المجلس العالمي للبصمة الكربونية
GLOBAL CARBON COUNCIL

Project Submission Form

V3.2 - 2020

Contents

COVER PAGE- Project Submission Form (PSF)

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

Title of the Project Activity	**Balsuyu Domanic Bundled Solar Power Plants**
PSF version number	Version 1.1
Date of completion of this form	11 August 2022
Project Owner(s) (Shall be consistent with De-registered CDM Type B Projects)	Alperen Elektrik Üretim A.Ş.
Country where the Project Activity is located	Turkey
GPS coordinates of the project site(s)	

SPP#	SSP Name	Latitude	Longitude
1	Adalsan-1 GES	39.764319° 39°45'51.55"N	29.471635° 29°28'17.89"E
2	Adelsan-2 GES	39.767180° 39°46'1.85"N	29.470350° 29°28'13.26"E
3	Amilsan-1 GES	39.763280° 39°45'47.81"N	29.470810° 29°28'14.92"E
4	Amilsan-2 GES	39.767393° 39°46'2.62"N	29.471899° 29°28'18.84"E
5	Lacinsan-1 GES	39.765404° 39°45'55.45"N	29.471915° 29°28'18.89"E
6	Lacinsan-2 GES	39.766357° 39°45'58.88"N	29.470640° 29°28'14.30"E
7	Eryas GES	39.766173° 39°45'58.22"N	29.466854° 29°28'0.67"E
8	Gorkem GES	39.766175° 39°45'58.23"N	29.468582° 29°28'6.89"E
9	Kizilagac GES	39.765199° 39°45'54.72"N	29.467089° 29°28'1.52"E

Eligible GCC Project	☒ **Type A:**

Type as per the Project Standard (Tick applicable project type)	☐ Type A1 ☒ Type A2 ☐ **Type B – De-registered CDM Projects:**[1] ☐ Type B1 ☐ Type B2
Minimum compliance requirements	☒ Real and Measurable GHG Reductions ☒ National Sustainable Development Criteria (if any) ☒ Apply credible baseline and monitoring methodologies ☒ Additionality ☒ Local Stakeholder Consultation Process ☒ Global Stakeholder Consultation Process ☒ No GHG Double Counting ☒ Contributes to United Nations Sustainable Development Goal 13 (Climate Action)
Choose optional and additional requirements (Tick applicable label categories)	☒ Do-no-net-harm Safeguards to address Environmental Impacts ☒ Do-no-net-harm Safeguards to address Social Impacts ☒ Contributes to United Nations Sustainable Development Goals (in addition to Goal 13)
Applied methodologies (Shall be approved by the GCC or the CDM)	AMS-I.D.: Grid Connected Renewable Energy Generation, Version 18.0
GHG Sectoral scope(s) linked to the applied methodology(ies)	GHG-SS 1: Energy (renewable/non-renewable sources)

[1] Owners of Type B projects shall fill in the form provided in Appendix 7.

Applicable Rules and Requirements for Project Owners

(Tick applicable Rules and Requirements)

Rules and Requirements		Reference	Version
☒ ISO 14064-2			
☒ Applicable host country legal requirements /rules			
☒ GCC Rules and Requirements[2]	☒ Project Standard		3.1
	☐ Approved GCC Methodology (XXXXX)		
	☒ Program Definitions		3.1
	☒ Environment and Social Safeguards Standard		2.0
	☒ Project Sustainability Standard		2.1
	☒ Instructions in Project Submission Form (PSF)-template		3.2
	☐ Add rows if required		
☒ CDM Rules[3]	☒ Approved CDM Methodology (XXXXX)	AMS-I.D.	18.0
	☒ Tool for the demonstration and assessment of additionality	TOOL 01	07.0
	☐ Combined tool to identify the baseline scenario and demonstrate additionality	TOOL 02	
	☒ Tool to calculate the emission factor for an electricity system	TOOL 07	7.0
	☐ Demonstration of additionality of microscale project activities	TOOL 19	
	☒ Demonstration of additionality of small-scale project activities	TOOL 21	13.1

[2] GCC Program rules and requirements: https://www.globalcarboncouncil.com/resource-centre.html

[3] CDM Program rules: https://cdm.unfccc.int/Reference/index.html

		☐ Additionality of first-of-its-kind project activities	TOOL 23	
		☐ Common practice	TOOL 24	
		☐ Investment analysis	TOOL 27	
		☐ Positive lists of technologies	TOOL 32	
		☐ Guidelines for objective demonstration and assessment of barriers		
		☐ Add rows if required		

Choose Third Party External Project Verification by approved GCC Verifiers[4] (Tick applicable verification categories)	☒ GHG emission reductions (i.e., Approved Carbon Credits **(ACCs)**) ☒ Environmental No-net-harm Label (**E**$^{+}$) ☒ Social No-net-harm Label (**S**$^{+}$) ☒ United Nations Sustainable Development Goals (**SDG**$^{+}$) ☐ Bronze SDG Label ☐ Silver SDG Label ☒ Gold SDG Label ☐ Platinum SDG Label ☐ Diamond SDG Label ☒ CORSIA requirements (**C**$^{+}$) ☒ Host Country Attestation on Double counting
Declaration to be made by the Project Owner(s)[5] (Tick all applicable statements)	The Project Owner(s) declares that: ☒ The Project Activity complies with the eligibility of the applicable project type (A1, A2, B1 or B2) as stipulated by the Project Standard. ☒ The Project Activity shall start operations, and start generating emission reductions, on or after 1 January 2016.

[4] **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.

[5] The "Project Owner" means the legal entity or organization that has overall control and responsibility for the Project Activity.

	☒ The Project Activity is eligible to be registered under the GCC program. ☒ 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. ☒ 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. ☒ 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. ☒ 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. Provide details (if any) below for the boxes ticked above.
	☐ 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: ☒ Confirms the avoidance of double counting as required by CORSIA; ☒ Shall be made publicly available prior to the use of units from the host country under CORSIA; and ☒ 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. Provide details below for the boxes ticked above
	The Project Owner(s) declares that: ☒ 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; ☒ 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. Provide details below for the boxes ticked above

Appendixes 1-7	Details about the Project Activity are provided in Appendixes 1 through 7 to this document.
Name, designation, date and signature of the Project Owner(s)	Alperen Elektrik Üretim A.Ş. Ahmet Balsuyu ALPEREN ELEKTRİK ÜRETİM A.Ş. Aksu V.D. Egemenlik Mah. Doğu Çevre Yolu Blv. Shell Petrol Ofisi Apt. No. Dulkadiroğlu Kahramanmaraş Tel. +90 (344) 236 12 02 11 August 2022

1. PROJECT SUBMISSION FORM

Section A. Description of the Project Activity

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

Turkey, as a middle income developing country, has a growing need for energy. Major portion of the energy meet is being met by fossil fuel based power plants, currently dominating the National Grid System of Turkey (NGST). To meet this growing energy meet, there is a strong need for clean energy that would not compromise environment and not contribute to global warming.

Given these environmental concerns and increasing demand for energy, Balsuyu Domanic Bundled Solar Power Plants (SPPs) (hereafter project activity and/or project) project aims to generate electricity from solar power and provide clean energy to the NGST. Without implementing such a project, same amount of electricity would be used from fossil fuel dominated NGST and would release CO_2 into the atmosphere.

Balsuyu Domanic Bundled SSPs is a renewable energy project, using solar power to produce electricity. Project is an unlicensed type and established in accordance with the Law on Electricity Market.[6]

Project comprises 9 individual units of photovoltaic power plants, located in province of Kütahya in Turkey. Project has a total installed capacity of 8.9785[7] MWp (8.316 MWe) with an average annual electricity generation of 12.52 GWh.

Project is a small scale one, not a debundled large scale project.

[6] Law on Electricity Market (Elektrik Piyasası Kanunu in Turkish), law number 6446 dated 14/03/2013.

[7] Note for DOE: Reference for the installed capacity is based on the official commissioning document. However, there is a difference between the cover page of the commissioning document and its rest. On the cover page, installed capacity is stated as 875 kWe for each SPP unit. However, in the rest of the document, number of solar panels does not match with 875 kWe; but slightly higher than 875 kWe as they can be seen in the table above. Project was installed in 2019 and real installed capacity values are taken and listed here. However, in either case, this does not change the result given that project is still small scale.

The list of each individual plants, their operation start dates and installed capacities are provided below.

Table 1 List of solar power plants in Balsuyu Domanic Bundled SPPs

No[8]	Name of power plant unit	Installed capacity (kWp)	Installed capacity (kWe)	Operation date	Annual Electricity Generation MWh/year[9]
1	Adalsan-1 GES	997.9	924.0	19 Nov 2019	1370.8
2	Adelsan-2 GES	997.9	924.0	19 Nov 2019	1359.1
3	Amilsan-1 GES	997.9	924.0	19 Nov 2019	1352.2
4	Amilsan-2 GES	997.9	924.0	19 Nov 2019	1375.9
5	Lacinsan-1 GES	997.9	924.0	19 Nov 2019	1371.1
6	Lacinsan-2 GES	997.9	924.0	19 Nov 2019	1363.0
7	Eryas GES	997.9	924.0	19 Nov 2019	1381.4
8	Gorkem GES	997.9	924.0	19 Nov 2019	1584.2
9	Kizilagac GES	997.9	924.0	19 Nov 2019	1365.3

Project activity is a newly installed Greenfield plant; hence project boundary comprises the project activity and NGST- National Grid System of Turkey. And, associated baseline scenario is as follows:

"The electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid."[10]

During the 10 year project crediting period, project activity is expected to produce 81174.1 tCO_2 emission reductions.

As a renewable power generation project, project activity will contribute to sustainable development goals (SDGs) in the following ways:

Goal 13. Take urgent action to combat climate change and its impacts (SDG 13.2.2)

The most significant SDG impact of the project is its contribution to combat climate change. Project activity, by producing renewable electricity, will annually provide 8117.4 tCO_2 emission reductions.

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all (SDG.7.2.1):

As a renewable electricity generation project, Balsuyu Domanic Bundled SPPs will contribute to increase of renewable energy share in the total final energy consumption.

Project activity has also supported Turkey in stimulating and commercializing the use of grid connected renewable energy technologies and markets, which are far more environmentally friendly t. This will contributeto diversification of Turkish electricity generation mix which is currently

[8] The numbers associated for each solar power unit will be used in the remaining part of this report.

[9] Average annual electricity generation based on real measured data.

[10] AMS-I.D., Version 18., p.6.

dominated by the fossil fueled power plants. Such a diversification is a long term benefit of the project activity for combatting global climate change.

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (SDG 8.5.1)

During construction and operation period, project directly and indirectly generates job opportunities, which results in enhancing local employment and contributing to reducing local poverty.

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 (SDG 9.4.1)

Project, by itself is a clean and environmentally sound technology that will result in CO_2 emission reduction within the project boundary.

A.2. Location of the Project Activity of the Project Activity

Project activity is located within the province of Kutahya, Domanic district, Saruhanlar neighborhoods, on the land registry and cadaster number of 101/476.

Address and geodetic coordinates of the physical site of the Project Activity			
SSP #	**Physical address**	**Latitude**	**Longitude**
1	Kütahya İli, Domanic İlçesi, Saruhanlar köyü.[11] Land registry and cadastre no:101/476.	39.764319° 39°45'51.55"N	29.471635° 29°28'17.89"E
2		39.767180° 39°46'1.85"N	29.470350° 29°28'13.26"E
3		39.763280° 39°45'47.81"N	29.470810° 29°28'14.92"E
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9		39.765199° 39°45'54.72"N	29.467089° 29°28'1.52"E

[11] Exact location in Turkish.

Figure 1 Location of Balsuyu Domanic Bundled SPPs in Turkey (1)

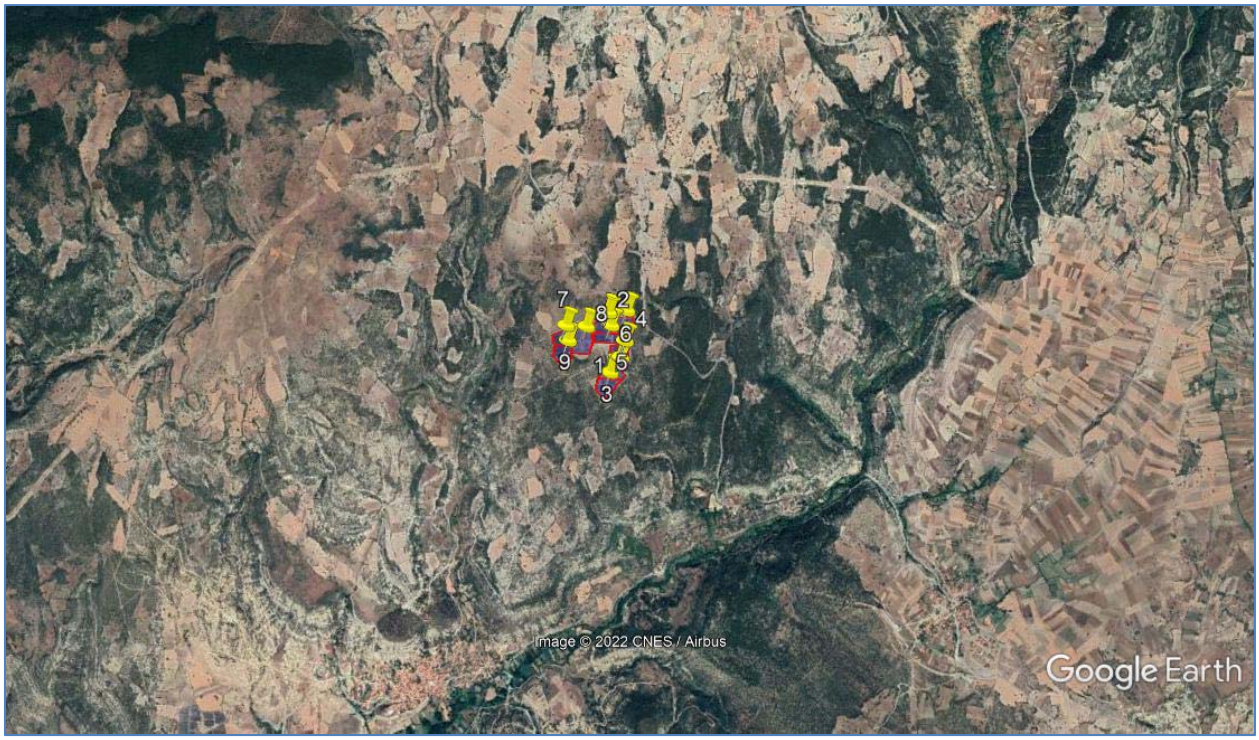


Figure 2 Location of Balsuyu Domanic Bundled SPPs in Turkey (2)

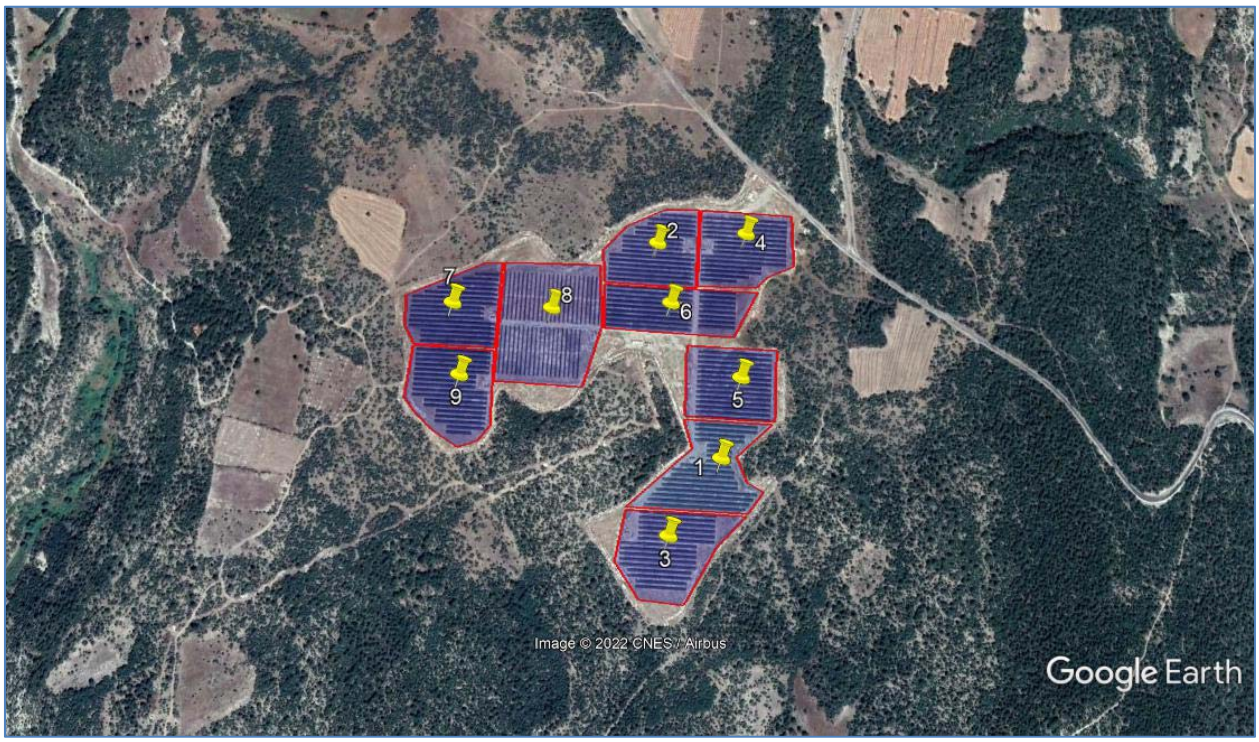


Figure 3 Location of Balsuyu Domanic Bundled SPPs in Turkey (3)

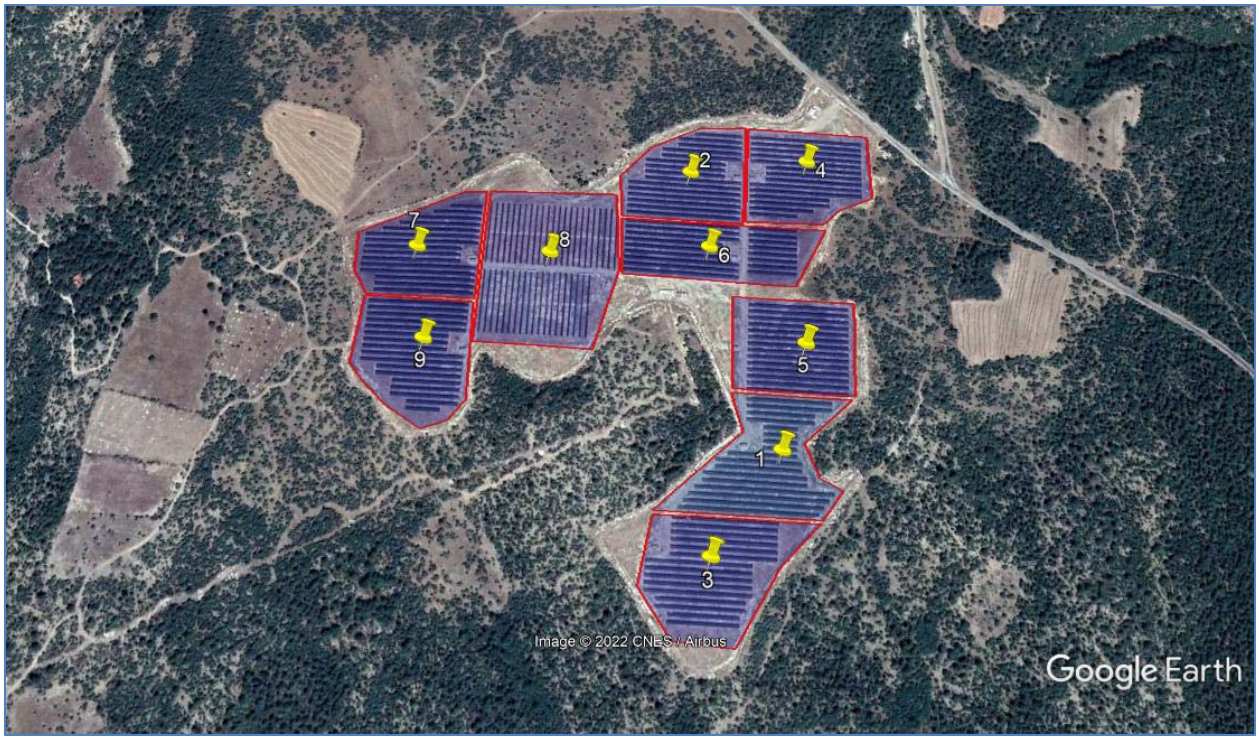


Figure 4 Location of Balsuyu Domaniç Bundled SPPs in Turkey (4)

A.3. Technologies/measures

Grid connected solar power generation systems uses the technology that converts solar energy into electricity using solar panels. Balsuyu Domanic Bundled SPPs consists of three main units:

1) Photovoltaic (PV) solar array that collects Sun's energy and produce Direct Current (DC)
2) Inverters, converting DC to Alternating Current (AC).
3) Substation that feeds AC electricity to the NGST.

Following table provides information about the solar panels (photovoltaic modules) and inverters for each individual power plant as depicted by the plants numbers. The table further provides installation capacities for each plant.

Table 2 Technical details of Solar Panels

Plant Number	Brand of Solar Panel	Panel Power (Wp)	Panel Unit Number	Brand of the Inverter	Power of the Inventers (kW)	Number of Inventers	Installed Capacity (DC) (kWp)	Installed Capacity (AC) (kWe)
1	Phono Solar	330	3024	Huawei	66	14	997.9	924.0
2	Phono Solar	330	3024	Huawei	66	14	997.9	924.0
3	Phono Solar	330/325	2988/28	Huawei	66	14	995.1	924.0
4	Phono Solar	330	3024	Huawei	66	14	997.9	924.0
5	Phono Solar	330	3024	Huawei	66	14	997.9	924.0
6	Phono Solar	330	3024	Huawei	66	14	997.9	924.0
7	Phono Solar	330	3024	Huawei	66	14	997.9	924.0
8	Phono Solar	330	3024	Huawei	66	14	997.9	924.0
9	Phono Solar	330	3024	Huawei	66	14	997.9	924.0
Total Installed Capacity							**8978.5**	**8316.0**

Monitoring equipment in the project activity is the bi-directional electronic power meters, appropriate for remote reading. Power meters, as per the "Regulation on Unlicensed Electricity

Generation"[12] are installed by the entity purchasing the electricity from the electricity generator. Project owner has no control on them. In the project activity, power meters are installed by the Osmangazi Elektrik Dağıtım A.Ş. (OEDAŞ-Osmangazi Electricity Distribution A.Ş).

OEDAŞ installed one main power meter for each SPP unit, sealed it and calibrated it. Regular calibration of the power meters is under the responsibility of the OEDAŞ. Project owner has no control on it.

A.4. Project Owner(s)

Location/ Country	Project Owner(s)	Where applicable[13], indicate if the host country has provided approval (Yes/No)
Turkey	Alperen Elektrik Üretim 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[14]		Name of the Entities	Purpose and Quantity of ACCs to be supplied
From	To		
19 Nov 2019	18 Nov 2029	Alperen Elektrik Üretim A.Ş.	81174.1 tCO_2 (expected emission reduction)

ACCs from the project activity will be used to create additional revenue stream for the investment and for reducing the project financial risks and thus enabling the sustainability of the project.

No double counting will occur in the scope of this project since GCC is the only program applied.

A.6. Additional requirements for CORSIA

Please see section E and F.

[12] "Regulation on Unlicensed Electricity Generation", Official Gazette Number 30772, dated as 12 May 2019. https://www.resmigazete.gov.tr/eskiler/2019/05/20190512-1.htm. Access date 5 June 2022.

[13] 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).

[14] Both days included.

Section B. Application of selected methodology(ies)

B.1. Reference to methodology(ies)

Methodology:

AMS-I.D.: Grid Connected Renewable Energy Generation, Version 18.0.

Tools

Tool 07: Tool to calculate the emission factor for an electricity system, Version 7.0.

Tool 21: Demonstration of additionality of small-scale project activities, Version 13.1.

Tool 01. Tool for the demonstration and assessment of additionality, Version 07.0.

B.2. Applicability of methodology(ies)

Applicability of the AMS-I.D. (version 18.0) to the project activity is justified in the following table.

No	Applicability criteria	Justification
	Scope	
1	This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass: (a) Supplying electricity to a national or a regional grid; or (b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.	Project activity is a photovoltaic energy generation project, supplying electricity to the NGST. Satisfies the criteria.
2	Illustration of respective situations under which each of the methodology (i.e. "AMS-I.D.: Grid connected renewable electricity generation", "AMS-I.F.: Renewable electricity generation for captive use and mini-grid" and "AMS-I.A.: Electricity generation by the user) applies is included in the appendix.	Project activity provides electricity to the NGST. Therefore, AMS-I.D. is applicable. Satisfies the criteria.
	Applicability	
3	This methodology is applicable to project activities that: (a) Install a Greenfield plant;	Project activity is a new Greenfield plant.

No	Applicability criteria	Justification
	(b) Involve a capacity addition in (an) existing plant(s); (c) Involve a retrofit of (an) existing plant(s); (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s).	Satisfies the criteria.
4	Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology: (a) The project activity is implemented in an existing reservoir with no change in the volume of reservoir; 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/m2 ; (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/m2 .	Project activity is not a hydropower plant. This criteria is not applicable.
5	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 of 15 MW.	Project activity has no non-renewable component and its total installation capacity is less than 15 MW. Satisfies the criteria.
6	Combined heat and power (co-generation) systems are not eligible under this category.	Project activity does not have combined heat and co-generation power systems. Satisfies the criteria.
7	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.	Project activity is a brand new renewable power plant. This criteria is not applicable.
8	In the case of retrofit, rehabilitation or replacement, to qualify as a small-scale	Project activity is a brand new renewable

No	Applicability criteria	Justification
	project, the total output of the retrofitted, rehabilitated or replacement power plant/unit shall not exceed the limit of 15 MW.	power plant. This criteria is not applicable.
9	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.	Project activity is a PV solar power plant. This criteria is not applicable.
10	In case biomass is sourced from dedicated plantations, the applicability criteria in the tool "Project emissions from cultivation of biomass" shall apply.	Project activity is a PV solar power plant. This criteria is not applicable.

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

AMS-I.D. defines the project boundary as:

"The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to."[15]

As per the definition, project boundary includes the following elements:

1) Balsuyu Domanic Bundled SPPs
2) Substation that connects Balsuyu Domanic Bundled SPPs to the NGST- National Grid System of Turkey
3) NGST

[15] UNFCCC CDM AMS-I.D., Version 18., p.6.

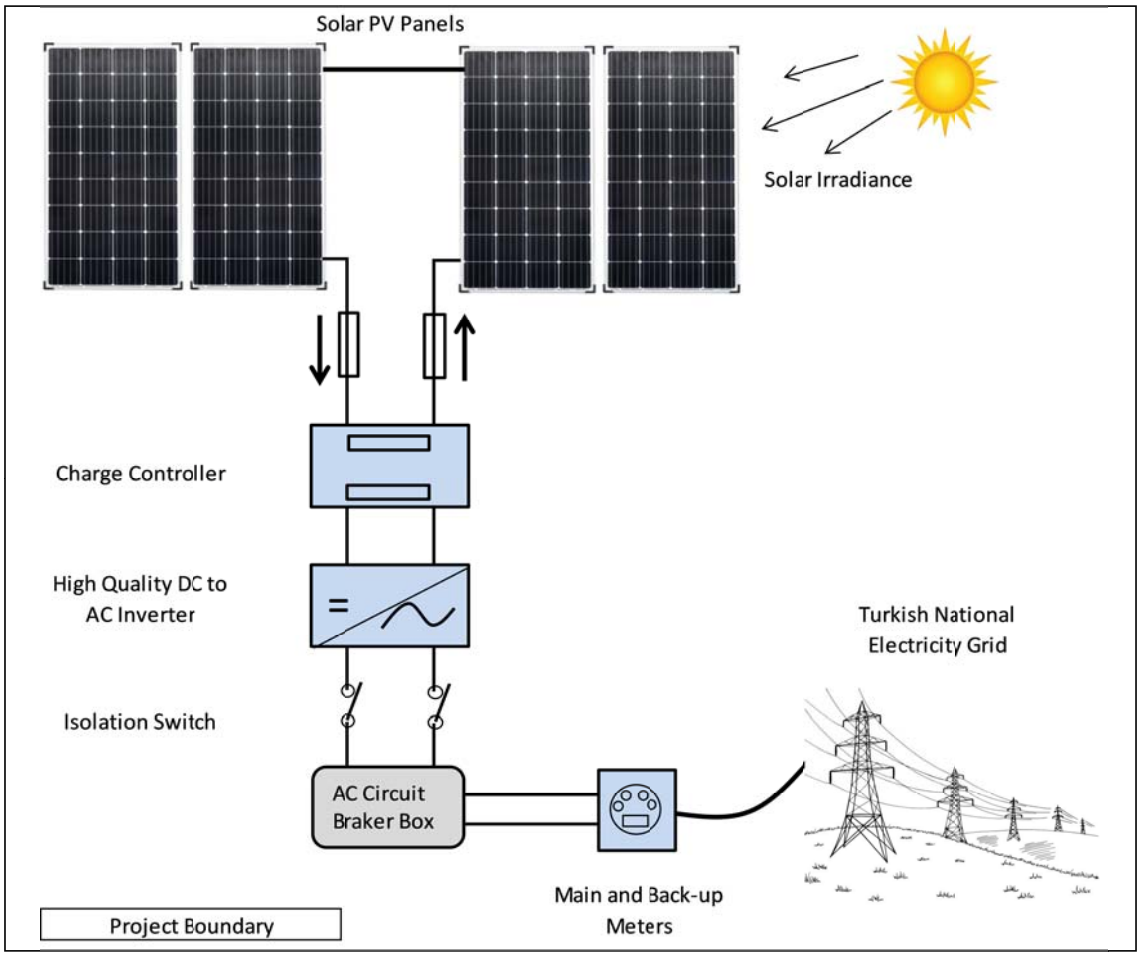


Figure 5 Conceptual Description of Balsuyu Domanic Bundled SPPs Project Boundary

Based on the project boundary, baseline emissions and project emission sources are as follow:

- Baseline emission source: NGST-National Grid System of Turkey
- Project emission source: Balsuyu Domanic Bundled SPPs project.

Baseline emission: Turkish National Grid System

UNFCCC CDM AMS-I.D. states that "Baseline emissions include only CO_2 emissions from electricity generation in power plants that are displaced due to the project activity".[16] As per the methodology, CO_2 is accepted as major emission source; CH4 and N2O are accepted as minor emission source and are neglected in baseline emission calculations (see the following table).

[16] AMS-I.D. Version 18., p.7.

Project emission: Balsuyu Domanic Bundled SPPs

AMS-I.D. Version 18 states that for most renewable energy project activities, project emission equals to zero (PEy = 0).[17]

Based on this statement, Balsuyu Domanic Bundled SPP's emission is accepted as zero given that project is a photovoltaic solar power plant and there is no emission source. Based on this conclusion, CO_2, CH4 and N2O are accepted as minor emission sources and neglected in project emission calculations (see the following table).

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

Source		GHG	Included?	Justification/Explanation
Baseline	**Turkish National Grid System** (CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity)	**CO_2**	**Yes**	**Main emission source.**
		CH_4	No	Minor emission source. Excluded for simplification.
		N_2O	No	Minor emission source. Excluded for simplification.
Project Activity	**Balsuyu Domanic Bundled SPPs** (Photovoltaic Solar Power Plant)	CO_2	No	Minor emission source. Excluded for simplification.
		CH_4	No	Minor emission source. Excluded for simplification.
		N_2O	No	Minor emission source. Excluded for simplification.
		---	No	Minor emission source. Excluded for simplification.

B.4. Establishment and description of the baseline scenario

According to AMS I.D. Version 18., if the project activity is a Greenfield power plant, the baseline scenario is that "the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid."[18]

Since Balsuyu Domanic Bundled SPPs project is a newly installed Greenfield plant, this baseline scenario is applicable to the project activity.

And the AMS-I.D. methodology refers to the latest version of the CDM Tool 07 "Tool to calculate the emission factor for an electricity system, Version 7.0." for baseline emission calculations.

[17] AMS-I.D., Version 18., p.12.

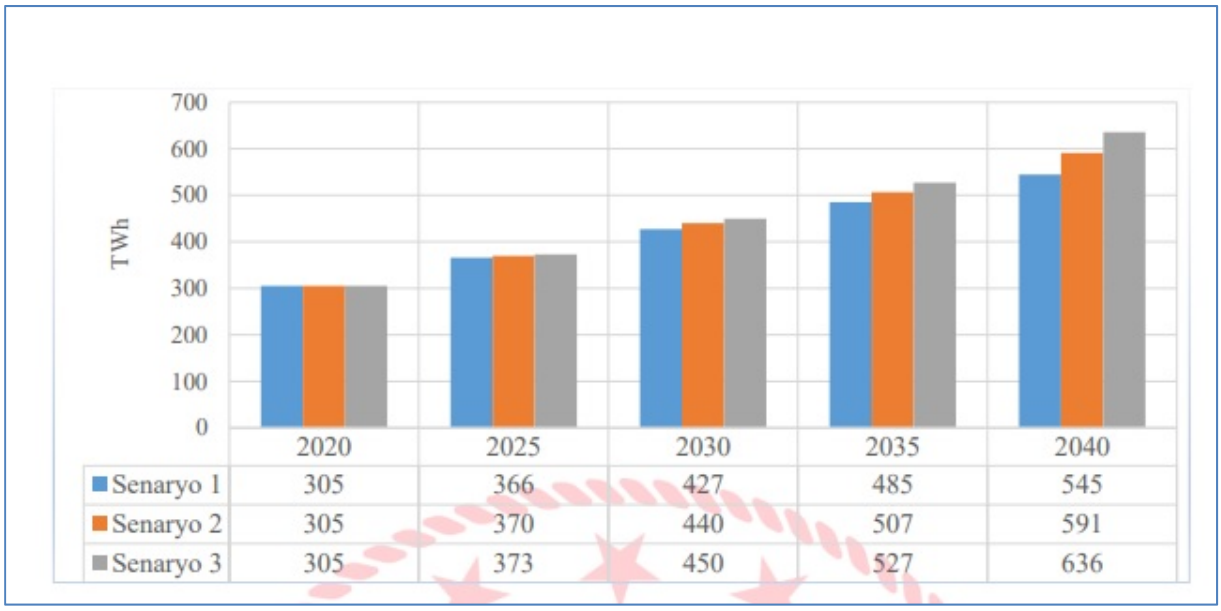
[18] AMS-I.D., Version 18., p.6.

Brief description NGST (baseline scenario)

"Operation of grid-connected power plants and by the addition of new generation sources into the grid"[19] represents the NGST-National Grid System of Turkey, which is the baseline scenario of the project activity.

NGST is growing year by year by the addition of new power plants to meet increasing energy demand of Turkey. As compared to 2021, electricity consumption increased by 7.7%, reaching to 329.6 Billion kWh; and electricity generation increased by 8.1% reaching to 331 Billion kWh.[20]

According to the report, prepared by the Ministry of Energy and Natural Resources of Turkey, demand for electricity energy will increase from 370 TWh in 2025 to 591 TWh in 2040.[21] To be able to meet this demand, Turkey will continue to develop power generation plants.



	2020	2025	2030	2035	2040
Senaryo 1	305	366	427	485	545
Senaryo 2	305	370	440	507	591
Senaryo 3	305	373	450	527	636

Figure 6 Energy Demand Projection of Turkey (2020-2040)[22]

NGST composes of thermal power plants and renewable power plants. According to the latest data provided in 2021, electricity generation by energy resources is provided in the following table.

[19] AMS-I.D., Version 18., p.6.

[20] Ministry of Energy and Natural Resources web site, "Electricity". https://enerji.gov.tr/bilgi-merkezi-enerji-elektrik. Access date 18 May 2022.

[21] Türkiye Elektrik Enerjisi Talep Projeksiyonu Raporu (2020-2040 Dönemi) in Turkish, Ministry of Energy and Natural Resources, p.1. https://enerji.gov.tr/Media/Dizin/EIGM/tr/Raporlar/ENTAP/114176-turkiye_elektrik_enerjisi_talep_projeksiyonu_raporu.pdf. Access date 22 May 2022.

[22] Türkiye Elektrik Enerjisi Talep Projeksiyonu Raporu (2020-2040 Dönemi) in Turkish, Ministry of Energy and Natural Resources, p.2. https://enerji.gov.tr/Media/Dizin/EIGM/tr/Raporlar/ENTAP/114176-turkiye_elektrik_enerjisi_talep_projeksiyonu_raporu.pdf. Access date 22 May 2022.

Table 3 Electricity Generation by Resources 2021[23]

Energy Sources	2021
Hard coal	31.4%
Natural gas	32.7%
Hydro	16.8%
Wind	9.4%
Solar	4%
Geothermal	3.2%
Other sources	2.5%

Based on this data, 64.1% of electricity generation comes from thermal power plants which comprise a significant portion of the total electricity generation. Electricity generation from renewable resources comprises of 33.4% of total electricity generation. However, it is important to keep in mind that majority of this electricity generation from hydro sources comes from very large scale projects, including Ataturk dam. To be able to achieve a sustainable future and to effectively combating climate change, this ratio of thermal resources to renewable resource should decrease. Although there is a an incentive in Turkey in terms of removing the legal obstacles for private investors to build and operate renewable energy projects, there is still a lot to do, such as making them financially attractive, to increase number of renewable power plants.

B.5. Demonstration of additionality

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

(a) A Legal Requirement Test; and

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

Legal Requirement Test

Balsuyu Domanic Bundled SPPs plant is not legally enforced by any means. Constructing and operating the project activity has been totally realized by private investors under the free market conditions in accordance with the Law on Electricity Market[24]. Once again, this law does not mandate the establishment of the project, it just provide regulations regarding how to implement power generation projects in Turkey.

The project passes the legal requirement test since there are no enforced laws, statutes, regulations, court orders, environmental-mitigation agreements, permitting conditions of other legally-binding mandates requiring its implementation. Furthermore, as per paragraph 46 of Project

[23] Ministry of Energy and Natural Resources web site, "Electricity". https://enerji.gov.tr/bilgi-merkezi-enerji-elektrik. Access date 18 May 2022.

[24] Law on Electricity Market (Elektrik Piyasası Kanunu-in Turkish). https://www.mevzuat.gov.tr/mevzuatmetin/1.5.6446.pdf. Access date 10 May 2022.

Standard, voluntary commitments/agreements within a sector or by an entity do not constitute the legal requirement. An Additionality Test is further applied.

Additionality Test

For additionality assessment, CDM Tool 21: Demonstration of additionality of small-scale project activities" is used. Given that Balsuyu Domanic Bundled SPPs is a small scale one, Tool 21 is the most appropriate additionality tool for the project activity.

Tool 21 states that "project participants shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:[25]

(a) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions;

(b) Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions;

(c) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions;

(d) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.

Among these barriers, option (a) Investment barrier is chosen to demonstrate additionality. And according to the Tool 21, since project activity's installed capacity is smaller and does not fall into the category of Positive Lists (CDM Tool 32), "regular additionality procedure" will be applied.[26]

As per regular additionality procedure, Tool 01: Tool for the demonstration and assessment of additionality Version 07.0.0., is used to make investment analysis.

Step 2 - Investment Analysis

For investment analysis, Step 2[27] of the CDM Tool 01 is applied; and it will analyze the financial attractiveness of the project without carbon revenue.

However, Step 2-Investment Analysis uses results from the Sub-step 1a, which defines alternatives to the project activity and acts as a precursor to Step 2 Investment analysis. Therefore, first Sub-step 1a, project alternatives, will be analyzed; then Step 2 investment analysis will be applied.

Sub-step 1a: Define alternatives to the project activity

As per the tool 21, following 3 alternatives will be analyzed:

1) Proposed project activity undertaken without being registered as a CDM project activity;

[25] CDM Tool 21: Demonstration of additionality of small-scale project activities, Version 13.1., p.4.

[26] CDM Tool 21: Demonstration of additionality of small-scale project activities, Version 13.1., p.5.

[27] CDM Tool 01: Tool for the demonstration and assessment of additionality Version 07.0.0., Section 4.3., p.9.

2) Other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs or services with comparable quality, properties and application areas;

3) Continuation of the current situation (no project activity or other alternatives undertaken).

First alternative, as per the statement of the tool under this category, is having the Balsuyu Domanic Bundled SPPs project without being registered to the GCC program. However, this is not a financially attractive option due to that project IRR is below the benchmark IRR value (25%) without having carbon revenue.

Second alternative could be the implementation of a new power plant utilizing renewable resources, which would produce similar services with the project activity. These alternatives are wind, hydro and geothermal renewable power generations. However, implementing any of these alternatives is not realistic due to the geographical conditions of the project location.

Project region technically is not an eligible location for wind power generation. Following figure shows wind speed maps of Kutahya. Wind speed should be at least 7 m/sec or higher for an economically feasible power generation. As it can be seen from the figure, in Domanic Kutahya, project site is located where the wind speed is below 6 m/sec. Therefore wind energy power generation is not an alternative to the project activity.

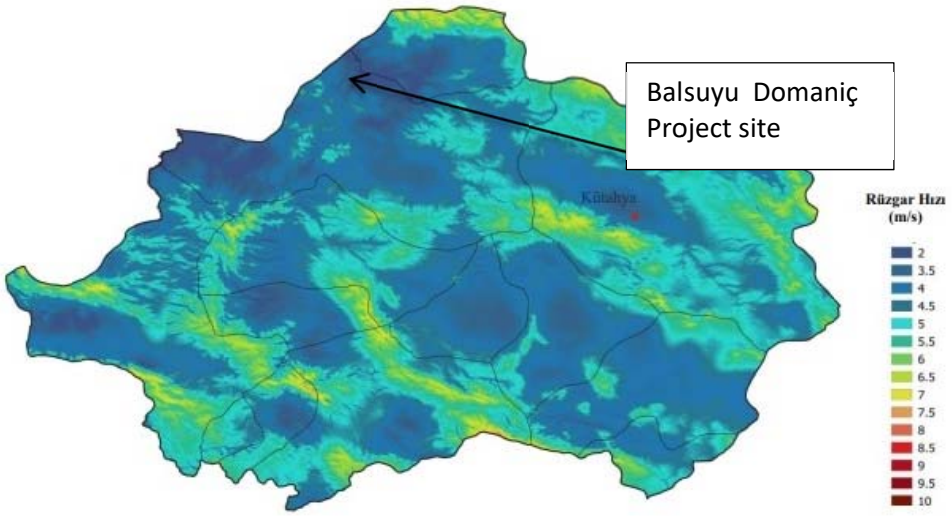


Figure 7 Kutahya Province Wind Speed Map[28]

At the project site, there are no geothermal and hydro resources eligible for electricity generation. Therefore both options are not alternative.

[28] Ministry of Energy, General Directorate of Energy Works, Turkey's Wind Power Potential, https://repa.enerji.gov.tr/REPA/ (Click on Kutahya) Access date 16 May 2022.

Third alternative, in case no project activity is taken that is the third alternative as suggested by the Tool 21, the same amount of electricity will be generated by the existing grid to supply the increasing demand of Turkey. However, this alternative is the same with the baseline scenario.

Investment analysis includes the application of the following steps:

- Determining the appropriate analysis method;
- Calculation and comparison of financial indicators;
- Sensitivity analysis.

Outcome of Sub-step 1a: The only realistic scenario is the third alternative, which is the supply of the same amount of electricity from the existing grid that is in compliance with relevant mandatory laws and regulations.

Sub-step 2a - Determine Appropriate Analysis Method (First sub step of Step 2 Investment Analysis/Tool 21)

The "Tool for the Demonstration and Assessment of Additionality, Version 7.0.0", offers three alternative methods for financial analysis:

- Option I: Simple cost analysis
- Option II: Investment comparison analysis
- Option III: Benchmark analysis.

Option I is only applicable if the project activity does not receive any revenue other than the sale of carbon credits. Project generates revenue from the sale of electricity. Therefore, this option is not applicable.

Option II is applicable if there are alternatives to the project activity. In this case, project activity does not have alternatives. Only viable alternative is the 'No Activity'. Therefore, investment analysis is not applicable to this alternative.

As a result Option III (Benchmark Analysis) is applicable to the project.

Sub-step 2b - Option III-Apply Benchmark Analysis

For benchmark analysis, IRR value determined by the financial institutions for similar type of projects will be used. According to the report on "Private Sector Renewable Energy and Energy Efficiency Projects", prepared by World Bank in 2017 defines the "threshold IRR on equity" for solar photovoltaic power plants as 25%[29] percent. This value will be used as a benchmark in project's financial analysis.

Sub-step 2c: Calculation and comparison of financial indicators (only applicable to Options II and III):

[29] World Bank, "Implementation Completion and Results Report", Report No:ICR0004069, 19 June 2017, p.40. https://documents1.worldbank.org/curated/en/799701498842988254/pdf/ICR00004069-06192017.pdf. Access date 15 May 2022.

Project's IRR is calculated on the basis of expected cash flows (investment, maintenance and operating costs, and revenues from electricity sale).

Table 4 Financial Parameters Used in Financial Analysis[30]

Parameters[31]	**Unit**	**Value**
Annual expected electricity generation	MWh	12,572
Investment Cost (includes solar panels, steel works, electrical works, site roads, switchyard, energy transmission lines, land cost, etc)	$	8,324,550
Operating Cost (Employee cost, internal electricity consumption cost, unforeseen expenditures, maintenance cost, grid system connection and management costs etc.)	$	206,058
Electricity Sale Price Feed in tariff for the first 10 years/ after the 10 years	$Cents/ kWh	13.3 / 6
Calculated IRR	**10.01%**	

The IRR for the project is calculated as 10.01% without any carbon revenue and without tax. This value is much lower than the benchmark IRR given above, in the "sub-step 2b". Given that project does not use any ODA type financial development assistance or government incentive, from the private sector point, project activity is not financially attractive. Project needs for carbon revenue to be a feasible investment.

As a result, project financially is not attractive without GCC ACC carbon revenue.

Sub-step 2d: Sensitivity analysis (only applicable to Options II and III)

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

For a range of ±10% and ±5% fluctuations separately in Investment Cost, Operating Cost, Electricity Production and Electricity Sales revenue, following table shows the results of the sensitivity analysis. In solar photovoltaic power plants, generally, investment cost and operational costs are predictable with higher accuracy. In these types of small scale SPP project with a less than 1 MWh installed capacity, construction period is short, about a year; and construction is simple and cost of technologies are predictable. Therefore maximum 10% fluctuations in prices are reasonable for small scale SSPs.

Following table shows the sensitivity analysis by having one parameter changing and the other three kept fixed. 0% fluctuation in the table provides reference point for comparison. Sensitivity analysis does not include carbon revenue.

[30] Since project is A2 type, some of the financial parameters are based on real expenditures, and some are based on assumptions which are very close to real value. Expenditure values used in IRR calculation were based on the time period of the investment decision taken, 2018.

[31] See the IRR excel sheet for details.

Table 5 Sensitivity Analysis for the Project IRR Variation

Variable	Fluctuation				
	-10%	-5%	0%	5%	10%
Investment Cost (IRR %)	12.12%	11.02%	10.01%	9.09%	8.25%
Operation Cost (IRR %)	10.59%	10.31%	10.01%	9.72%	9.41%
Electricity Price (IRR %)[32]	7.43%	8.74%	10.01%	11.25%	12.47%
Energy Production (IRR %)	7.48%	8.77%	10.01%	11.23%	12.42%

In every alternative scenario in sensitivity analysis, project's IRR value is still very low ranging from minimum 7.43% to maximum 12.47%.

Outcome of Step 2:

Investment analysis confirms that the proposed project is not attractive for investment. Even the maximum IRR values calculated for the best-case scenario is considerably below the 25% benchmark. Thus, there is a strong need for additional revenues from carbon credits for the project activity.

As per the results of the investment analysis, project meets the conditions of additionality.

B.6. Estimation of emission reductions

B.6.1. Explanation of methodological choices

As per the methodology AMS-I.D.Version 18.0, emission reduction of the project activity is calculated as follows:

$$ER_y=BE_y-PE_y-LE_y$$

Where:

ER_y : Emission reductions in year y (tCO_2)

BE_y : Baseline emissions in year y (tCO_2)

PE_y : Project emissions in year y (tCO_2)

LE_y : Leakage emissions in year y (tCO_2)

BE_y: Baseline emissions in year y (tCO_2)

Baseline emission calculations are done according to the AMS-I.D. version 18.0. According to the methodology, "baseline emissions include only CO_2 emissions from electricity generation in power plants that are displaced due to the project activity. The methodology assumes that all project

[32] Electricity price will change after 10 years since the start date of the operation. It is expected to decrease to 6 Cents USD per kWh.

electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants."[33]

Methodology further defines the baseline emissions to be calculated as follows:

$$BE_y = EG_{pj,y} \times EF_{grid,y}$$

Where:

BE_y : Baseline emissions in year y (tCO_2)

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

$EF_{grid,y}$: Combined margin CO_2 emission factor for grid connected power generation in year *y* calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (t CO_2/MWh)

AMS-I.D. states the use of "Tool 07: Methodological tool: Tool to calculate the emission factor for an electricity system (version 07.0)" to calculate the emission factor ($EF_{grid,y}$).

Based on the methodology AMS-I.D. Version 18.0., since Balsuyu Domanic Bundled SPPs is a new Greenfield project, project emissions is equal to the quantity of net electricity generation supplied by the project activity to the grid.

$$EG_{pj,y} = EG_{pj,facility,y}$$

where:

$EG_{pj,facility,y}$: Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y* (MWh)

PE_y: Project emissions in year y (tCO_2)

As per the methodology, *PEy* = 0. Project does not produce CO2 during its operation.

LE_y: Leakage emissions in year y (tCO_2)

As per the methodology (AMS-I.D.), leakage emission is not applicable to the project activity.

Given that PE_y and LE_y are zero, Emission reductions in year y (tCO_2) is:

$$ER_y = BE_y$$

[33] AMS-I.D. Version 18.0., p.7.

B.6.2. Data and parameters fixed ex ante

Data / Parameter Table 1. Emission Factor (EFgrid,CM,y)

Data / Parameter:	**EFgrid,CM,y**
Methodology reference	AMS-I.D. Version 18.0.
Data unit	tCO_2/MWh
Description	Combined margin CO_2 emission factor for the project electricity system in year
Measured/calculated /default	Calculated
Data source	The applied Combined margin for the project is 0.6482 tCO_2/MWh. (Ministry of Energy and Natural Resources of the Government of Turkey released on 06/10/2021)
Value(s) of monitored parameter	0.6482 tCO_2/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.
Measuring/reading/ recording frequency (if applicable)	Ex-ante determined and fixed for the 10-year crediting period.
Calculation method (if applicable)	CM = (BM x 0.25) + (OM x 0.75) As given by the Ministry of Energy and Natural Resources, built margin is 0.4153 and operating margin is 0.7258. (0.4153 x 0.25) + (0.7258 x 0.75) = 0.6482 tCO_2/MWh
QA/QC procedures	-
Purpose of data	Baseline emission calculation
Additional comments	-

B.6.3. Ex-ante calculation of emission reductions

According to the AMS-I.D., the emission factor ($EFCO_2$,grid,y) can be calculated in a transparent and conservative manner in the following two ways:

a) A combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the “Tool to calculate the Emission Factor for an electricity system”; or

b) The weighted average emissions (in t CO_2/MWh) of the current generation mix. The data of the year in which project generation occurs must be used.

Methodology further clarifies that calculations shall be based on data from a publicly available official source. Among these options, Option A is used to calculate the emission factor ($EF_{CO2,grid,y}$). Using Option B was not an option due to that weighted average emissions data is not available.

The tool that will be used to calculate the emission factor is "Tool to calculate the emission factor for an electricity system, Version 07.0. This tool determines the CO_2 emission factor for the displacement of electricity generated by power plants in an electricity system, by calculating the "combined margin" emission factor (CM) of the electricity system. The CM is the result of a weighted average of two emission factors pertaining to the electricity system: the "operating margin" (OM) and the "build margin" (BM).

OM and BM are already calculated by the Ministry of Energy and Natural Resources of the Government of Turkey and published publicly under the document name of "Turkey National Electricity Grid Emission Factor Factsheet" dated 6 Oct 2021. This is the most recent publicly available data. Combined Margin emission factor for Turkish National Grid System is:

CM=0.6482[34]

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

Year	Baseline emissions (t CO_2e)	Project emissions (t CO_2e)	Leakage (t CO_2e)	Emission reductions (t CO_2e)[35]
19/11/2019-31/12/2019	1014.7	0	0	**1014.7**
2020	8117.4	0	0	**8117.4**
2021	8117.4	0	0	**8117.4**
2022	8117.4	0	0	**8117.4**
2023	8117.4	0	0	**8117.4**
2024	8117.4	0	0	**8117.4**
2025	8117.4	0	0	**8117.4**
2026	8117.4	0	0	**8117.4**
2027	8117.4	0	0	**8117.4**
2028	8117.4	0	0	**8117.4**
01/01/2029-18/11/2029	7102.7	0	0	**7102.7**
Total	81174.1	0	0	**81174.1**
Total number				

[34] "Turkey National Electricity Grid Emission Factor Factsheet," Ministry of Energy and Natural Resources of Government of Turkey, 6 Oct 2021. 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. Access date 17 May 2022.

[35] See the excel sheet "BalsuyuDomanic_ERCalculations" for emission reduction calculations.

Year	Baseline emissions (t CO_2e)	Project emissions (t CO_2e)	Leakage (t CO_2e)	Emission reductions (t CO_2e)[35]
of crediting years	10 years			
Annual average over the crediting period	**8117.4**	**0**	**0**	**8117.4**

B.7. Monitoring plan

B.7.1. Data and parameters to be monitored

Data / Parameter Table 1.

Data / Parameter:	**$EG_{PJ,y}$**
Methodology reference	AMS- I.D.
Data unit	MWh/year
Description	Quantity of the net electricity generation supplied to the grid by the project in year y
Measured/calculated /default	Measured
Data source	Electricity generation is measured by the power meters (one for each SPP unit), which are installed, sealed, calibrated and controlled by the OEDAŞ. OEDAŞ is the private electricity distributor in the project region, Kutahya; and operate under the Law of Electricity Market[36]. Power meters are bi-directional, measuring both electricity generation and internal consumption. OEDAŞ applies remote reading to the power meters, and records the data to its online platform called "Unlicensed Electricity Generation Information System". Project owner get access to this platform with a user and password, and see the project's monthly electricity generation. Project owner, based on this monthly generation data, bills to the OEDAŞ to receive payment. Monitoring of the project activity will be based on the OEDAŞ- "Unlicensed Electricity Generation Information System/ Balsuyu Domanic Bundled SPPs data" and the bills sent to the OEDAŞ. These

[36] Specifically, "Regulation of Measurement and Measurement Devices" (Ölçü ve Ölçü Aletleri Yönetmeliği –in Turkish), Official Gazette Number 22000 dated 24.07.1994, is applicable. https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6381&MevzuatTur=7&MevzuatTertip=5. Access date 26 May 2022.

	sources will provide the electricity generation. Electricity consumption will be verified by the monthly electricity consumption bills received from the OEDAŞ. Difference between electricity generation and electricity consumption, will provide net electricity generation.
Value(s) of monitored parameter	12.523 GWh, yearly estimated electricity generation by the project activity (expected).
Measurement/ Monitoring equipment	Power meter is the monitoring equipment. Power meters for each SPP unit were installed by the OEDAŞ. Project owner has no control and information on it.[37]
Measuring/reading/ recording frequency	Monthly
Calculation method (if applicable)	-
QA/QC procedures	
Purpose of data	Project emission calculation
Additional comments	-

Data / Parameter Table 2.

Data / Parameter:	**tCO_2**
Methodology reference	GCC Environment and Social Safeguards Standard, v2.0
Data unit	Ton
Description	Reduction of CO_2 emissions due to implementation of the project activity
Measured/calculated /default	Calculated
Data source	Data/Parameter Table 1.
Value(s) of monitored parameter	8117.4 tCO_2 emission reduction (expected)
Measurement/ Monitoring equipment	**$EG_{PJ,y}$ (**from Data / Parameter Table 1)

[37] Since power meters were installed by the OEDAŞ, project owner has no information about it such as model name, serial numbers etc. In case of DOE requests such an information, it will officially be requested from OEDAŞ.Therefore technical information about the power meters could not be put into the table.

Measuring/reading/ recording frequency	Annually
Calculation method (if applicable)	CM x $EG_{PJ,y}$ Where CM=0.6482[38]
QA/QC procedures	QA/QC applicable to $EG_{PJ,y}$ data (Refer to Data / Parameter Table 1)
Purpose of data	UN SDG 9.4.1, SDG 13.2.2
Additional comments	-

Data / Parameter Table 3.

Data / Parameter:	Quantitative Employment
Methodology reference	GCC Environment and Social Safeguards Standard, v2.0
Data unit	Number of employees by the project activity
Description	Creating new job opportunities
Measured/calculated /default	Calculated
Data source	Official employment records
Value(s) of monitored parameter	4 employees/year
Measurement/ Monitoring equipment	Official employment records
Measuring/reading/ recording frequency	Annually
Calculation method (if applicable)	-
QA/QC procedures	-
Purpose of data	UN SDG 8.5
Additional	-

[38] "Turkey National Electricity Grid Emission Factor Factsheet," Ministry of Energy and Natural Resources of Government of Turkey, 6 Oct 2021. 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. Access date 17 May 2022.

comments	

B.7.2. Monitoring-program of risk management actions

There is no parameter determined within the project activity that is harmful and needs for continuous monitoring. See Section E. for more information.

First of all project does not produce any airborne emissions, on the contrary it indirectly reduces GHG and other air pollutants from the NGST by generating clean energy.

Operation of the Balsuyu Domanic Bundled SPPs does not produce any waste on a routine bases, including solid and wastewater. Solid wastes may only occur due to breakdown of the solar power equipment. In these cases, equipment is sent back to the manufacturer for repairment or replacement if it is within the range of manufacturing guarantee period. In case of equipment reach to the end of its life or broken, they are stored at the project site and will be disposed as per the Electrical and Electronic Waste Control Regulation[39]. Disposal process includes giving out these e-wastes to the authorized recycling companies and these companies dispose them as per the regulations. Recycling companies are very common in Turkey and recycling such wastes are their business. These companies can only operate after receiving the required licenses for transporting and processing of electronic wastes from the Ministry of Environment Urbanization and Climate Change of the Government of Turkey.

Since electronic wastes produce rarely in these solar power plants, there is no need for a routine monitoring procedure.

B.7.3. Sampling plan

Not Applicable. No sampling plan is needed.

B.7.4. Other elements of the monitoring plan

For Quantity of Net Electricity Generation by the project activity

Monitoring equipment for the project activity is power meter. Power meters in Turkey controlled by the entities which purchase the electricity. Under normal conditions, project owners have no control on these power meters.

Power meters for the project activity were installed by the OEDAŞ, which is the electricity distributor in the project region, Kutahya. OEDAŞ installed one main power meter for each SPP unit, and sealed them. Regular calibration of the power meter is under the responsibility of the OEDAŞ.

[39] Electrical and Electronic Waste Control Regulation (Atık Elektrikli ve Elektronik Eşyaların Kontrolü Yönetmeliği-in Turkish), Official Gazette number 28300 dated 22.05.2012. https://www.resmigazete.gov.tr/eskiler/2012/05/20120522-5.htm. Access date 19 May 2022.

Project owner has no control and information on it. For quality control, OEDAŞ follows its own procedure as per the regulations based on the Law on Electricity Market.[40]

In summary, monitoring equipment is the power meter installed by the OEDAŞ. Electricity generation data is obtained from the measurement of the power meter. OEDAŞ applies remote reading to the power meters, and records the data to its online platform called "Unlicensed Electricity Generation Information System". Project owner get access to this platform with a user and password, and see the project's monthly electricity generation. Project owner, based on this monthly generation data, send the bill to the OEDAŞ to receive payment.

Electricity consumption will be verified by the monthly electricity consumption bills received from the OEDAŞ. Difference between electricity generation and electricity consumption, will provide net electricity generation.

In related to the monitoring plan, project owner's finance department will archive the electricity generation and consumption bills. Electricity generation data is also recorded at OEDAŞ-Unlicensed Electricity Generation Information System" platform. Annually, net electricity data will be sent to the carbon consultant (see Appendix 1) for calculation of annual tCO_2 emission reduction.

Section C. Start date, crediting period type and duration

C.1. Start date of the Project Activity

Project start date is 19 November 2019. This is at the same time, provisional acceptance date of the project.

C.2. Expected operational lifetime of the Project Activity

Expected operational lifetime of the project activity 25 years.

C.3. Crediting period of the Project Activity

C.3.1. Fixed crediting period

Crediting period is fixed as 10 years.

C.3.2. Start date of the crediting period

Start date of the crediting period 19 November 2019.

[40] "Regulation of Measurement and Measurement Devices" (Ölçü ve Ölçü Aletleri Yönetmeliği –in Turkish), Official Gazette Number 22000 dated 24.07.1994, is applicable.
https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6381&MevzuatTur=7&MevzuatTertip=5. Access date 26 May 2022.

C.3.3. Duration of the crediting period

Crediting period is fixed as 10 years.
Crediting period starts on 19 Nov 2019 and ends on 18 Nov 2029 (both days included)

Section D. Environmental impacts

D.1. Analysis of environmental impacts

See Section E.1 of this report.

D.2. Environmental impact assessment

Balsuyu Domanic Bundled SPPs is a small scale project activity. Each of the power plant unit involved in the bundle has about 1MW or less installed capacity. Such small projects, due to their minimal environmental impact, are exempted from conducting environmental impact assessment in Turkey. According to the Regulation on Environmental Impact Assessment, photovoltaic solar power plants with an installed capacity of less than 10 MWe are exempted from environmental impact assessment. [41]

Photovoltaic solar power projects, normally, has minimal environmental effects and more environmental benefits. The most important environmental advantages of such projects are that during the operation they do not emit air pollutants, including greenhouse gases, into the atmosphere; they do not produce waste water, solid waste and hazardous waste. They also do not cause noise during energy generation. From these perspectives, it can be stated that Balsuyu Domanic Bundled SPPs is an environmentally friendly project. See Section E.1. for further information.

Section E. Environmental and social safeguards

[41] Regulation on Environmental Impact Assessment" (Çevresel Etki Değerlendirme Yönetmeliği- in Turkish), official gazette number 29186, dated as 25.11.2014. https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=20235&MevzuatTur=7&MevzuatTertip=5. Access date 20 May 2022.

E.1. Environmental safeguards

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Impact of Project Activity on		**Information on Impacts, Do-No-Harm Risk Assessment and Establishing Safeguards**									**Project Owner's Conclusion**	
		Description of Impact *(both positive and negative)*	**Legal requirement / Limit**	**Do-No-Harm Risk Assessment**			**Risk Mitigation Action Plans**		**Do-No-Harm Residual Risk Assessment**		**Self-Declaration**	
				Not Applicable *(No actions required)*	**Harmless** *(No actions required)*	**Harmful** *(Actions required)*	**Operational Controls**	**Program of Risk Management Actions**	**Re-evaluate Risks**	**Monitoring**	**Explanation of Conclusion**	**The Project Activity will not cause any harm**
Environmental impacts on the identified categories[42] indicated below.	*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 **Not Applicable** (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 **Harmless** (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 **Harmful** (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 **Harmful**.*	*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 **Harmful**.*	*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 **Harmless** (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 **Yes** or and -1 for **No**)*
Environmental Safeguards												
Environment *- Air*	*SO_x emissions*	Project does not produce SOx emission.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	NO_x emissions	Project does not produce NOx emission	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	CO_2 emissions	Project does not produce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0

[42] sourced from the CDM SD Tool and the sample reports are available (https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx)

		CO2 emission										
	CO emissions	Project does not produce CO emission	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Suspended particulate matter (SPM) emissions	Project does not produce SPM emission	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Fly ash emissions	Project does not produce fly ash emission	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Non-Methane Volatile Organic Compounds (NMVOCs)	Project does not produce NMVOCs emission	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Odor emissions	Project does not produce odor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Noise Pollution	During the construction project may create noise. But since project site is far away from the closest residential area and there are no environmentally sensitive locations nearby, no actions needed as per the regulation. Therefore noise is not accepted as an environmental risk During operation, project does not cause	Evaluation of Environmental Noise and Management Regulation[43]	N/A	Harmless		N/A	N/A	N/A	N/A	N/A	0

[43] Evaluation of Environmental Noise and Management Regulation (Çevresel Gürültünün Değerlendirilmesi ve Yönetimi-in Turkish), official gazette number 27601, dated 04.06.2010. https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=14012&MevzuatTur=7&MevzuatTertip=5. Access date 19 May 2022.

		noise.										
	Others	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Add more rows if required											
Environment *- Land*	*Solid waste Pollution from Plastics*	Project does not produce plastic wastes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Solid waste Pollution from Hazardous wastes	Project does produce hazardous wastes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Solid waste Pollution from Bio-medical wastes	Project will not produce bio-medical wastes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Solid waste Pollution from E-wastes	Operation of the project activity does not produce e-wastes , normally. However, some equipment (panels and inverters) may breakdown and needed to be disposed.	Electrical and Electronic Waste Control Regulation [44]	N/A	Harmless	-	E-wastes will be disposed in accordance with the regulations.	E-wastes will be disposed in accordance with the regulations	Risk is eliminated.	Project will comply with the Electrical and Electronic Waste Control Regulation. If e-waste is generated, wastes will be delivered to authorized waste recycling companies which are licensed by the Ministry of Environment Urbanization and	Project will comply with the Electrical and Electronic Waste Control Regulation. If e-waste is generated, wastes will be delivered to authorized waste recycling companies which are licensed by the Ministry of Environment Urbanization and	+1

[44] Electrical and Electronic Waste Control Regulation (Atık Elektrikli ve Elektronik Eşyaların Kontrolü Yönetmeliği-in Turkish), Official Gazette number 28300 dated 22.05.2012. https://www.resmigazete.gov.tr/eskiler/2012/05/20120522-5.htm. Access date 19 May 2022.

										Climate Change for recycling.	Climate Change for recycling.	
	Solid waste Pollution from Batteries	Project activity, normally, does not produce battery waste. Because batteries do not exist within the project activity. Generated electricity directly is transmitted to the NGST.	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A	N/A	0
	Solid waste Pollution from end of life products/ equipment	At the end of the project lifetime, solid wastes such as solar panels, underground cables, inverters etc. will need to be disposed and recycled properly.	Electrical and Electronic Waste Control Regulation [45]	N/A	Harmless	-	Will comply with the Electrical and Electronic Waste Control Regulation for proper disposal and recycle.	Will comply with the Electrical and Electronic Waste Control Regulation for proper disposal and recycle.	Risk is eliminated.	At the end of the project life time, e-wastes will be recycled as per the Electrical and Electronic Waste Control Regulation.	At the end of the project life time, e-wastes will be recycled as per the Electrical and Electronic Waste Control Regulation.	+1
	Soil Pollution from Chemicals (including Pesticides, heavy metals, lead, mercury)	No chemicals used in the project that could cause soil pollution	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Soil erosion	Project does not cause soil erosion.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Others	-	-	-	-	-	-	-	-	-	-	

[45] Electrical and Electronic Waste Control Regulation (Atık Elektrikli ve Elektronik Eşyaların Kontrolü Yönetmeliği-in Turkish), Official Gazette number 28300 dated 22.05.2012. https://www.resmigazete.gov.tr/eskiler/2012/05/20120522-5.htm. Access date 19 May 2022.

Environment *- Water*	*Reliability/ accessibility of water supply*	There is no water consumption in the project activity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Water Consumption from ground and other sources	There is no water consumption activity in the project	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Generation of wastewater	Project does not generate waste water	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Wastewater discharge without/with insufficient treatment	Project does not generate waste water	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Pollution of Surface, Ground and/or Bodies of water	Project does not produce waste water, does not produce emission to the atmosphere and does not produce solid waste.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Others	-	-	-	-	-	-	-	-	-	-	
Environment *– Natural Resources*	*Conserving mineral resources*	N/A	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	0
	Protecting/ enhancing plant life	N/A	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	0
	Protecting/ enhancing species diversity	N/A	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	0
	Protecting/ enhancing forests	N/A	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	0
	Protecting/ enhancing	N/A	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	0

	other depletable natural resources											
	Conserving energy	N/A	N/A	N/A	-	-	N/A	N/A	N/A	N/A	N/A	0
	Replacing fossil fuels with renewable sources of energy	Project activity replaces fossil fuels (from the NGST) by providing energy from solar power.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
	Replacing ODS with non-ODS refrigerants	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Others	-	-	-	-	-	-	-	-	-	-	-

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.

Net Score:	**+2**
Project Owner's Conclusion in PSF:	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**

Social impacts on the identified categories[46] indicated below.	*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 **Not Applicable** (No actions required)*	*If social impacts are anticipated, but are expected to be in compliance with applicable national regulatory requirements/ legal limits, then it the Project Activity is unlikely to cause any harm (is safe) and shall be indicated as **Harmless** (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 **Harmful** (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 **Harmful**.*	*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 **Harmful**.*	*Re-evaluate risks after Risk Mitigation Actions 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 **Harmless** (No actions required)*	*Describe the monitoring approach and the parameters to be monitored for each impact that has been identified as Harmful 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 **Yes** or and -1 for **No**)*
Social Safeguards												
Social - *Jobs*	*Long-term jobs (> 1 year) created/ lost*	Project employs 4 employee in total as a long term employee	Related national regulations applicable	N/A	N/A	N/A	N/A	N/A	N/A	The employment records will be monitored through SGK (Social Security Institution) records or payroll records.	Employment will be monitored and recorded.	+1
	New short-term jobs (< 1 year) created/ lost	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	0
	Sources of income generation increased / reduced	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	0
Social - *Health & Safety*	*Disease prevention*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	0
	Reducing / increasing accidents	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	0

[46] sourced from the CDM SD Tool and the sample reports are available (https://www4.unfccc.int/sites/sdcmicrosite/Pages/SD-Reports.aspx)

	Reducing / increasing crime	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Reducing / increasing food wastage	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Reducing / increasing indoor air pollution	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Efficiency of health services	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Sanitation and waste management	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Other health and safety issues	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Add more rows if required	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
Social - *Education*	*Job related training imparted or not*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Educational services improved or not	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Project - related knowledge dissemination effective or not	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Other educational issues	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Add more rows if required	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*

Social - *Welfare*	*Improving/ deteriorating working conditions*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*0*
	Community and rural welfare	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
	Poverty alleviation (more people above poverty level)	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
	Improving / deteriorating wealth distribution/ generation of income and assets	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
	Increased or / deteriorating municipal revenues	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
	Women's empowerment	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
	Reduced / increased traffic congestion	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
	Other social welfare issues	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
	Add more rows if required	*N/A*	*N/A*	*N/A*	*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 society. Score is obtained after adding the individual scores in each of the rows in the last column of the above table.

Net Score:	**+1**
Project Owner's	The Project Owner confirms that the Project Activity will not cause any net harm to society.

Conclusion in PSF:	

Section F. United Nations Sustainable Development Goals (SDG)

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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?**
Describe UN SDG targets and indicators *See: https://unstats.un.org/sdgs/indicators/indicators-list/*	*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*	*Define project-level SDGs by suitably modifying and customizing UN/ Country-level SDGs to the project scope.* ***For guidance see:*** *Integrating the SDGs into Corporate Reporting- A Practical Guide: https://www.unglobalcompact.org/docs/publications/Practical_Guide_SDG_Reporting.pdf* *Case-study from Coca-Cola and other organizations to develop organization-wide SDGs (page 114): https://pub.iges.or.jp/pub/realising-transformative-potential-sdgs*	*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)*
Goal 1: End poverty in all its forms everywhere	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Goal 3. Ensure	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*

healthy lives and promote well-being for all at all ages									
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Goal 5. Achieve gender equality and empower all women and girls	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Goal 6. Ensure availability and sustainable management of water and sanitation for all	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix 7.2.1 Renewable energy share in the total final energy consumption	Yes	Increase the share of renewables in the National Grid of Turkey.	Provide 12.52 GWh clean energy annually with an installed capacity of 8.316 MWe.	Increase the share of renewables in the NGST-National Grid System of Turkey.	Project increases the renewable energy share in Turkey's energy production mix. It annually provides 12.52 GWh clean energy to the NGST.	Annual electricity generation of the project activity will prove its contribution to increase share of renewables in NGST.	Project has been producing energy successfully since its start date. There are no technical, financial and legal obstacles that could prevent the project to continue its operation.	Yes
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.5 By 2030, achieve full and productive employment and decent work for all	Yes	Providing job opportunities to people and enhance the quality of life for local people.	Provide short term jobs during construction; long term jobs during operation.	Provide a minimum number of 4 employees. Long term job goal started to be implemented	Provide short term jobs during construction; long term jobs during operation.	Check the Social Security Records of the employees	Project has to employ qualified people to be able to operate the power plants. Therefore, achieving this	Yes

	women and men, including for young people and persons with disabilities, and equal pay for work of equal value. 8.5.1 Average hourly earnings of employees, by sex, age, occupation and persons with disabilities				with the start date of the project.			SDG is certain.	
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	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	Yes	Provide clean and environmentally sound technologies that will result in CO2 emission reduction	Project activity results in 8117.4 tCO2 emission reduction annually within the project boundary (NGST system).	Project activity results in 8117.4 tCO2 emission reduction annually within the project boundary (NGST system).	Project was implemented and started to generate clean electricity.	Annual electricity generation (12.52 GWh expected) and tCO2 emission reduction by the project activity will be calculated.	Project has started to generated clean electricity. There are no technical, financial and legal obstacles that could prevent the project to continue its operation.	Yes

	action in accordance with their respective capabilities 9.4.1 CO2 emission per unit of value added								
Goal 10. Reduce inequality within and among countries	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Goal 12. Ensure sustainable consumption and production patterns	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Goal 13. Take urgent action to combat climate change and its impacts	13.2 Integrate climate change measures into national policies, strategies and planning 13.2.2 Total greenhouse gas emissions per year	Yes	Achieving CO2 emission reduction in the National Grid System of Turkey	Project activity results in 8117.4 tCO2 emission reduction annually within the project boundary (NGST system).	Project activity results in 8117.4 tCO2 emission reduction annually within the project boundary (NGST system).	Project was implemented and started to generate clean electricity.	Annual electricity generation (12.52 GWh expected) and tCO2 emission reduction by the project activity will be calculated.	Project has started to generated clean electricity. There are no technical, financial and legal obstacles that could prevent the project to continue its operation.	Yes
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*

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	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
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*

SUMMARY	**Targeted**	**Likely to be Achieved**
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

Local stakeholder consultation process includes holding meetings for the local people who are directly affected by the project activity.

For Balsuyu Domanic Bundled SPP project, local stakeholder meeting was held on 27 May 2022. Meeting date and location was announced at least ten days in advance, and posted on several locations. Posters were placed at locations where villagers can recognize them quickly and easily. Among these locations, there are pastry shop, mosque, village fountain etc.

Figure 8 Meeting annoucements

Meeting was conducted at the Tea House, located at the downtown of the village. This location enabled more participation to the meeting. At the meeting, description of project activity, its purpose

and the climate change concept was successfully delivered to the meeting participants through verbal communication. At the end of the meeting, participants stated their positive comments to the project activity. They all stated that they are happy about the project because it does not give harm to environment and produce clean energy. Among the participants, there was the village head, called Muhtar in Turkish, which is the official government representative in village and neighborhoods. Muhtar especially stated that he is proud of the project; and it provided job opportunities to locals.

Meeting was successful in general. But, the only point is that participation to the meeting was less than expected. The reason of that, at this time of the year, villagers are so busy for agricultural activities.

In addition to the meeting, one to one verbal communications with villagers were also so positive. Project did not change their life, did not provide negative consequences, on the contrary provided job opportunities to local people. In summary project is welcomed by the community.

Participant comments are provided at the Appendix 6.

Figure 9 Local Stakeholder Meeting at Saruhanlar Village, 26 May 2022

G.2. Summary of comments received

Meeting participants stated their positive comments to the project activity. They all stated that they are happy about the project because it does not give harm to environment and produce clean energy. Among the participants, there was the village head, called Muhtar in Turkish, which is the official government representative in village and neighborhoods. Muhtar especially stated that he is proud of the project; it provided job opportunities to local people. Written comments and their translations are provided in Appendix 6.

G.3. Consideration of comments received

The participants were given the contact information of the project owners for any further comments.

Section H. Approval and authorization

>>

Appendix 1. Contact information of project owners

Organization name	Alperen Elektrik Üretim A.Ş.
Country	Turkey
Address	Egemenlik Mahallesi Doğu Çevre Yolu Blv. Shell Petrol Ofisi No. 9/A Dulkadiroğlu / Kahramanmaraş/ Turkey
Telephone	+90 5332170046
Fax	-
E-mail	abalsuyu@gmail.com
Website	www.balsuyu.com
Contact person	Ahmet Balsuyu

Appendix 2. Affirmation regarding public funding

N/A

Appendix 3. Applicability of methodology(ies)

N/A

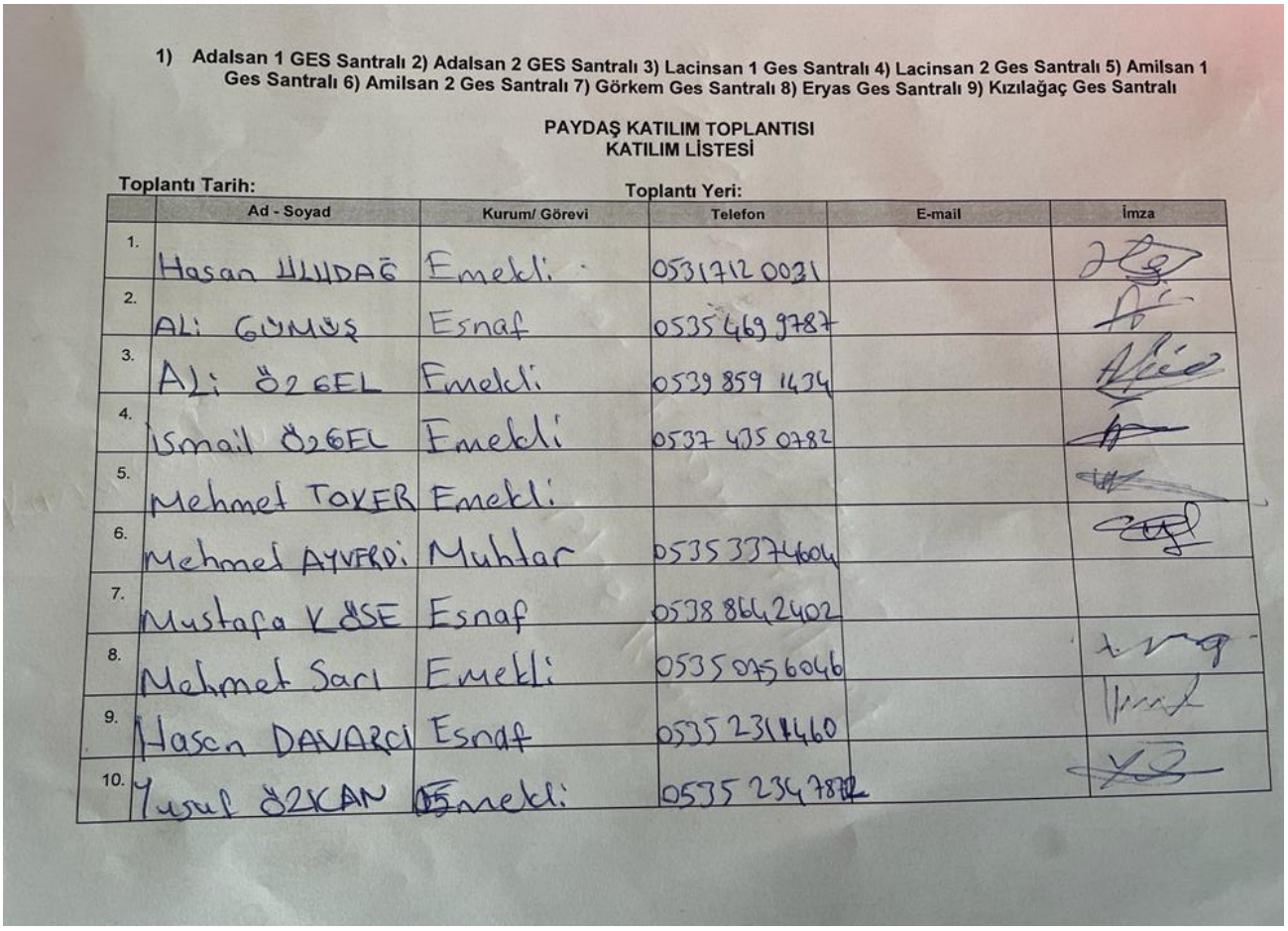
Appendix 4. Further background information on ex ante calculation of emission reductions

N/A

Appendix 5. Further background information on monitoring plan

N/A

Appendix 6. Summary report of comments received from local stakeholders



1) Adalsan 1 GES Santralı 2) Adalsan 2 GES Santralı 3) Lacinsan 1 Ges Santralı 4) Lacinsan 2 Ges Santralı 5) Amilsan 1 Ges Santralı 6) Amilsan 2 Ges Santralı 7) Görkem Ges Santralı 8) Eryas Ges Santralı 9) Kızılağaç Ges Santralı

PAYDAŞ KATILIM TOPLANTISI
KATILIM LİSTESİ

Toplantı Tarih: **Toplantı Yeri:**

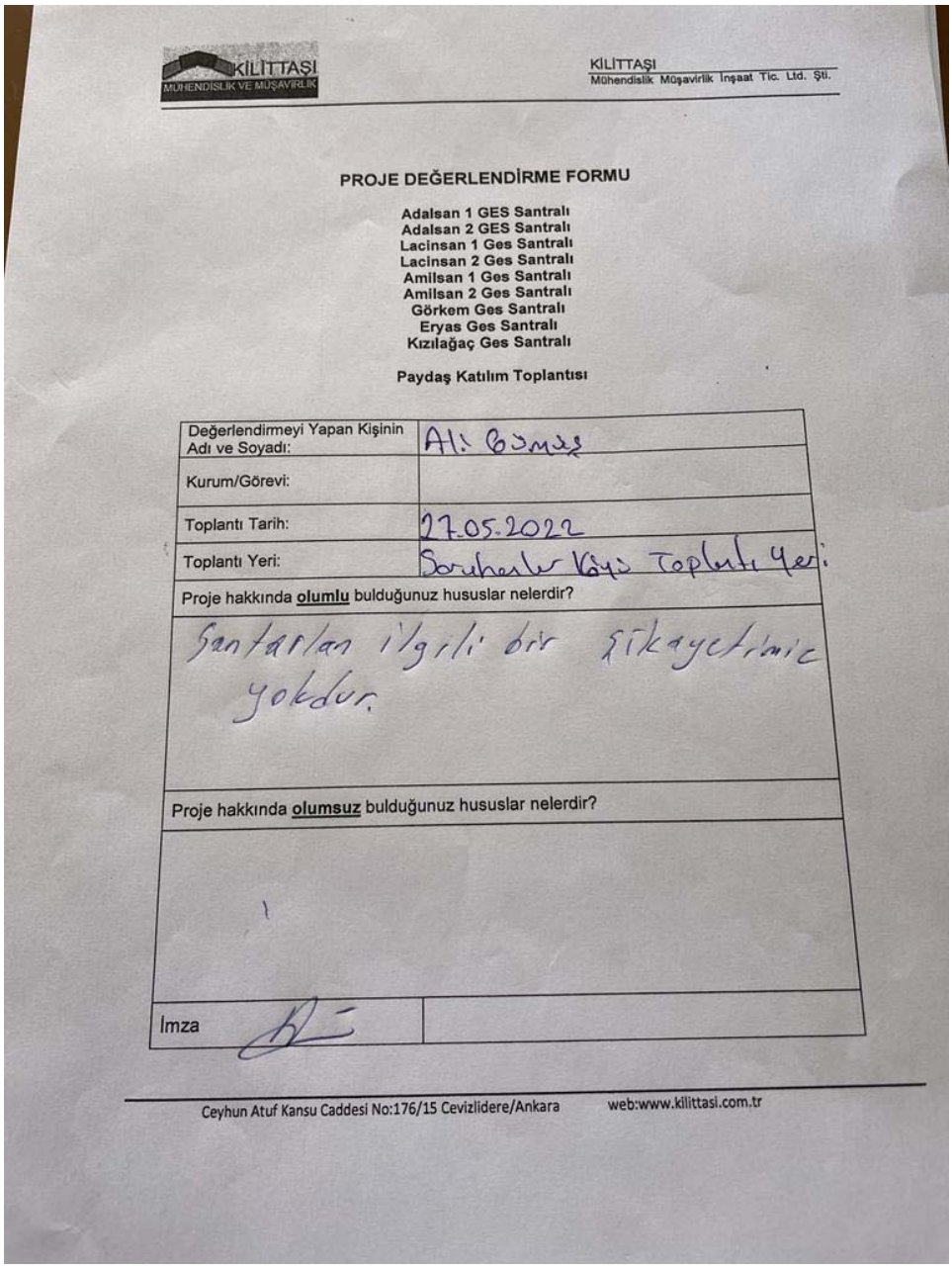
	Ad - Soyad	Kurum/ Görevi	Telefon	E-mail	İmza
1.	Hasan ULUDAĞ	Emekli	05317120031		
2.	ALİ GÜMÜŞ	Esnaf	05354699787		
3.	ALİ ÖZGEL	Emekli	0539 859 1434		
4.	İsmail ÖZGEL	Emekli	0537 435 0782		
5.	Mehmet TAKER	Emekli			
6.	Mehmet AYVERDİ	Muhtar	05353374604		
7.	Mustafa KÖSE	Esnaf	0538 8642402		
8.	Mehmet Sarı	Emekli	05350756046		
9.	Hasan DAVARCI	Esnaf	05352314460		
10.	Yusuf ÖZKAN	Emekli	05352347872		

1) Adalsan 1 GES Santralı 2) Adalsan 2 GES Santralı 3) Lacinsan 1 Ges Santralı 4) Lacinsan 2 Ges Santralı 5) Amilsan 1 Ges Santralı 6) Amilsan 2 Ges Santralı 7) Görkem Ges Santralı 8) Eryas Ges Santralı 9) Kızılağaç Ges Santralı

PAYDAŞ KATILIM TOPLANTISI
KATILIM LİSTESİ

Toplantı Tarih: **Toplantı Yeri:**

	Ad - Soyad	Kurum/ Görevi	Telefon	E-mail	İmza
11.	Kazım GÖZACAN	Emekli	05378773333		
12.	Süleyman ORHAN	Emekli	0539 893 0706		
13.	Şükrü Orhan	Emekli	0534 655 3105		
14.	Bezir ÖZDEMİR	Emekli	05367700990		
15.	Fatih OĞUZ	Esnaf	05365288317		
16.					
17.					
18.					
19.					
20.					



KİLİTTAŞI
MÜHENDİSLİK VE MÜŞAVİRLİK

KİLİTTAŞI
Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.

PROJE DEĞERLENDİRME FORMU

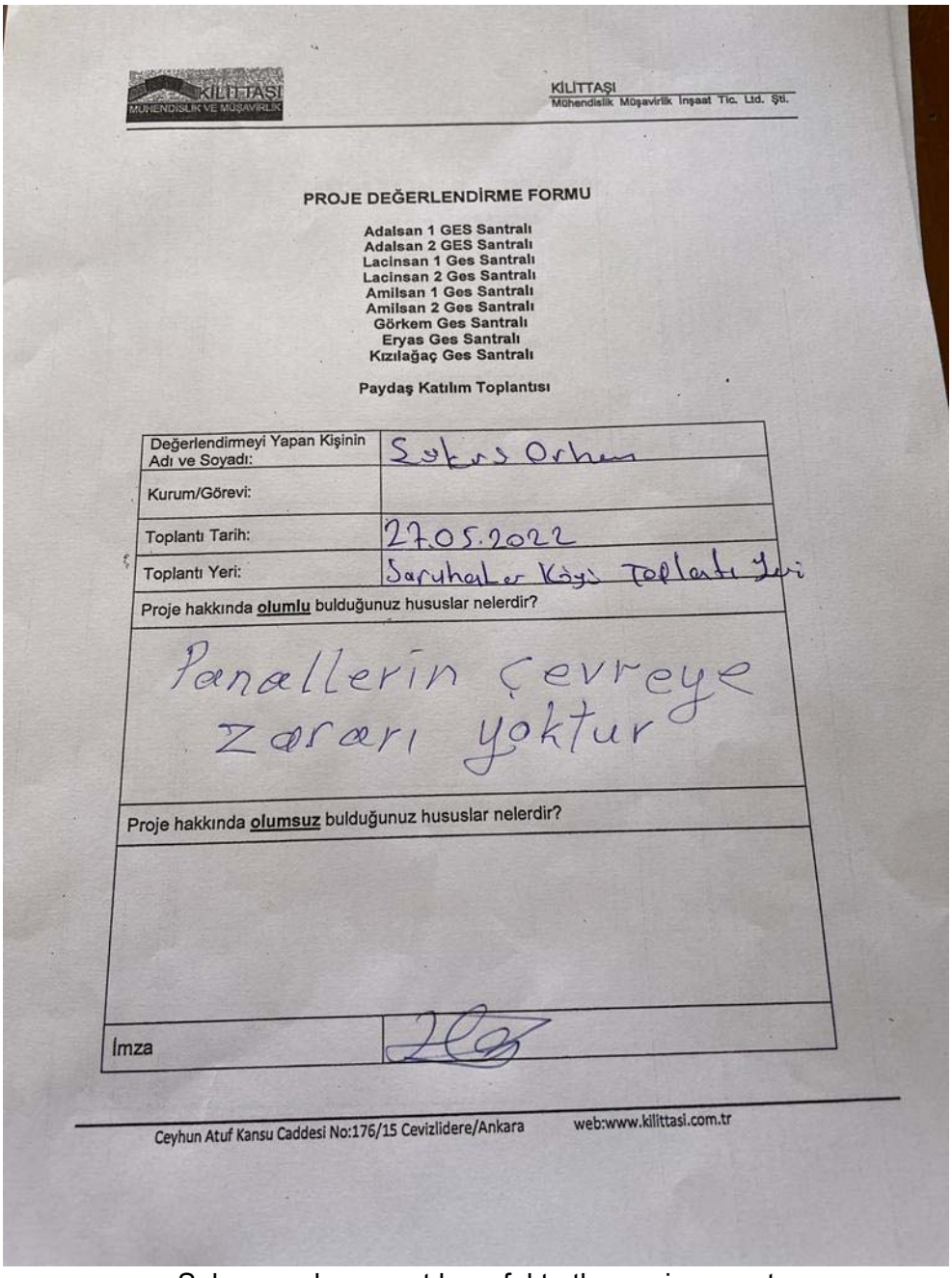
Adalsan 1 GES Santralı
Adalsan 2 GES Santralı
Lacinsan 1 Ges Santralı
Lacinsan 2 Ges Santralı
Amilsan 1 Ges Santralı
Amilsan 2 Ges Santralı
Görkem Ges Santralı
Eryas Ges Santralı
Kızılağaç Ges Santralı

Paydaş Katılım Toplantısı

Değerlendirmeyi Yapan Kişinin Adı ve Soyadı:	Ali Bozkuş
Kurum/Görevi:	
Toplantı Tarih:	27.05.2022
Toplantı Yeri:	Sarıhasanlar Köyü Toplantı Yeri
Proje hakkında **olumlu** bulduğunuz hususlar nelerdir?	Santralın ilgili bir şikayetimiz yokdur.
Proje hakkında **olumsuz** bulduğunuz hususlar nelerdir?	
İmza	

Ceyhun Atuf Kansu Caddesi No:176/15 Cevizlidere/Ankara web:www.kilittasi.com.tr

We don’t have complaints about the power plant.



KİLİTTAŞI
MÜHENDİSLİK VE MÜŞAVİRLİK

KİLİTTAŞI
Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.

PROJE DEĞERLENDİRME FORMU

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Lacinsan 2 Ges Santralı
Amilsan 1 Ges Santralı
Amilsan 2 Ges Santralı
Görkem Ges Santralı
Eryas Ges Santralı
Kızılağaç Ges Santralı

Paydaş Katılım Toplantısı

Değerlendirmeyi Yapan Kişinin Adı ve Soyadı:	Şükrü Orhan
Kurum/Görevi:	
Toplantı Tarih:	27.05.2022
Toplantı Yeri:	Saruhanlar Köyü Toplantı Yeri

Proje hakkında **olumlu** bulduğunuz hususlar nelerdir?

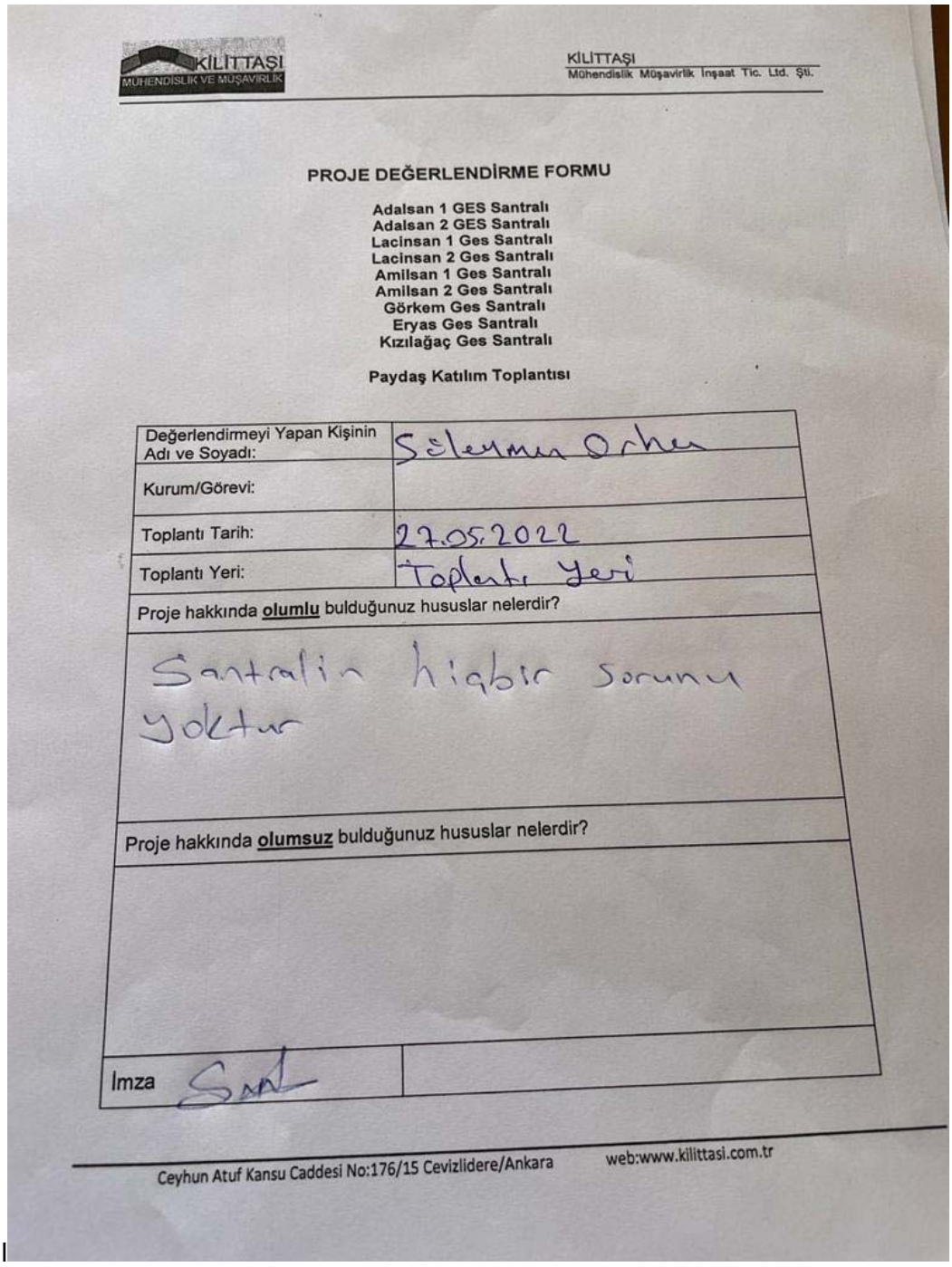
Panellerin çevreye zararı yoktur

Proje hakkında **olumsuz** bulduğunuz hususlar nelerdir?

İmza

Ceyhun Atuf Kansu Caddesi No:176/15 Cevizlidere/Ankara web:www.kilittasi.com.tr

Solar panels are not harmful to the environment



KİLİTTAŞI
MÜHENDİSLİK VE MÜŞAVİRLİK

KİLİTTAŞI
Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.

PROJE DEĞERLENDİRME FORMU

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Lacinsan 2 Ges Santralı
Amilsan 1 Ges Santralı
Amilsan 2 Ges Santralı
Görkem Ges Santralı
Eryas Ges Santralı
Kızılağaç Ges Santralı

Paydaş Katılım Toplantısı

Değerlendirmeyi Yapan Kişinin Adı ve Soyadı:	Süleyman Orhan
Kurum/Görevi:	
Toplantı Tarih:	27.05.2022
Toplantı Yeri:	Toplantı Yeri

Proje hakkında **olumlu** bulduğunuz hususlar nelerdir?

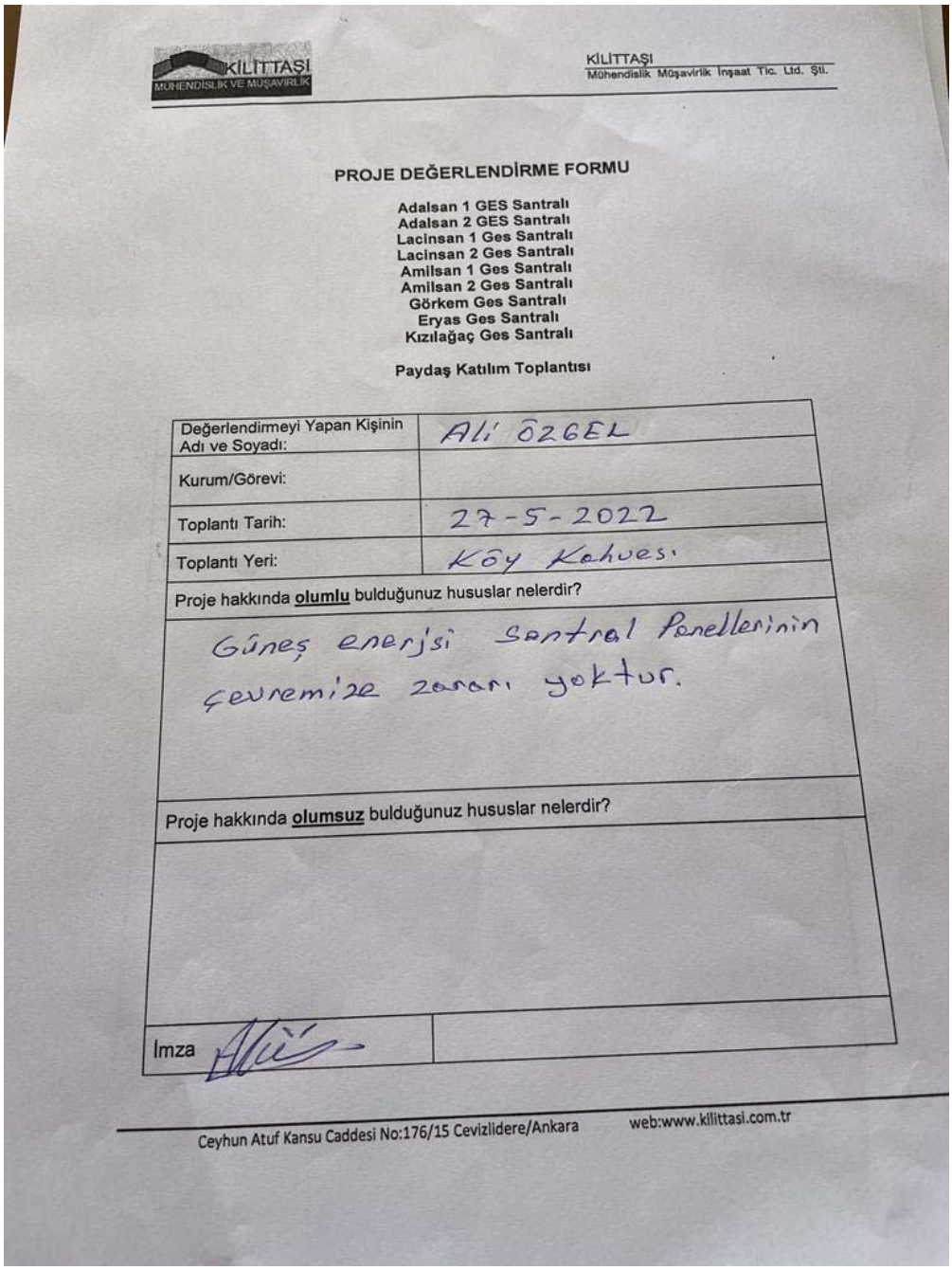
Santralin hiçbir sorunu yoktur

Proje hakkında **olumsuz** bulduğunuz hususlar nelerdir?

İmza

Ceyhun Atuf Kansu Caddesi No:176/15 Cevizlidere/Ankara web:www.kilittasi.com.tr

There is no complaints about the power plant.



KİLİTTAŞI
MÜHENDİSLİK VE MÜŞAVİRLİK

KİLİTTAŞI
Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.

PROJE DEĞERLENDİRME FORMU

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Lacinsan 1 Ges Santralı
Lacinsan 2 Ges Santralı
Amilsan 1 Ges Santralı
Amilsan 2 Ges Santralı
Görkem Ges Santralı
Eryas Ges Santralı
Kızılağaç Ges Santralı

Paydaş Katılım Toplantısı

Değerlendirmeyi Yapan Kişinin Adı ve Soyadı:	Ali ÖZGEL
Kurum/Görevi:	
Toplantı Tarih:	27-5-2022
Toplantı Yeri:	Köy Kahvesi

Proje hakkında **olumlu** bulduğunuz hususlar nelerdir?

Güneş enerjisi santral panellerinin çevremize zararı yoktur.

Proje hakkında **olumsuz** bulduğunuz hususlar nelerdir?

İmza

Ceyhun Atuf Kansu Caddesi No:176/15 Cevizlidere/Ankara web:www.kilittasi.com.tr

Solar panels are not harmful to the environment

Project Submission Form

KİLİTTAŞI
MÜHENDİSLİK VE MÜŞAVİRLİK

KİLİTTAŞI
Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.

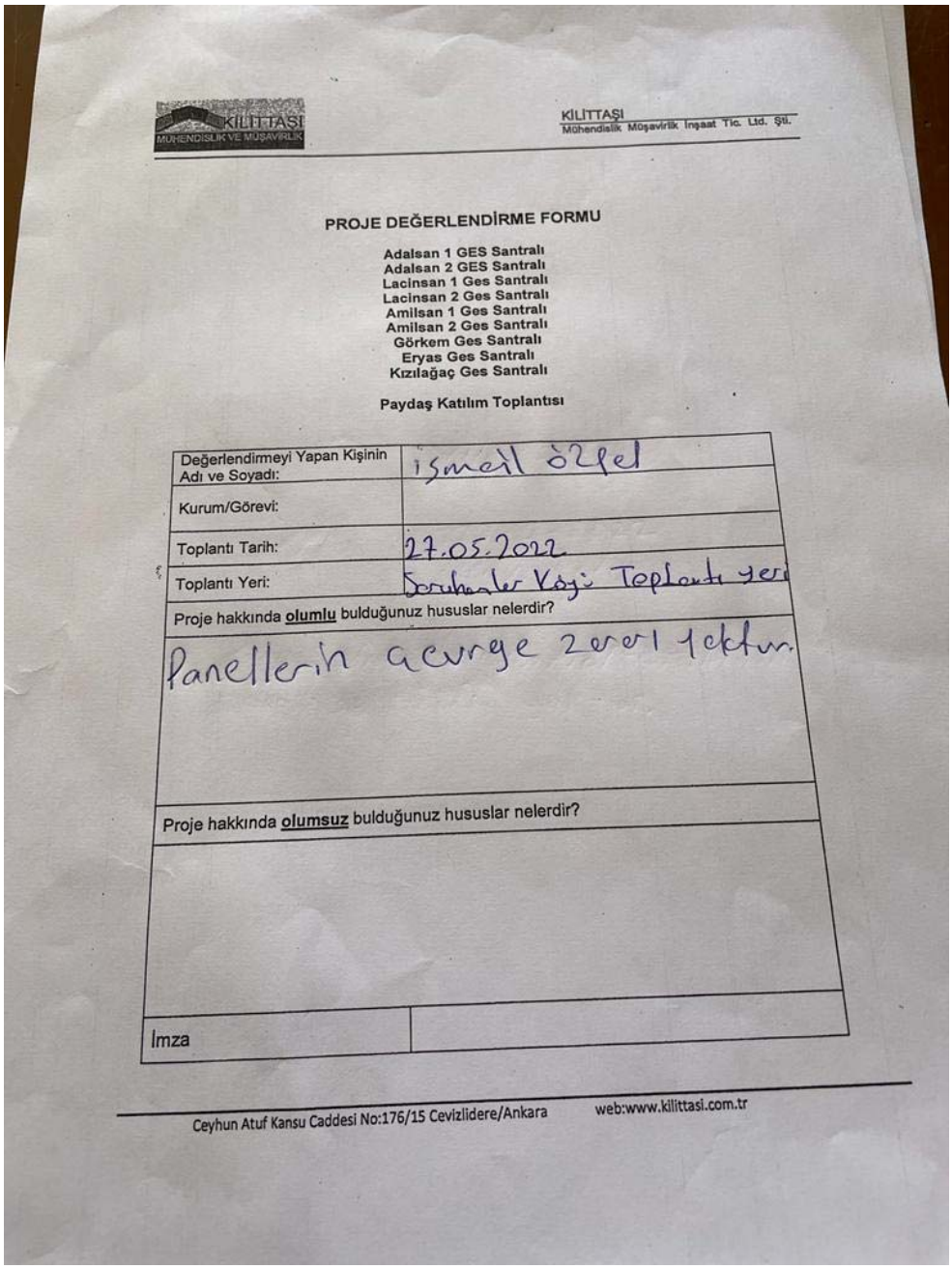
PROJE DEĞERLENDİRME FORMU

Adalsan 1 GES Santralı
Adalsan 2 GES Santralı
Lacinsan 1 Ges Santralı
Lacinsan 2 Ges Santralı
Amilsan 1 Ges Santralı
Amilsan 2 Ges Santralı
Görkem Ges Santralı
Eryas Ges Santralı
Kızılağaç Ges Santralı

Paydaş Katılım Toplantısı

Değerlendirmeyi Yapan Kişinin Adı ve Soyadı:	Kazım Gökçay
Kurum/Görevi:	
Toplantı Tarih:	27.05.2022
Toplantı Yeri:	Sarıhanlar Köyü Toplantı Yeri
Proje hakkında **olumlu** bulduğunuz hususlar nelerdir?	
uygundur	
Proje hakkında **olumsuz** bulduğunuz hususlar nelerdir?	
X	
İmza	

Ceyhun Atuf Kansu Caddesi No:176/15 Cevizlidere/Ankara web:www.kilittasi.com.tr



KİLİTTAŞI
MÜHENDİSLİK VE MÜŞAVİRLİK

KİLİTTAŞI
Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.

PROJE DEĞERLENDİRME FORMU

Adalsan 1 GES Santralı
Adalsan 2 GES Santralı
Lacinsan 1 Ges Santralı
Lacinsan 2 Ges Santralı
Amilsan 1 Ges Santralı
Amilsan 2 Ges Santralı
Görkem Ges Santralı
Eryas Ges Santralı
Kızılağaç Ges Santralı

Paydaş Katılım Toplantısı

Değerlendirmeyi Yapan Kişinin Adı ve Soyadı:	İsmail özpel
Kurum/Görevi:	
Toplantı Tarih:	27.05.2022
Toplantı Yeri:	Sarıhamzalar Köyü Toplantı yeri

Proje hakkında **olumlu** bulduğunuz hususlar nelerdir?

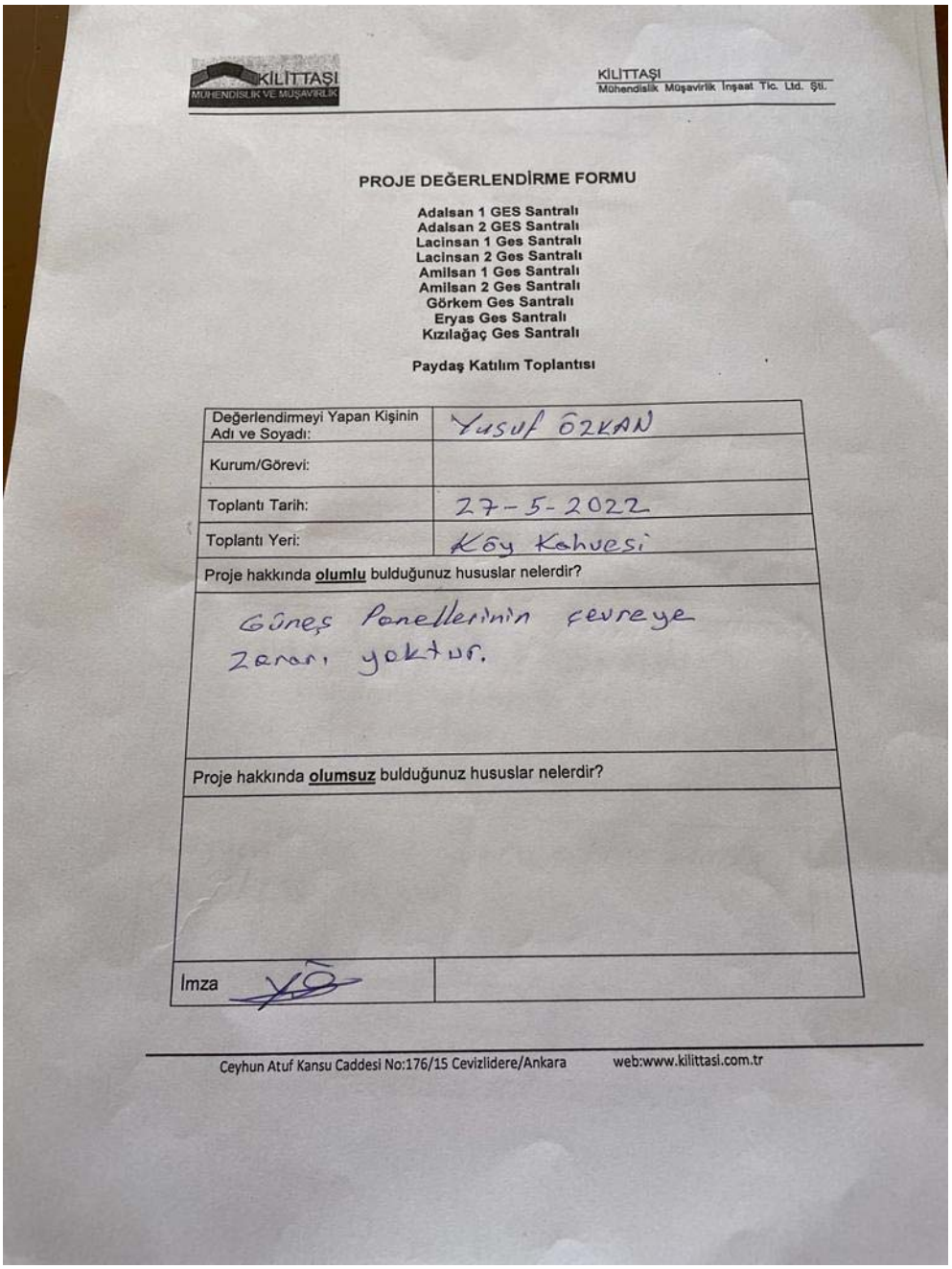
Panellerin çevreye zararı yoktur.

Proje hakkında **olumsuz** bulduğunuz hususlar nelerdir?

İmza

Ceyhun Atuf Kansu Caddesi No:176/15 Cevizlidere/Ankara web:www.kilittasi.com.tr

Solar panels are not harmful to the environment



KİLİTTAŞI
MÜHENDİSLİK VE MÜŞAVİRLİK

KİLİTTAŞI
Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.

PROJE DEĞERLENDİRME FORMU

Adalsan 1 GES Santralı
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Lacinsan 2 Ges Santralı
Amilsan 1 Ges Santralı
Amilsan 2 Ges Santralı
Görkem Ges Santralı
Eryas Ges Santralı
Kızılağaç Ges Santralı

Paydaş Katılım Toplantısı

Değerlendirmeyi Yapan Kişinin Adı ve Soyadı:	Yusuf ÖZKAN
Kurum/Görevi:	
Toplantı Tarih:	27-5-2022
Toplantı Yeri:	Köy Kahvesi

Proje hakkında **olumlu** bulduğunuz hususlar nelerdir?

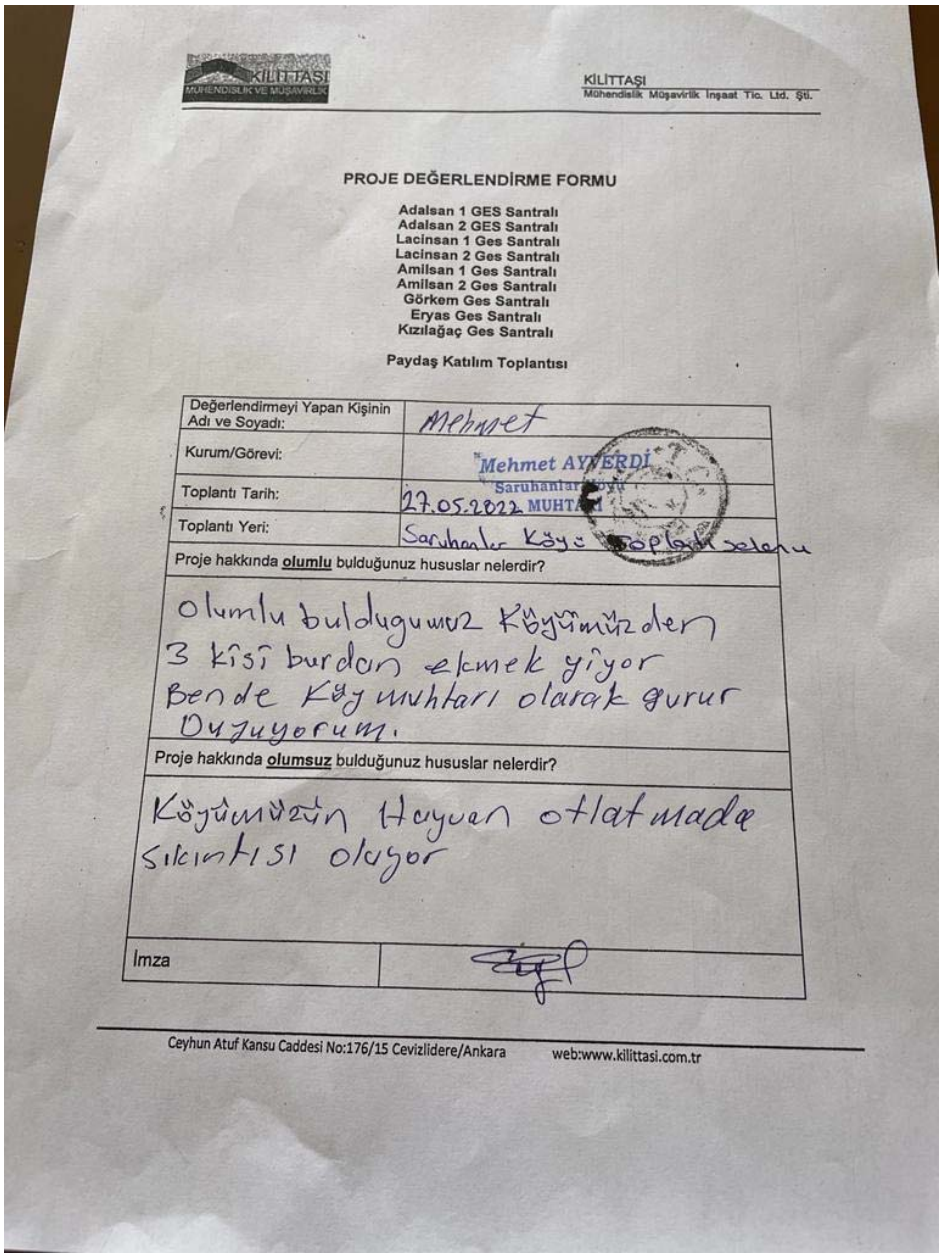
Güneş Panellerinin çevreye zararı yoktur.

Proje hakkında **olumsuz** bulduğunuz hususlar nelerdir?

İmza

Ceyhun Atuf Kansu Caddesi No:176/15 Cevizlidere/Ankara web:www.kilittasi.com.tr

Solar panels are not harmful to the environment



KİLİTTAŞI
MÜHENDİSLİK VE MÜŞAVİRLİK

KİLİTTAŞI
Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.

PROJE DEĞERLENDİRME FORMU

Adalsan 1 GES Santralı
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Lacinsan 2 Ges Santralı
Amilsan 1 Ges Santralı
Amilsan 2 Ges Santralı
Görkem Ges Santralı
Eryas Ges Santralı
Kızılağaç Ges Santralı

Paydaş Katılım Toplantısı

Değerlendirmeyi Yapan Kişinin Adı ve Soyadı:	Mehmet
Kurum/Görevi:	Mehmet AYVERDİ Saruhanlar Köyü MUHTAR
Toplantı Tarih:	27.05.2022
Toplantı Yeri:	Saruhanlar Köyü Toplantı salonu

Proje hakkında **olumlu** bulduğunuz hususlar nelerdir?

Olumlu bulduğumuz Köyümüzden 3 kişi burdan ekmek yiyor Bende Köy muhtarı olarak gurur Duyuyorum.

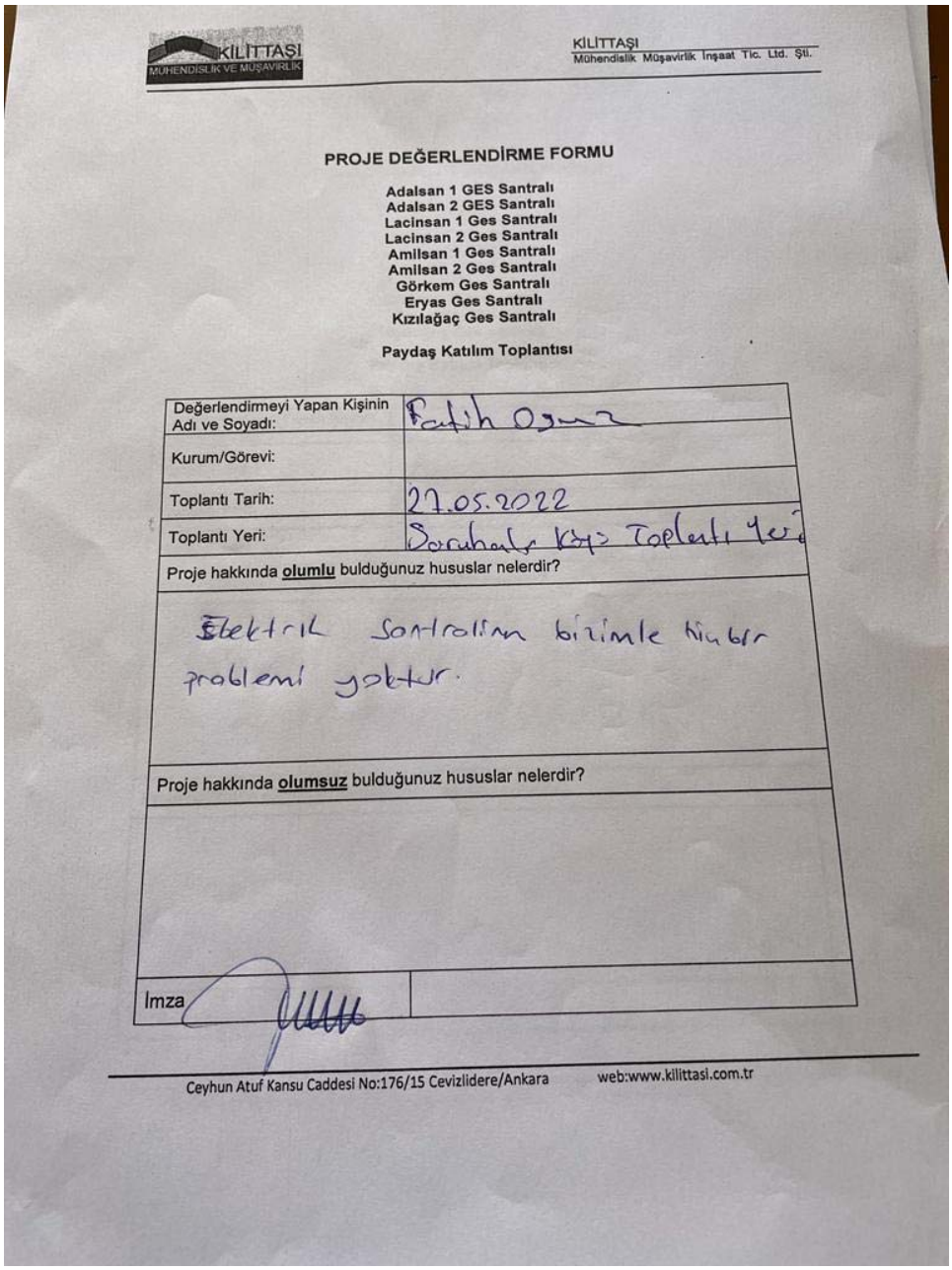
Proje hakkında **olumsuz** bulduğunuz hususlar nelerdir?

Köyümüzün Hayvan otlatmada sıkıntısı oluyor

İmza

Ceyhun Atuf Kansu Caddesi No:176/15 Cevizlidere/Ankara web:www.kilittasi.com.tr

As the official village head of Saruhanlar village (called Muhtar inTurkish) I am proud with this project. Project provided job opportunitity. Three people from Saruhanlar are working at the project. Only negative point is that we have limited land areas gor grazing our cattles.
Carbon Consultant response: Project land area was a private land, not a community land for grazing.



KİLİTTAŞI
MÜHENDİSLİK VE MÜŞAVİRLİK

KİLİTTAŞI
Mühendislik Müşavirlik İnşaat Tic. Ltd. Şti.

PROJE DEĞERLENDİRME FORMU

Adalsan 1 GES Santralı
Adalsan 2 GES Santralı
Lacinsan 1 Ges Santralı
Lacinsan 2 Ges Santralı
Amilsan 1 Ges Santralı
Amilsan 2 Ges Santralı
Görkem Ges Santralı
Eryas Ges Santralı
Kızılağaç Ges Santralı

Paydaş Katılım Toplantısı

Değerlendirmeyi Yapan Kişinin Adı ve Soyadı:	Fatih Oğuz
Kurum/Görevi:	
Toplantı Tarih:	27.05.2022
Toplantı Yeri:	Sarıhalı Köyü Toplantı Yeri

Proje hakkında **olumlu** bulduğunuz hususlar nelerdir?

Elektrik santralinin bizimle hiçbir problemi yoktur.

Proje hakkında **olumsuz** bulduğunuz hususlar nelerdir?

İmza

Ceyhun Atuf Kansu Caddesi No:176/15 Cevizlidere/Ankara web:www.kilittasi.com.tr

We don’t have a problem with the project.

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

N/A

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

<table>
<tr><td></td><td></td></tr>
<tr><td>Applied CDM methodology(ies)
(provide reference and version number(s))</td><td></td></tr>
<tr><td>Pre-registration changes to the CDM Project Activity
(Tick as applicable)</td><td>
<table>
<tr><th>CDM Pre-registration Changes</th><th>Reference number</th><th>Approved</th><th>Provide a summary of pre-registration changes</th></tr>
<tr><td>Deviations from the CDM methodology</td><td></td><td>☐</td><td></td></tr>
<tr><td>Deviations from the CDM Tool</td><td></td><td>☐</td><td></td></tr>
<tr><td>Deviations from the CDM rules</td><td></td><td>☐</td><td></td></tr>
<tr><td>Other…….</td><td></td><td>☐</td><td></td></tr>
</table>
</td></tr>
</table>

Post-registration changes to the CDM Project Activity

(Tick as applicable)

CDM Post registration Changes	Reference number	Approved	Provide a summary of post-registration changes
Change in project design		☐	
Request for revision of monitoring plan		☐	
Request for change in start date of crediting period		☐	
Renewal of crediting period		☐	
Temporary deviations		☐	
Other…….		☐	

Crediting Period(s)

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

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

DOCUMENT HISTORY

Version	Date	Comment
V 3.2	31/12/2020	▪ The name of GCC Program's emission units has been changed from "Approved Carbon Reductions" or ACRs to "Approved Carbon Credits" or ACCs.
V 3.1	17/08/2020	▪ Editorial revisions made o Revised Table in section B.7.2 on Monitoring-program of risk management actions o Revised Table in section E.1 on Environmental Safeguards o Revised Table in section E.1 on Social Safeguards o Revised Table in section F on United Nations Sustainable Development Goals (SDG)
V 3.0	05/07/2020	▪ Revised version released on approval by Steering Committee as per GCC Program Process; ▪ Revised version contains following changes: o Change of name from Global Carbon Trust (GCT) to Global Carbon Council (GCC); o Considered and addressed comments raised by Steering Committee: ➢ during physical meeting (SCM 01, dated 29 Oct 2019, Doha Qatar); and ➢ electronic consultations EC01-Round 01 (15.09.2019 – 25.09.2019), EC01-Round 02 (27.03.2020 – 27.06.2020). o Feedback from Technical Advisory Board (TAB) of ICAO on GCC submission for approval under CORSIA[47];
V 2.0	25/06/2019	▪ Revised version released for approval by the GCC Steering Committee. ▪ Revised version includes additional details and instructions on the information to be provided, consequent to the latest developments world-wide (e.g., CORSIA EUC).
V 1.0	01/11/2016	Initial version released under the GCC Program Version 1

[47] See ICAO recommendation for conditional approval of GCC at https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/Excerpt_TAB_Report_Jan_2020_final.pdf

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