji San. ve Tic. A.Ş.<br>Adres: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Muratpaşa/Antalya<br>Tel: +90242 732 32 32<br>E-posta: carbon@masfen.com.tr |             |              |
| Sayfa 5/5 MASFEN-3 Solar Bundle GES PROJESİ   |             |              |

|   |                         |              |
|---|-------------------------|--------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Nurgül Erkan |
|   | <b>Institution/Duty</b> | Housewife    |
| What are the aspects that you find <b>positive</b> about the project? |                         |              |
| Project created job opportunities in our region.                      |                         |              |
| What are the aspects that you find <b>negative</b> about the project? |                         |              |
| [Empty]   |                         |              |

|   |             |             |
|---|-------------|-------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ                                   | Ad Soyad    | Murat Akman |
|   | Telefon     | [REDACTED]  |
|   | Kurum/Görev | Kamu İşci   |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |             |
| Hava Kirliliği Yok Ekonomiye Katkı                            |             |             |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir? |             |             |
|   |             |             |

**İLETİŞİM:**

Masfen İnşaat Enerji San. ve Tic. A.Ş.  
Adres: Çağlayan Mah. 2100. Sk. No:2/2, 07230 Muratpaşa/Antalya  
Tel: +90242 732 52 32  
E-posta: carbon@masfen.com.tr

Sayfa 5/5

MASFEN-3 Solar Bundle GES PROJESİ

|   |                         |                  |
|---|-------------------------|------------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Murat Akman      |
|   | <b>Institution/Duty</b> | Public personnel |
| What are the aspects that you find <b>positive</b> about the project? |                         |                  |
| Benefits the economy without creating air pollution.                  |                         |                  |
| What are the aspects that you find <b>negative</b> about the project? |                         |                  |
|   |                         |                  |

## Project Submission Form

|   |             |            |
|---|-------------|------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ   | Ad Soyad    | Ayşe Bulut |
|   | Telefon     | [REDACTED] |
|   | Kurum/Görev | Ev Hanımı  |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |            |
| Bölgemize iş imkanı konusunda iş yaratmıştır.   |             |            |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir?   |             |            |
|   |             |            |
| <b>İLETİŞİM:</b><br>Masfen İnşaat Enerji San. ve Tic. A.Ş.<br>Adres: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Muratpaşa/Antalya<br>Tel: +90242 732 32 32<br>E-posta: carbon@masfen.com.tr |             |            |
| Sayfa 5/5 - MASFEN-3 Solar Bundle GES PROJESİ   |             |            |

|   |                         |            |
|---|-------------------------|------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Ayşe Bulut |
|   | <b>Institution/Duty</b> | Housewife  |
| What are the aspects that you find <b>positive</b> about the project? |                         |            |
| The project creates job opportunities in our region.                  |                         |            |
| What are the aspects that you find <b>negative</b> about the project? |                         |            |
|   |                         |            |



|   |             |             |
|---|-------------|-------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ                                   | Ad Soyad    | Hüsnü Bulut |
|   | Telefon     | [REDACTED]  |
|   | Kurum/Görev | Belediyesi  |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |             |
| Verimsiz kabloları topraklara can vererek elektrik üretmesi.  |             |             |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir? |             |             |
|   |             |             |

**İLETİŞİM:**

Masfen İnşaat Enerji San. ve Tic. A.Ş.  
Adres: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Muratpaşa/Antalya  
Tel: +90242 732 32 32  
E-posta: carbon@masfen.com.tr

Sayfa 5/5

MASFEN-3 Sola' Bundle GES PROJESİ

|   |                         |                     |
|---|-------------------------|---------------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Hüsnü Bulut         |
|   | <b>Institution/Duty</b> | Municipality worker |
| What are the aspects that you find <b>positive</b> about the project? |                         |                     |
| Arid lands are used to generate electricity                           |                         |                     |
| What are the aspects that you find <b>negative</b> about the project? |                         |                     |
|   |                         |                     |

## Project Submission Form

|   |             |             |
|---|-------------|-------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ                                   | Ad Soyad    | osman ceber |
|   | Telefon     | [REDACTED]  |
|   | Kurum/Görev | çiftçi      |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |             |
| Verimsiz toprakların enerjide<br>çevrilmesi iyi bir durumdur  |             |             |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir? |             |             |
|   |             |             |

### İLETİŞİM:

Masfen İnşaat Enerji San. ve Tic. A.Ş.  
Adres: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Muratpaşa/Antalya  
Tel: +90242 732 32 32  
E-posta: carbon@masfen.com.tr

Sayfa 5/5

MASFEN-3 Solar Bundle GES PROJESİ

|   |                         |             |
|---|-------------------------|-------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Osman Ceber |
|   | <b>Institution/Duty</b> | Farmer      |
| What are the aspects that you find <b>positive</b> about the project? |                         |             |
| It is good that arid lands are used to generate electricity.          |                         |             |
| What are the aspects that you find <b>negative</b> about the project? |                         |             |
|   |                         |             |

|  |             |                 |
|--|-------------|-----------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ  | Ad Soyad    | Abdullah Candan |
|  | Telefon     | [REDACTED]      |
|  | Kurum/Görev | Çiftçi          |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?   |             |                 |
| <p>Verim siz topraklara güneş enerjisi<br/>kurtul böyle iyi birşey - Allahın<br/>güneşini enerjiye çeviriyoruz bu pahalilikte<br/>bedava enerji kullanıyoruz - Keşke herkez<br/>yapabilse.</p> |             |                 |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir?  |             |                 |
| <p>[Empty box for negative feedback]</p>   |             |                 |

**İLETİŞİM:**

Masfen İnşaat Enerji San. ve Tic. A.Ş.  
Adres: Çağlayan Mah., 2030. Sk. No:2/2, 07230 Muratpaşa/Antalya  
Tel: +90242 732 32 32  
E-posta: carbon@masfen.com.tr

|  |                         |                 |
|--|-------------------------|-----------------|
| <b>EVALUATOR<br/>INFORMATION</b>   | <b>Name surname</b>     | Abdullah Candan |
|  | <b>Institution/Duty</b> | Farmer          |
| What are the aspects that you find <b>positive</b> about the project?  |                         |                 |
| I think it is a nice thing to build solar power plants on arid lands. We convert God's sun to energy in these expensive times. I wish it would be done everywhere. |                         |                 |
| What are the aspects that you find <b>negative</b> about the project?  |                         |                 |
| [Empty box for negative feedback]  |                         |                 |

## Project Submission Form

|   |             |                |
|---|-------------|----------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ                                   | Ad Soyad    | Süleyman Erkan |
|   | Telefon     | [REDACTED]     |
|   | Kurum/Görev | çiftçi         |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |                |
| Bölgemizde enerji kesiminin sağlamıştır                       |             |                |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir? |             |                |
|   |             |                |

### İLETİŞİM:

Masfen İnşaat Enerji San. ve Tic. A.Ş.

Adres: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Muratpaşa/Antalya

Tel: +90242 732 32 32

E-posta: carbon@masfen.com.tr

Sayfa 5/5

MASFEN-3 Solar Bundle GES PROJESİ

|   |                         |                |
|---|-------------------------|----------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Süleyman Erkan |
|   | <b>Institution/Duty</b> | Farmer         |
| What are the aspects that you find <b>positive</b> about the project? |                         |                |
| Generated electricity in our region.                                  |                         |                |
| What are the aspects that you find <b>negative</b> about the project? |                         |                |
|   |                         |                |

|   |             |            |
|---|-------------|------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ                                   | Ad Soyad    | Musa Yiğit |
|   | Telefon     | [REDACTED] |
|   | Kurum/Görev | İşçi       |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |            |
|   |             |            |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir? |             |            |
|   |             |            |

**İLETİŞİM:**

Masfen İnşaat Enerji San. ve Tic. A.Ş.  
Adres: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Muratpaşa/Antalya  
Tel: +90242 752 32 22  
E-posta: carbon@masfen.com.tr

|   |                         |            |
|---|-------------------------|------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Musa Yiğit |
|   | <b>Institution/Duty</b> | Worker     |
| What are the aspects that you find <b>positive</b> about the project? |                         |            |
|   |                         |            |
| What are the aspects that you find <b>negative</b> about the project? |                         |            |
|   |                         |            |

## Project Submission Form

|   |             |              |
|---|-------------|--------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ   | Ad Soyad    | Fadime Yiğit |
|   | Telefon     | [REDACTED]   |
|   | Kurum/Görev | Ev Hanımı    |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |              |
| Kesintisiz elektrik santrali-   |             |              |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir?   |             |              |
|   |             |              |
| <b>İLETİŞİM:</b><br>Masfen İnşaat Enerji San. ve Tic. A.Ş.<br>Adres: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Müratpaşa/Antalya<br>Tel: +90242 732 32 32<br>E-posta: carbon@masfen.com.tr |             |              |
| Sayfa 5/5 MASFEN-3 Solar Bundle GES PROJESİ   |             |              |

|   |                         |              |
|---|-------------------------|--------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Fadime Yiğit |
|   | <b>Institution/Duty</b> | Housewife    |
| What are the aspects that you find <b>positive</b> about the project? |                         |              |
| Continuous electricity generation                                     |                         |              |
| What are the aspects that you find <b>negative</b> about the project? |                         |              |
|   |                         |              |

|   |             |               |
|---|-------------|---------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ   | Ad Soyad    | Abdullah Mete |
|   | Telefon     | [REDACTED]    |
|   | Kurum/Görev | İSİ           |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?                      |             |               |
| Verimsiz toprakların enerji amaçlı kullanılması<br>ülke ekonomisine katkı sağlar. |             |               |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir?                     |             |               |
|   |             |               |

**İLETİŞİM:**

Masfen İnşaat Enerji San. ve Tic. A.Ş.

Adres: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Muratpaşa/Antalya

Tel: +90242 732 32 32

E-posta: carben@masfen.com.tr

Sayfa 5/5

MASFEN-3 Solar Bundle GES PROJESİ

|  |                         |               |
|--|-------------------------|---------------|
| <b>EVALUATOR<br/>INFORMATION</b>   | <b>Name surname</b>     | Abdullah Mete |
|  | <b>Institution/Duty</b> | Worker        |
| What are the aspects that you find <b>positive</b> about the project?              |                         |               |
| Arid lands are being used for energy generation.<br>Benefits the national economy. |                         |               |
| What are the aspects that you find <b>negative</b> about the project?              |                         |               |
|  |                         |               |

## Project Submission Form

|   |             |             |
|---|-------------|-------------|
| DEĞERLENDİRİCİ<br>BİLGİLERİ                                   | Ad Soyad    | Salih AKMAN |
|   | Telefon     | [REDACTED]  |
|   | Kurum/Görev | Serbest     |
| Proje ile ilgili <b>olumlu</b> bulduğunuz hususlar nelerdir?  |             |             |
| Elektrik Tüketimine Destek Hava kirliliği<br>yok              |             |             |
| Proje ile ilgili <b>olumsuz</b> bulduğunuz hususlar nelerdir? |             |             |
|   |             |             |

### İLETİŞİM:

Masfen İnşaat Enerji San. ve Tic. A.Ş.

Adres: Çağlayan Mah., 2000. Sk. No:2/2, 07230 Muratpaşa/Antalya

Tel: +90242 732 32 32

E-posta: carbon@masfen.com.tr

Sayfa 5/5

MASFEN-3 Solar Bundle GES PROJESİ

|   |                         |                 |
|---|-------------------------|-----------------|
| <b>EVALUATOR<br/>INFORMATION</b>                                      | <b>Name surname</b>     | Salih Akman     |
|   | <b>Institution/Duty</b> | Self-employment |
| What are the aspects that you find <b>positive</b> about the project? |                         |                 |
| Supports electricity generation without causing air pollution.        |                         |                 |
| What are the aspects that you find <b>negative</b> about the project? |                         |                 |
|   |                         |                 |



**MASFEN-3 SOLAR BUNDLE GÜNEŞ ENERJİ SANTRALİ**  
**SÜRDÜRÜLEBİLİR KALKINMA DEĞERLENDİRME FORMU**

| Sürdürülebilir Kalkınma Göstergeleri   | Katılımcı Görüşleri |         |            |
|--|---------------------|---------|------------|
|  | Olumlu              | Olumsuz | Etkisi Yok |
| Hava kalitesi (Kükürt dioksit, azot oksitler, kurum, vb)   |                     |         | X          |
| Su kalitesi ve miktarı (Su kaynaklarına erişim)  |                     |         | X          |
| Toprak kalitesi (Erozyonla mücadele, toprak kirliliği vb)  | X                   |         |            |
| Diğer kirlilik kaynakları (gürültü, ışık, vb kirlilik kaynakları)                                | X                   |         |            |
| Biyçeşitlilik (Koruma altındaki türlere etki)  | X                   |         |            |
| İstihdam Kalitesi (Çalışma koşulları, iş güvenliği)  | X                   |         |            |
| Yoksullukla Mücadele (Yaşam standardına etki, sağlık hizmetlerine erişim, vb)                    | X                   |         |            |
| Temiz enerji kaynaklarına erişim (Güvenilir, ucuz enerji, enerji ithalatına etki)                | X                   |         |            |
| Kişisel ve kurumsal kapasite (Eğitim, farkındalık yaratma)                                       | X                   |         |            |
| İstihdam ve gelir seviyesine katkı (Yeni iş imkânı, gelir artışı)                                | X                   |         |            |
| Ödemeler dengesi (Dışa bağımlılığın azaltılması, yatırım artışı)                                 | X                   |         |            |
| Teknoloji transferi ve teknolojik yeterlilik (Yeni teknolojilerin kullanılması, uyarlanması, vb) | X                   |         |            |

**MASFEN-3 SOLAR BUNDLE GÜNEŞ ENERJİ SANTRALİ**  
**SÜRDÜRÜLEBİLİR KALKINMA DEĞERLENDİRME FORMU**

| Sürdürülebilir Kalkınma Göstergeleri   | Katılımcı Görüşleri |         |            |
|--|---------------------|---------|------------|
|  | Olumlu              | Olumsuz | Etkisi Yok |
| Hava kalitesi (Kükürt dioksit, azot oksitler, kurum, vb)   |                     |         | +          |
| Su kalitesi ve miktarı (Su kaynaklarına erişim)  |                     |         | +          |
| Toprak kalitesi (Erozyonla mücadele, toprak kirliliği vb)  | +                   |         |            |
| Diğer kirlilik kaynakları (gürültü, ışık, vb kirlilik kaynakları)                                | +                   |         |            |
| Biyçeşitlilik (Koruma altındaki türlere etki) -  | +                   |         |            |
| İstihdam Kalitesi (Çalışma koşulları, iş güvenliği)  | +                   |         |            |
| Yoksullukla Mücadele (Yaşam standardına etki, sağlık hizmetlerine erişim, vb)                    | +                   |         |            |
| Temiz enerji kaynaklarına erişim (Güvenilir, ucuz enerji, enerji ithalatına etki)                | +                   |         |            |
| Kişisel ve kurumsal kapasite (Eğitim, farkındalık yaratma)                                       | +                   |         |            |
| İstihdam ve gelir seviyesine katkı (Yeni iş imkânı, gelir artışı)                                | +                   |         |            |
| Ödemeler dengesi (Dışa bağımlılığın azaltılması, yatırım artışı)                                 | +                   |         |            |
| Teknoloji transferi ve teknolojik yeterlilik (Yeni teknolojilerin kullanılması, uyarlanması, vb) | +                   |         |            |

**MASFEN-3 SOLAR BUNDLE GÜNEŞ ENERJİ SANTRALİ**  
**SÜRDÜRÜLEBİLİR KALKINMA DEĞERLENDİRME FORMU**

| Sürdürülebilir Kalkınma Göstergeleri   | Katılımcı Görüşleri |         |            |
|--|---------------------|---------|------------|
|  | Olumlu              | Olumsuz | Etkisi Yok |
| Hava kalitesi (Kükürt dioksit, azot oksitler, kurum, vb)   |                     |         | +          |
| Su kalitesi ve miktarı (Su kaynaklarına erişim)  |                     |         | +          |
| Toprak kalitesi (Erozyonla mücadele, toprak kirliliği vb)  | +                   |         |            |
| Diğer kirlilik kaynakları (gürültü, ışık, vb kirlilik kaynakları)                                | +                   |         |            |
| Biyçeşitlilik (Koruma altındaki türlere etki)  | +                   |         |            |
| İstihdam Kalitesi (Çalışma koşulları, iş güvenliği)  | +                   |         |            |
| Yoksullukla Mücadele (Yaşam standardına etki, sağlık hizmetlerine erişim, vb)                    | +                   |         |            |
| Temiz enerji kaynaklarına erişim (Güvenilir, ucuz enerji, enerji ithalatına etki)                | +                   |         |            |
| Kişisel ve kurumsal kapasite (Eğitim, farkındalık yaratma)                                       | +                   |         |            |
| İstihdam ve gelir seviyesine katkı (Yeni iş imkânı, gelir artışı)                                | +                   |         |            |
| Ödemeler dengesi (Dışa bağımlılığın azaltılması, yatırım artışı)                                 | +                   |         |            |
| Teknoloji transferi ve teknolojik yeterlilik (Yeni teknolojilerin kullanılması, uyarlanması, vb) | +                   |         |            |

**MASFEN-3 SOLAR BUNDLE GÜNEŞ ENERJİ SANTRALİ**  
**SÜRDÜRÜLEBİLİR KALKINMA DEĞERLENDİRME FORMU**

| Sürdürülebilir Kalkınma Göstergeleri   | Katılımcı Görüşleri |         |            |
|--|---------------------|---------|------------|
|  | Olumlu              | Olumsuz | Etkisi Yok |
| Hava kalitesi (Kükürt dioksit, azot oksitler, kurum, vb)   |                     |         | X          |
| Su kalitesi ve miktarı (Su kaynaklarına erişim)  |                     |         | X          |
| Toprak kalitesi (Erozyonla mücadele, toprak kirliliği vb)  | X                   |         |            |
| Diğer kirlilik kaynakları (gürültü, ışık, vb kirlilik kaynakları)                                | X                   |         |            |
| Biyçeşitlilik (Koruma altındaki türlere etki)  | X                   |         |            |
| İstihdam Kalitesi (Çalışma koşulları, iş güvenliği)  | X                   |         |            |
| Yoksullukla Mücadele (Yaşam standardına etki, sağlık hizmetlerine erişim, vb)                    | X                   |         |            |
| Temiz enerji kaynaklarına erişim (Güvenilir, ucuz enerji, enerji ithalatına etki)                | X                   |         |            |
| Kişisel ve kurumsal kapasite (Eğitim, farkındalık yaratma)                                       | X                   |         |            |
| İstihdam ve gelir seviyesine katkı (Yeni iş imkânı, gelir artışı)                                | X                   |         |            |
| Ödemeler dengesi (Dışa bağımlılığın azaltılması, yatırım artışı)                                 | X                   |         |            |
| Teknoloji transferi ve teknolojik yeterlilik (Yeni teknolojilerin kullanılması, uyarlanması, vb) | X                   |         |            |

**MASFEN-3 SOLAR BUNDLE GÜNEŞ ENERJİ SANTRALİ**  
**SÜRDÜRÜLEBİLİR KALKINMA DEĞERLENDİRME FORMU**

| Sürdürülebilir Kalkınma Göstergeleri   | Katılımcı Görüşleri |         |            |
|--|---------------------|---------|------------|
|  | Olumlu              | Olumsuz | Etkisi Yok |
| Hava kalitesi (Kükürt dioksit, azot oksitler, kurum, vb)   |                     |         | X          |
| Su kalitesi ve miktarı (Su kaynaklarına erişim)  |                     |         | X          |
| Toprak kalitesi (Erozyonla mücadele, toprak kirliliği vb)  | X                   |         |            |
| Diğer kirlilik kaynakları (gürültü, ışık, vb kirlilik kaynakları)                                | X                   |         |            |
| Bioçeşitlilik (Koruma altındaki türlere etki)  | X                   |         |            |
| İstihdam Kalitesi (Çalışma koşulları, iş güvenliği)  | X                   |         |            |
| Yoksullukla Mücadele (Yaşam standardına etki, sağlık hizmetlerine erişim, vb)                    | X                   |         |            |
| Temiz enerji kaynaklarına erişim (Güvenilir, ucuz enerji, enerji ithalatına etki)                | X                   |         |            |
| Kişisel ve kurumsal kapasite (Eğitim, farkındalık yaratma)                                       | X                   |         |            |
| İstihdam ve gelir seviyesine katkı (Yeni iş imkânı, gelir artışı)                                | X                   |         |            |
| Ödemeler dengesi (Dışa bağımlılığın azaltılması, yatırım artışı)                                 | X                   |         |            |
| Teknoloji transferi ve teknolojik yeterlilik (Yeni teknolojilerin kullanılması, uyarlanması, vb) | X                   |         |            |



**MASFEN-3 SOLAR BUNDLE GÜNEŞ ENERJİ SANTRALİ**  
**SÜRDÜRÜLEBİLİR KALKINMA DEĞERLENDİRME FORMU**

| Sürdürülebilir Kalkınma Göstergeleri   | Katılımcı Görüşleri |         |            |
|--|---------------------|---------|------------|
|  | Olumlu              | Olumsuz | Etkisi Yok |
| Hava kalitesi (Kükürt dioksit, azot oksitler, kurum, vb)   |                     |         | +          |
| Su kalitesi ve miktarı (Su kaynaklarına erişim)  |                     |         | +          |
| Toprak kalitesi (Erozyonla mücadele, toprak kirliliği vb)  | +                   |         |            |
| Diğer kirlilik kaynakları (gürültü, ışık, vb kirlilik kaynakları)                                | +                   |         |            |
| Biyçeşitlilik (Koruma altındaki türlere etki)  | +                   |         |            |
| İstihdam Kalitesi (Çalışma koşulları, iş güvenliği)  | +                   |         |            |
| Yoksullukla Mücadele (Yaşam standardına etki, sağlık hizmetlerine erişim, vb)                    | +                   |         |            |
| Temiz enerji kaynaklarına erişim (Güvenilir, ucuz enerji, enerji ithalatına etki)                | +                   |         |            |
| Kişisel ve kurumsal kapasite (Eğitim, farkındalık yaratma)                                       | +                   |         |            |
| İstihdam ve gelir seviyesine katkı (Yeni iş imkânı, gelir artışı)                                | +                   |         |            |
| Ödemeler dengesi (Dışa bağımlılığın azaltılması, yatırım artışı)                                 | +                   |         |            |
| Teknoloji transferi ve teknolojik yeterlilik (Yeni teknolojilerin kullanılması, uyarlanması, vb) | +                   |         |            |

**MASFEN-3 SOLAR BUNDE GÜNEŞ ENERJİ SANTRALİ**  
**SÜRDÜRÜLEBİLİR KALKINMA DEĞERLENDİRME FORMU**

| Sürdürülebilir Kalkınma Göstergeleri   | Katılımcı Görüşleri                 |                                     |                                     |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
|  | Olumlu                              | Olumsuz                             | Etkisi Yok                          |
| Hava kalitesi (Kükürt dioksit, azot oksitler, kurum, vb)   |                                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Su kalitesi ve miktarı (Su kaynaklarına erişim)  |                                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Toprak kalitesi (Erozyonla mücadele, toprak kirliliği vb)  | <input checked="" type="checkbox"/> |                                     |                                     |
| Diğer kirlilik kaynakları (gürültü, ışık, vb kirlilik kaynakları)                                | <input checked="" type="checkbox"/> |                                     |                                     |
| Biyçeşitlilik (Koruma altındaki türlere etki)  | <input checked="" type="checkbox"/> |                                     |                                     |
| İstihdam Kalitesi (Çalışma koşulları, iş güvenliği)  | <input checked="" type="checkbox"/> |                                     |                                     |
| Yoksullukla Mücadele (Yaşam standardına etki, sağlık hizmetlerine erişim, vb)                    | <input checked="" type="checkbox"/> |                                     |                                     |
| Temiz enerji kaynaklarına erişim (Güvenilir, ucuz enerji, enerji ithalatına etki)                | <input checked="" type="checkbox"/> |                                     |                                     |
| Kişisel ve kurumsal kapasite (Eğitim, farkındalık yaratma)                                       | <input checked="" type="checkbox"/> |                                     |                                     |
| İstihdam ve gelir seviyesine katkı (Yeni iş imkânı, gelir artışı)                                | <input checked="" type="checkbox"/> |                                     |                                     |
| Ödemeler dengesi (Dışa bağımlılığın azaltılması, yatırım artışı)                                 | <input checked="" type="checkbox"/> |                                     |                                     |
| Teknoloji transferi ve teknolojik yeterlilik (Yeni teknolojilerin kullanılması, uyarlanması, vb) | <input checked="" type="checkbox"/> |                                     |                                     |

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

N/A



المجلس العالمي للبصمة الكربونية  
GLOBAL CARBON COUNCIL

A member of

