

Table-15. Çaypınar WPP Project Construction Phase Environmental and Social Management Plan

Impact Description	National legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
Air Quality	<ul style="list-style-type: none"> - Regulation on Control of Industrial Air Pollution - Regulation on Assessment and Management of Air Quality - IFC PS 1; PS 3; PS4; PS6 - IFC EHS Guideline on Air Emissions and Ambient Air Quality - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Dust (PM₁₀) measurement results - Grievance records obtained from stakeholders regarding air quality (if any) 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Environmental Noise	<ul style="list-style-type: none"> - Regulation on Assessment and Management of Environmental Noise - IFC EHS Guideline on Noise Management - IFC PS 1; PS 3; PS4; PS6 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Environmental noise measurement results - Grievance records obtained from stakeholders regarding environmental noise (if any) 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Waste Management	<ul style="list-style-type: none"> - Regulation on Waste Management - Regulation on Control of Excavation, Construction and Demolition Waste - Regulation on Control of Oil Wastes - IFC PS3; PS4 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Generated domestic solid waste are collected by municipality regularly - Waste oils to be generated during the maintenance and repair of construction machinery and equipment are collected and disposed/recovered in accordance with the provisions of the Regulation on Waste Management and Regulation on Control of Waste Oil. 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Wastewater	<ul style="list-style-type: none"> - Water Pollution Control Regulation - Regulation on Pit Opening Where Sewer System Construction is not Applicable - IFC PS1; PS3; PS4 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Septic tank is controlled periodically and overflowing is prevented. - Necessary analysis for potable water to be utilized by personnel is conducted. 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer

Impact Description	National legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
Biodiversity	<ul style="list-style-type: none"> - BERN Convention - IFC PS1, PS3 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Ornithology Report was prepared for the Project - There are no habitat and population losses in the areas where the Project construction works are carried out. 	<ul style="list-style-type: none"> - Contractor Specialist who will conduct works on biodiversity
Subcontractor Management	<ul style="list-style-type: none"> - Labor Law - IFC PS2 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Compliance issues with Project standards and national legislation are included in the subcontractor contracts. 	<ul style="list-style-type: none"> - Contractor
Occupational Health and Safety	<ul style="list-style-type: none"> - Labor Law - Occupational Health and Safety Law - Regulation on Occupational Health and Safety - Regulation on Emergency Situations in Workplaces - Regulation on Health and Safety Signs - Regulation on Occupational Health and Safety Risk Assessment - Regulation on Personal Protection Equipment - IFC PS2 - ILO Conventions - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Records belonging to work accident and near miss - Appropriate PPE was provided to employees - Personnel was informed about contact information and procedures to be followed in case of emergency situation - OHS Management Plan was prepared and implemented 	<ul style="list-style-type: none"> - Contractor - OHS Specialist
Labor and Working Condition	<ul style="list-style-type: none"> - IFC PS2 - ILO Conventions - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Workers informed through appropriate/ transparent mediums with regards to dismissal - Dismissal processes are conducted in compliance with IFC PS2 - Employees were informed about working conditions 	<ul style="list-style-type: none"> - Contractor
Community Health and Safety	<ul style="list-style-type: none"> - Regulation on Assessment and Management of Air Quality - Regulation on Assessment and Management of Environmental Noise 	<ul style="list-style-type: none"> - SEP prepared and Grievance Redress Mechanism established - Local communities informed about Grievance Redress Mechanism 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer

Impact Description	National legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
	<ul style="list-style-type: none"> - IFC PS4 - IFC EHS Guideline on Community Health and Safety - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Communities informed about abnormal load transportation times - Danger and warning signs are placed on the Project Site - Measures for prevention of public access to construction sites in place - Traffic Management Plan was prepared 	
Cultural Heritage	<ul style="list-style-type: none"> - Law on Conservation of Cultural and Natural Assets - IFC PS8 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - In case of chance find, chance find is recorded - Chance Find Procedure was prepared - Cultural heritage of local community were identified and required precautions were taken 	<ul style="list-style-type: none"> - Contractor - Subcontractor
Social Impacts	<ul style="list-style-type: none"> - IFC PS1 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - SEP prepared and Grievance Redress Mechanism established - Stakeholder engagement meeting was held - Local communities were informed about Grievance Redress Mechanism - Recruitment was provided from local workforce to the extent possible - Use of local resources for goods and services to be procured was prioritized 	<ul style="list-style-type: none"> - Contractor

Table-16. Çaypınar WPP Project Operating Phase Environmental and Social Management Plan

Impact Description	National legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
Environmental Noise	<ul style="list-style-type: none"> - Regulation on Assessment and Management of Environmental Noise - IFC EHS Guideline on Noise Management - IFC PS 1; PS 3; PS4; PS6 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Environmental noise measurement results - Grievance records obtained from stakeholders regarding environmental noise (if any) - Periodical maintenance for turbines are conducted regularly 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Waste Management	<ul style="list-style-type: none"> - Regulation on Waste Management - Regulation on Control of Oil Wastes - IFC PS3; PS4 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Generated domestic solid waste are collected by municipality regularly - Waste oils to be generated during the maintenance of turbines are collected and disposed/recovered in accordance with the provisions of the Regulation on Waste Management and Regulation on Control of Waste Oil. 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Wastewater	<ul style="list-style-type: none"> - Water Pollution Control Regulation - Regulation on Pit Opening Where Sewer System Construction is not Applicable - IFC PS1; PS3; PS4 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Septic tank is controlled periodically and overflowing is prevented. - Necessary analysis for potable water to be utilized by personnel is conducted. 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Biodiversity	<ul style="list-style-type: none"> - BERN Convention - Central Hunting Commission Decision - Law on Land Hunting - IFC PS1, PS3 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Ornithology Report was prepared for the Project - There are no habitat and population losses in the areas Çaypınar WPP Site 	<ul style="list-style-type: none"> - Contractor - Specialist who will conduct works on biodiversity
Subcontractor Management	<ul style="list-style-type: none"> - Labor Law - IFC PS2 - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Compliance issues with Project standards and national legislation are included in the subcontractor contracts. 	<ul style="list-style-type: none"> - Contractor

Impact Description	National legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
Occupational Health and Safety	<ul style="list-style-type: none"> - Framework - Labor Law - Occupational Health and Safety Law - Regulation on Occupational Health and Safety - Regulation on Emergency Situations in Workplaces - Regulation on Health and Safety Signs - Regulation on Occupational Health and Safety Risk Assessment - Regulation on Personal Protection Equipment - IFC PS2 - ILO Conventions - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Records belonging to work accident and near miss - Appropriate PPE was provided to employees - Personnel was informed about contact information and procedures to be followed in case of emergency situation - OHS Management Plan was prepared and implemented 	<ul style="list-style-type: none"> - Contractor - OHS Specialist
Labor and Working Condition	<ul style="list-style-type: none"> - IFC PS2 - ILO Conventions - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - Personnel to be recruited during the operation phase was selected as much as possible among the employees working during Project construction phase - Employees were informed about working conditions 	<ul style="list-style-type: none"> - Contractor
Community Health and Safety	<ul style="list-style-type: none"> - Regulation on Assessment and Management of Air Quality - Regulation on Assessment and Management of Environmental Noise - IFC PS4 - IFC EHS Guideline on Community Health and Safety - IFC EHS Guidelines for Wind Energy - The World Bank Environmental and Social Framework 	<ul style="list-style-type: none"> - SEP prepared and Grievance Redress Mechanism established - Local communities informed about Grievance Redress Mechanism - Danger and warning signs regarding risky situations such as electric shock are placed within the Project Site - Traffic Management Plan was prepared - Shadow flicker effects experienced at a sensitive receptor not exceed 30 hours per year and 30 minutes per day - Screening with vegetation cover was applied in 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer

Impact Description	National legislation and International Standards	Key Performance Indicators / Monitoring Criteria	Responsibility
<p>Social Impacts</p>	<ul style="list-style-type: none"> - IFC PS1 - The World Bank Environmental and Social Framework 	<p>case of shadow flicker</p> <ul style="list-style-type: none"> - SEP prepared and Grievance Redress Mechanism established - Stakeholder engagement meeting was held - Local communities were informed about Grievance Redress Mechanism - Recruitment was provided from local workforce to the extent possible - Use of local resources for goods and services to be procured was prioritized 	<ul style="list-style-type: none"> - Contractor

6 MONITORING PLAN

It is essential to create a Monitoring Plan in order to assess the efficiency of management practices stated in the ESMP and the Project's impacts on environmental, social, biodiversity and OHS issues. It will be possible to control the efficiency of ESMP and to conduct required adaptations by the help of Monitoring Plan. There is a continuous review, observation and improvement system in a good monitoring process. In addition, Project Management receives report from authorized personnel and subcontractors about progresses regarding environmental and social performances. What matter in the monitoring studies is the determination of key performance indicators ("KPIs"). Fundamental components of monitoring studies are constituted by field observations, inspections, interviews, measurements and document reviewing.

In case of non-conformance with Project Standards, or any measurement above the limits stipulated by relevant legislation or standard during monitoring of environmental, OHS and community health and safety performance indicators, such non-compliance will be recorded and reported. Monitoring records will be kept and preserved by OHS Specialist and/or environmental engineer. At every stage of the Project, compliance with national legislation and international standards will be ensured and monitoring activities will be carried out by independent experts when necessary.

Monitoring studies to be conducted during construction and operating phase of the Çaypınar WPP Project and details regarding monitoring methods and frequencies are presented in Table-17 and Table-18.

Table-17. Çaypınar WPP Project Construction Phase Monitoring Plan

Monitoring Parameter	Where the parameter is to be monitored?	Monitoring Methodology	Monitoring Period	Responsibility
Air Quality (PM ₁₀)	- Project Area - Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods	- Dust (PM ₁₀) measurement - Grievance Redress Mechanism	- Air quality measurements to be conducted for once only at the peak period of construction phase - In case grievance is received	- Contractor - OHS Specialist - Environmental Engineer - Institutions having competence certificate to measure air quality
Environmental Noise	- Project Area - Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods	- Noise measurement - Grievance Redress Mechanism	- Air quality measurements to be conducted for once only at the peak period of construction phase - In case grievance is received	- Contractor - OHS Specialist - Environmental Engineer - Institutions having competence certificate to measure environmental noise
Waste	- Project Area - Temporary Storage Waste Area	Field Observations and Inspections	- Weekly	- OHS Specialist - Environmental Engineer
Wastewater	- Project Area	Field Observations and Inspections	Septic tanks will be emptied regularly and it will be ensured that there is no wastewater discharge to the receiving environment	- OHS Specialist - Environmental Engineer
Biodiversity	- Project Area and its vicinity	- Visual Observations at the Field	Two or three times per year	- Contractor - Specialist to conduct studies
Subcontractor Management	- Project Area	- Field inspections - Grievance Redress Mechanism	-Constantly	- Contractor
Occupational Health and	- All working area	- Field Observations and Inspections	-Daily	- OHS Specialist

Monitoring Parameter	Where the parameter is to be monitored?	Monitoring Methodology	Monitoring Period	Responsibility
Safety		<ul style="list-style-type: none"> - Grievance Mechanism - Redress 		
Community Health and Safety	<ul style="list-style-type: none"> - Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods - Local communities using route which are used in the scope of Project construction works or local communities located in these routes 	<ul style="list-style-type: none"> - Grievance Mechanism - Redress 	<ul style="list-style-type: none"> - Stakeholder Meetings - Engagement - In case grievance is received 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Cultural Heritage	<ul style="list-style-type: none"> - Project Area 	<ul style="list-style-type: none"> - Field Observations and Inspections 	<ul style="list-style-type: none"> - In case Chance Find is encountered 	<ul style="list-style-type: none"> - Contractor
Social Impacts	<ul style="list-style-type: none"> - All interacted settlements in the scope of Project 	<ul style="list-style-type: none"> - Grievance Mechanism - Stakeholder Meetings - Redress - Engagement 	<ul style="list-style-type: none"> - Stakeholder Meetings - Engagement - In case grievance is received 	<ul style="list-style-type: none"> - Contractor
Cumulative Impact	<ul style="list-style-type: none"> - Project Area - All interacted settlements in the scope of Project 	<ul style="list-style-type: none"> - Meeting and interview with Project Company - Grievance Mechanism - Redress 	<ul style="list-style-type: none"> - In case of new project that may cause cumulative effect is planned in the region where the Project Site is located. 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer

Table-18. Çaypınar WPP Project Operation Phase Monitoring Plan

Monitoring Parameter	Where the parameter is to be monitored?	Monitoring Methodology	Monitoring Period	Responsibility
Air Quality (PM ₁₀)	- Çaypınar WPP Site - Saraçköy, İnsaniye, Servet and Eşeler Neighbourhoods	- Dust (PM ₁₀) measurement - Grievance Redress Mechanism	- In case grievance is received	- Contractor - OHS Specialist - Environmental Engineer - Institutions having competence certificate to measure air quality
Environmental Noise	- Çaypınar WPP Site - Saraçköy, İnsaniye, Servet and Eşeler Neighbourhoods	- Noise measurement - Grievance Redress Mechanism	- In case grievance is received	- Contractor - OHS Specialist - Environmental Engineer - Institutions having competence certificate to measure environmental noise
Waste	- Çaypınar WPP Site	Field Observations and Inspections	- Weekly	- OHS Specialist - Environmental Engineer
Wastewater	- Çaypınar WPP Site	Field Observations and Inspections	Septic tanks will be emptied regularly and it will be ensured that there is no wastewater discharge to the receiving environment	- OHS Specialist - Environmental Engineer
Biodiversity	- Çaypınar WPP Site and its vicinity	- Visual Observations at the Field	Two or three times per year	- Contractor - Specialist to conduct studies
Subcontractor Management	- Project Area	- Field inspections - Grievance Redress Mechanism	-Constantly	- Contractor
Occupational Health and Safety	- All operational area	- Field Observations and Inspections - Grievance Redress Mechanism	-Daily	- OHS Specialist

Monitoring Parameter	Where the parameter is to be monitored?	Monitoring Methodology	Monitoring Period	Responsibility
Community Health and Safety	<ul style="list-style-type: none"> - Saraçköy, İhsaniye, Servet and Eşeler Neighbourhoods - Local communities using route which are used in the scope of Project or local communities located in these routes 	<ul style="list-style-type: none"> - Grievance Mechanism - Redress 	<ul style="list-style-type: none"> - Stakeholder Meetings - Engagement - In case grievance is received 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer
Social Impacts	<ul style="list-style-type: none"> - All interacted settlements in the scope of Project 	<ul style="list-style-type: none"> - Grievance Mechanism - Stakeholder Meetings - Redress - Engagement 	<ul style="list-style-type: none"> - Stakeholder Meetings - Engagement - In case grievance is received 	<ul style="list-style-type: none"> - Contractor
Cumulative Impact	<ul style="list-style-type: none"> - Project Area - All interacted settlements in the scope of Project 	<ul style="list-style-type: none"> - Meeting and interview with Project Company - Grievance Mechanism - Redress 	<ul style="list-style-type: none"> - In case of new project that may cause cumulative effect is planned in the region where the Çaypınar WPP Site is located. 	<ul style="list-style-type: none"> - Contractor - OHS Specialist - Environmental Engineer