TÜRKİYE PETROLLERİ ANONİM ORTAKLIĞI

OTC OFFSHORE TECHNOLOGY CENTER

SAKARYA GAS FIELD DEVELOPMENT PROJECT – ENHANCEMENT OF SUBSEA PRODUCTION CAPACITY AND FLOATING PRODUCTION UNIT

Chapter 1 - Introduction; Chapter 2 - Regulatory Framework

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Information Classification

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This report has been prepared based on the written and verbal information and documentation provided to WSP Danışmanlık ve Mühendislik Ltd. Şti (WSP Türkiye or WSP) as of the date of this Environmental and Social Impact Assessment (ESIA) Report by the Turkish Petroleum Offshore Technology Center (TP-OTC or the "Client" or "Project Owner"). WSP cannot confirm the accuracy of the information provided by third parties during ESIA process.

IMPORTANT: This section should be read before reliance is placed on any of the opinions, advice, recommendations, or conclusions herein set out.

a) The purpose of this report was to undertake an Environmental and Social Impact Assessment pursuant to the appointment of WSP to act as Consultant for the Sakarya Gas Field Development Project.

b) Except for the Project Owner and the Lenders, any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third parties. Should additional parties require reliance on this report, written authorisation from WSP will be required. WSP disclaims responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs. No duty is undertaken, nor warranty nor representation made to any party in respect of the opinions, advice, recommendations or conclusions herein set out.

c) The Project description included in this report is based on data and information provided to WSP by the Project Owner. It is based solely on a review of information and data obtained from the Project Owner as described in this report, and discussion with representatives of TP-OTC, as reported herein. Except as otherwise may be requested, WSP disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to WSP after the time during which WSP conducted the ESIA.

d) Project design is currently being evaluated by TP-OTC and its Contractors and changes have occurred during the preparation of this report and are expected until design is finalized. This ESIA report is based on the design information made available to WSP as of the date of this report.

e) No soil, water, liquid, gas, product, exposure, Occupational Health and Safety (OHS), chemical sampling or analytical testing at or in the vicinity of the Project was conducted by WSP, as part of this ESIA study.

f) In evaluating the Project, WSP has relied in good faith on information provided by other entities noted in this report. WSP has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the Investor. WSP accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

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COMPANY / PROJECT EXECUTOR	Turkish Petroleum - Offshore Technology Center A.S. (TP-OTC)
CONSULTANT	WSP Mühendislik ve Danışmanlık Ltd. Şti. (WSP)
PROJECT	Sakarya Gas Field Development Project (SGFD) Phase 2 Unless otherwise stated, Project refers to the Phase 2 of the investment. SGFD Phase 2 is the topic of this ESIA
PROJECT OWNER	Türkiye Petrolleri Ananonim Ortaklığı (TPAO)

ABBREVIATIONS

Abbreviation	Definition
ACCOBAMS	Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area
ADCP	Acoustic Doppler Current Profiler
AF	Associated Facility
AFAD	Disaster and Emergency Management Presidency of Türkiye
ALARP	As Low As Reasonably Possible
AoI	Area of Influence
AOX	Adsorbable Organic Halides
AR4	Fourth Assessment Report
AR5	Fifth Assessment Report
AR6	Sixth Assessment Report
ASTM	American Society for Testing and Materials
BAP	Biodiversity Action Plan
Barg	Bar gauge
BAU	Business As Usual
BCM	Billion Cubic Meter
BERN	Convention on the Conversation of European Wildlife and Natural Habitats
BHP	Brake Horse Power
BMP	Biodiversity Management Plan

Abbreviation	Definition
BOD	Biological Oxygen Demand
BOTAŞ	Turkish Petroleum Pipeline Corporation
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
BWM Convention	Ballast Water Management Convention
CAPEX	Capital Expenditure
CBAM	Carbon Border Adjustment Mechanism
CCR	Central Control Room
CCRA	Climate Change Risk Assessment
CEFAS	The Centre for Environment, Fisheries and Aquaculture Science
CER	Central Equipment Room
CH	Critical Habitat
CH_4	Methane
CHS	Community Health and Safety
CIA	Cumulative Impact Assessment
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLC	Coastal Logistics Center
CLO	Community Liaison Officer
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_{2e}	Carbon Dioxide Equivalent
COD	Chemical Oxygen Demand
COLREG	Convention on the International Regulations for Preventing Collisions at Sea
COP	Conference of Parties
CR	Critically Endangered
CTD	Conductivity, Temperature, Depth

Abbreviation	Definition
dB	Decibels
DD	Data Deficient
DO	Dissolved Oxygen
DSI	State Hydraulic Works
EC	Electrical Conductivity
ECA	Export Credit Agency
EDG	Emergency Diesel Generator
EF	Emission Factor
EHS	Environmental Health and Safety
EHSS	Environment, Health and Safety Social
EIA	Environmental Impact Assessment
EIT	Electrical Instrumentation Telecommunications
EMRA	Energy Market Regulatory Authority
EN	English
EN	Endangered (Biodiversity)
EP	Equator Principles
EPA	Environmental Protection Agency
EPCI	Engineering, Procurement, Construction and Installation
EPFI	Equator Principles Financial Institutions
EPRP	Emergency Preparedness and Response Plan
ETL	Energy Transmission Line
EUNIS	European Nature Information System
E&S	Environmental and Social
ESE	East-Southeast
ESS	Environmental and Social Standards
ESHS	Environmental, Social, Health and Safety
ESIA	Environmental and Social Impact Assessment

Abbreviation	Definition
ESMS	Environmental and Social Management System
ETP-A	Effluent Treatment Package
ETP-B	Sanitary Sewage Treatment System
EU	European Union
FCG-H	Flooding, Cleaning, Gauging and Hydrotesting
FEED	Front-End Engineering Development
FGR	Flare Gas Recovery
F&G	Fire and Gas
FI	Financial Intermediaries
FPU	Floating Production Unit
FMS	Fiscal Metering Station
F/O	Fuel Oil
g	Grams
GDP	Gross Domestic Product
GDU	Gas Dehydration Unit
GHG	Greenhouse Gas
GIIP	Good International Industry Practice
GIS	Geographic Information System
GN	Guidance Note
WSP Türkiye	WSP Danışmanlık ve Mühendislik Ltd. Şti
Gpm	Gallons per minute
GRM	Grievance Mechanism
GTG	Gas Turbine Generator
GWP	Global Warming Potential
HAPs	Hazardous Air Pollutants
HAZID	Hazard Identification
HAZOP	Hazard and Operability

Abbreviation	Definition
HDD	Horizontal Direction Drilling
HHV	Higher Heating Values
HIPPS	High Integrity Pressure Protection System
H_2S	Hydrogen Sulphide
HC	Hydrocarbon
HP	High Pressure
HPR	Hydroacoustic Position Reference
HPU	Hydraulic Power Unit
HR	Human Resources
HSE	Health and Safety and Environment
H&S	Health and Safety
IAPCR	Industrial Air Pollution Control Regulation
IBA	Important Bird Area
IBC	Intermediate Bulk Container
IEA	International Energy Agency
IFC	International Finance Corporation
IFI	International Financing Institutions
IFRS	International Financial Reporting Standards
ICOMOS	International Council on Monuments and Sites
ICSS	Integrated Control and Safety Systems
ILO	International Labour Organisation
IMO	International Maritime Organisation
INDC	Intended Nationally Determined Contribution
IPA	Important Plant Area
IPCC	Intergovernmental Panel on Climate Change
IPF	Investment Project Financing
IPIECA	International Petroleum Industry Environmental Conservation Association

Abbreviation	Definition
ISO	International Standards Organisation
IUCN	The International Union for Conservation of Nature
İÇDAŞ	İstanbul Çelik Demir İzabe Sanayi A.Ş.
KBA	Key Biodiversity Area
K	Kilo
Kg	Kilogram
KM	Kilometer
kn	Knot
KP	Kilometre Point
kt	Kilo tonne
$ktCO_{2e}$	Kilo tonnes of carbon dioxide equivalent
kV	Kilovolt
kW	Kilowatt
kW(e)	Kilowatt electric
kWh	Kilowatt hour
LC	Least Concern
LDAR	Leak Detection and Repair
L_{Aeq}	A weighted equivalent sound pressure level.
L_{Amax}	The maximum A weighted sound pressure level detected in the measurement time domain
L_{Ceq}	C weighted equivalent sound pressure level.
L_{day}	Equivalent continuous sound pressure level for reference time interval day
L_{den}	Day, evening- night weighted sound pressure level. Day time defined in between 07:00-19:00, evening time between 19:00-23:00, nighttime between 23:00-07:00.
L_{dn}	Day-night-weighted sound pressure level. Day time defined in between 06:00-22:00, and nighttime defined as 22:00-06:00.
L_{eq}	Equivalent Sound Level

Abbreviation	Definition
$L_{evening}$	Equivalent continuous sound pressure level for reference time interval evening
L_{night}	Equivalent continuous sound pressure level for reference time interval night
L_P	Sound Pressure Level
L_w	Sound Power Level
LP	Low Pressure
LPA	Local Public Authorities
LPG	Liquified Petroleum Gas
LRP	Livelihood Restoration Plan
LULUCF	Land Use, Land Use Change and Forestry
LV	Limit Value
M	Meter
m^3	Cubic meter
MAH	Major Accident Hazards
MARPOL	The International Convention for the Prevention of Pollution from Ships
MEG	Mono-Ethylene Glycol
MGO	Marine Gas Oil
MLC	Maritime Labour Convention
$MMSm^3$	Million metric standard cubic meter
mmBTU	Million British Thermal Unit
MmBTU/h	Million British Thermal Unit per hour
Mt CO_2e	Mega tonnes of carbon dioxide equivalent
MoAF	Ministry of Agriculture and Forestry
MoC	Management of Change
MoEUCC	Ministry of Environment, Urbanisation and Climate Change
MoTI	Republic of Türkiye Ministry of Transportation and Infrastructure
MPN	Most Probable Number

Abbreviation	Definition
MT	Metric Tonne
MV	Medium Voltage
MWt	Megawatt Thermal
N_2O	Nitrous Oxide
N/A	Not Applicable
N-CP	Non-Compliance
NAVTEX	Navigational telex
NE	Northeast
NGL	Natural Gas Liquids
NGO	Non-governmental Organization
NH_4	Ammonium
NIR	National Inventory Report
NM	Nautical Miles
NO	Nitrogen Oxide
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NOAA	National Oceanic and Atmospheric Administration
NPS	Non-party stakeholders
NRU	Nitrogen Removal Unit
NT	Near Threatened
NTU	Nephelometric Turbidity Unit
NW	Northwest
O_3	Ozone
OBS	Observation
ODS	Ozone Depleting Substance
OHS	Occupational Health and Safety
ONHO	Turkish Naval Forces, Office of Navigation, Hydrography and Oceanography

Abbreviation	Definition
OPF	Onshore Production Facility
OSPAR	Oslo and Paris Conventions
PA/CA	Preventative Actions/Corrective Actions
PAH	Polycyclic Aromatic Hydrocarbon
PAP	Project Affected Person
PAGA	Public Address and General Alarm
PCB	Polychlorinated Biphenyls
PEL	Probable Effect Level
pH	Potential of Hydrogen
PID	Photoionization Detector
PIF	Project Information File
PIG	Pipeline Inspection Gauge
PLET	Pipeline End Termination
PLR	Pig Launcher Receiver
PM	Particulate Matter
POM	Princeton Ocean Model
ppm	Parts per million
PS	Performance Standard
PSV	Platform Supply Vessel
Pt-Co	Platinum-Cobalt
PWT	Produced Water Treatment
Q	Flowrate
R	Rare
RAEP	Risk Assessment and Emergency Response Plan
RAMEN	Regulation on Assessment and Management of Environmental Noise
RAP	Resettlement Action Plan
RCP	Representative Concentration Pathway

Abbreviation	Definition
RIAPC	Regulation on Industrial Air Pollution Control
RO	Reverse Osmosis
ROV	Remotely Operated Vehicle
RoW	Rights of Way
SCMD	Standard cubic meter per day
SEA	Strategic Environmental Assessment
S&EA	The Social and Environmental Impact Assessment
SEP	Stakeholder Engagement Plan
SGFD	Sakarya Gas Field Development Project (Unless otherwise stated, Project refers to the Phase 2 of the investment. SGFD Phase 2 is the topic of this ESIA)
SIA	Subsea Integration Alliance
SKHKKY	Turkish Regulation on Control of Industrial Air Pollution
SLB	Schlumberger
SO_2	Sulphur Dioxide
SOLAS	The International Convention for the Safety of Life at Sea
SOP	Standard Operating Procedure
SPS	Subsea Production System
SRES	Special Report on Emission Scenarios
SS7	SubSea7
SSE	South-Southeast
SSW	South-Soutwest
STG	Steam Turbine Generators
SURF	Subsea Umbilical, Risers and Flow Lines
T	Temperature
t	tonnes
TBD	To be Defined

Abbreviation	Definition
TCF	Trillion cubic feet
$tCO_2e/tLNG$	tonnes carbon dioxide equivalent per tonnes of liquefied natural gas
TEG	Tri-ethylene Glycol
TEİAŞ	Turkish Electricity Transmission Company
TEMA	Turkish Foundation for Combating Erosion, Afforestation and Conservation of Natural Assets
TER	Telecom Equipment Room
TCFD	Task Force on Climate-related Financial Disclosures
TJ	Terajoule
TOC	Total Organic Compound
ToR	Terms of Reference
Tosyalı	Tosyalı Holding
TOX	Total Organic Halides
TPAO	Turkish Petroleum Corporation
TPH	Total Petroleum Hydrocarbons
TP-OTC	Turkish Petroleum Offshore Technology Center A.S.
TR	Turkish
TR	Temporary Refuge
TS	Turkish Standard
TTK	Turkish Hard Coal
TUTA	Topside Umbilical Termination Assembly
TÜBİTAK MAM	Technological Research Council of Türkiye
TÜİK	Turkish Statistical Institute
TÜPRAŞ	Turkish Petroleum Refineries Corporation
UK	United Kingdom
ULV	Upper Limit Value
UN	United Nations

Abbreviation	Definition
UNFCCC	United Nations Framework Convention on Climate Change
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPS	Uninterruptible Power Supply
UV	Ultraviolet
UXO	Unexploded Military Ordnance
VEC	Valued Environmental Component
VOC	Volatile Organic Compound
VU	Vulnerable
VPSHR	Voluntary Principles on Security and Human Rights
ZSF	Fish Bioassay Toxicity Dilution Factor
WHO	World Health Organization
WB	World Bank
WBT	Water Ballast Tank
WD	Water Depth
WPCR	Water Pollution Control Regulation
WWTP	Wastewater Treatment Plant
XT	Xmas Tree

1.0 INTRODUCTION

Sakarya Gas Field Development Project has been initiated by the Turkish Petroleum Corporation (TPAO) to extract, transport to shore and process the natural gas discovered in the Sakarya Gas Field, in the exclusive economic zone of Türkiye, off the Western Black Sea Region, and the natural gas reserves to be discovered through the ongoing exploration. Turkish Petroleum Offshore Technology Center (TP-OTC or Project Owner), 100% owned by TPAO will be conducting Project Management and Engineering, Procurement, Construction and Installation (EPCI) for the Project.

The Sakarya Gas Field Development Project investment is planned to be realized in three phases, Phase 1, Phase 2 and Phase 3:

- Under **Phase 1,** natural gas production with the subsea production system (SPS) from 10 wells in the Sakarya Gas Field, being transported onshore through a 16-inch (40.64 cm) diameter carbon steel pipeline, processed at the onshore production facility (OPF), and delivered to the Petroleum Pipeline Company ("BOTAŞ"), with a daily production capacity of up to 10 million standard m³ (Sm^3/day). The infrastructure for Phase 1, including the SPS, SURF (Subsea Umbilicals, Risers, and Flowlines), and OPF, has been installed. The first gas arrival onshore was achieved in 2023 with an initial production of 2.8 million Sm³/day. Currently, the production capacity has reached over 6 million Sm3/day.
- Under **Phase 2,** (the Project – subject of this ESIA), it is planned to install 13 additional wells in the Sakarya Gas Field. Two of these wells will be connected to the existing subsea production system of Phase 1. The natural gas extracted from these two wells will be transported to and processed in the OPF. The other wells will be connected to a new subsea production system to be installed and will be processed within a floating production unit (FPU), transported onshore through approximately 170 km long 16-inch (40.64 cm) diameter steel pipeline, and delivered to BOTAŞ through the export pipeline. Gas will then be measured at the existing Fiscal Metering Station (FMS) and offloaded to the existing 36 km Phase 1 BOTAŞ Pipeline, which will be connected to the 175 km Phase 2 BOTAŞ pipeline to be built.

  Phase 2 aims to increase the total maximum raw gas extraction capacity up to 20.5 million Sm³/day, by adding 10.5 million Sm³/day to the existing capacity.
- Under **Phase 3**, further expansion of the subsea production system and associated SURF interconnections will occur, possibly including additional floating production system and export pipeline. The natural gas production in the Sakarya Gas Field will continue with the connection of 44 additional wells to the subsea production system. With Phase 3, production will be realized from a total of 67 wells, and the total maximum production capacity of 46.5 million Sm³/day.

It is planned to commence Phase 2 (the Project) of the Sakarya Gas Field Development Project ("SGFD"). SGFD Phase 2 is the subject of this ESIA Unless otherwise stated, the terms "Project" and "Phase 2" refer to the Phase 2 of the Sakarya Gas Field Development Project.

TP-OTC is considering receiving a loan from Export Credit Agencies (ECAs) for the purchase of Phase 2 (i.e. Subsea Production System (SPS), SURF, FPU and export pipeline).

A Screening Report for Phase 2 has been prepared to review the previous studies and the current applications for the SGFD including Phase 1 national EIA and ESIA studies, environmental and social monitoring studies, and the current Environmental and Social Management System (ESMS) practices. The report suggests actions to reach a fully bankable ESIA in line with the International Conventions, International Financing Institutions' (IFI) Performance Standards (Equator Principles, IFC Performance Standards and Guidelines) and the best

practices in the oil and gas industry along with the national legislation. This Screening Report is based on the design information as of 8 August 2024.

WSP Danışmanlık ve Mühendislik Ltd. Şti (WSP) was retained as a consultant to carry out the Environmental and Social Impact Assessment of the FPU, (SPS), SURF and the export gas pipeline components of the SGFD Phase 2 (Project).

The potential lenders require the Project environmental and social information to be disclosed to stakeholders and this information is referred to as the disclosure package, which demonstrates Project's compliance with the lenders' requirements.

Site Location Map showing Sakarya Gas Field Development Project, The Offshore and Onshore Sections is presented below.

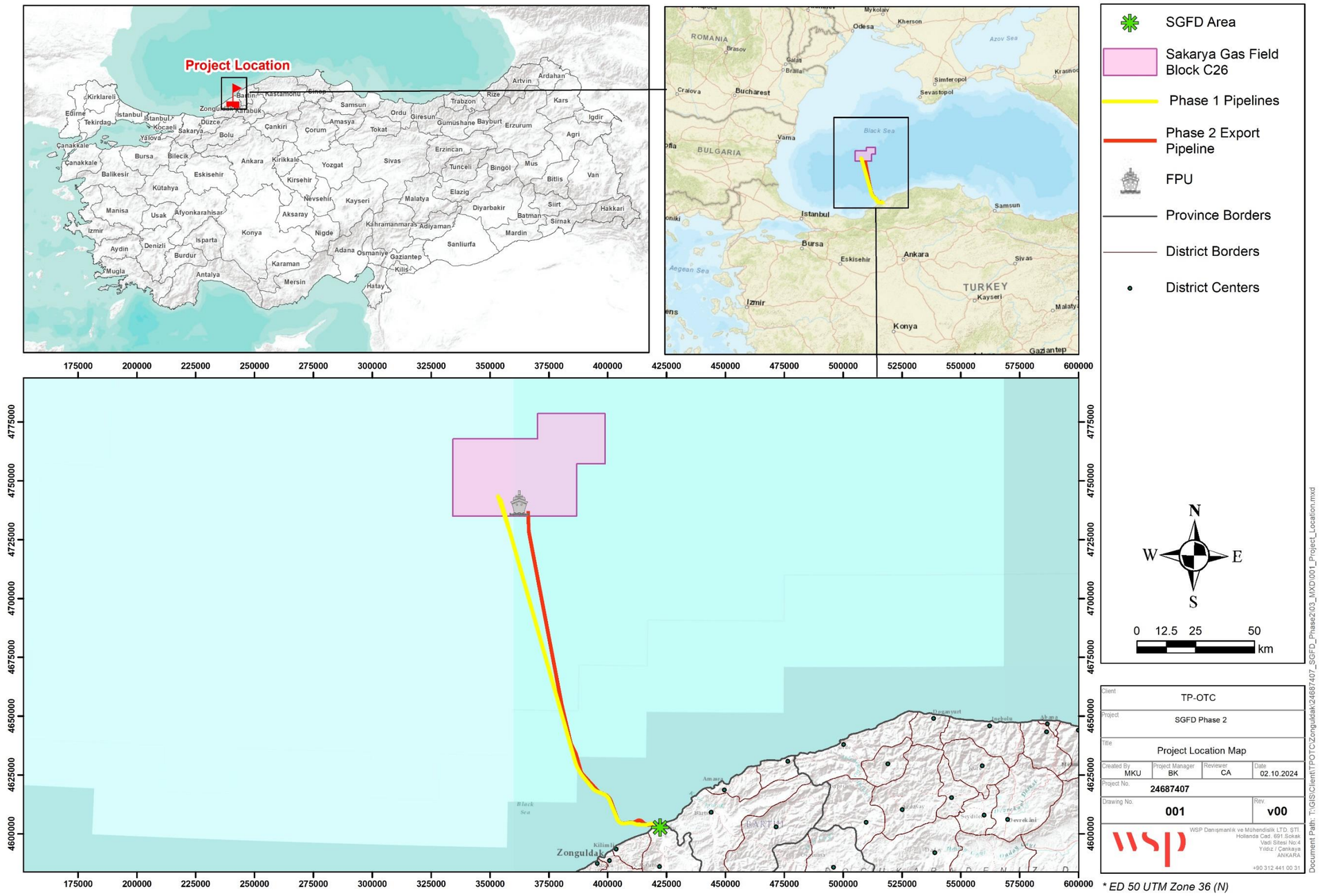

Figure 1-1: Sakarya Gas Field Development Project, Site Location Map

1.1 Background on the Project

1.1.1 The Discovery of Sakarya Gas Field

Sakarya Gas Field is located within the Sakarya Gas Field Block C26 in the western Black Sea, approximately 155 km offshore Filyos, located in Zonguldak, Türkiye. The Sakarya Gas Field is the first deepwater gas field discovery and the biggest natural gas reserve in the country. Gas explorations and wells installation in this area have both been undergoing since October 2020 and are forecasted to continue well beyond 2025.

Sakarya Gas Field discovery was initiated with the Tuna-1 deepwater exploration well, set at a depth of 2,115 m to reach a depth of 4,525 m, using its sixth generation deepwater drillship Fatih, in August 2020. The well intercepted more than 100 m of the natural gas-bearing reservoir in the Pliocene and Miocene sandstone formations. The initial natural gas reserve estimation was 320 billion cubic meters (bcm)/11 trillion cubic feet (tcf)) of lean gas, which is considered the largest gas reserve discovered both in the Turkish Exclusive Economic Zone and in the Black Sea.

In the deeper sections of Tuna-1, a second discovery was made in October 2020, increasing the potential reserve estimate to 405bcm (14.3tcf) of lean gas. The discovery was made at a depth of 4,775 m in 2,117 m of water, where an additional 30 m of gas play was encountered in the reservoir in sandstones of the early-Pliocene to late-Miocene era.

In June 2021, further 135bcm gas was discovered through the drilling of the Amasra-1 exploration well by the Fatih drill ship, where the natural gas was intercepted at three levels between 3,000m and 4,000m.

1.1.2 Construction Period of Phase 1

The construction period of Phase 1 is complete, commissioning and operations started in 2023.

In the Phase 1 natural gas production with the subsea production system (SPS) from 10 wells in the Sakarya Gas Field, being transported onshore through a 170 km long 16-inch (40.64 cm) diameter steel pipeline, processed at the onshore processing facility (OPF), and delivered to BOTAŞ, with a daily production capacity of up to 10 million standard m^3. Within Phase 1, the infrastructure, including the SPS, SURF, and OPF has been installed, and the first gas arrival onshore was achieved in 2023 with an initial production of 2.8 million Sm^3/day.

1.2 Background on the Applicant, TPAO/TP-OTC

TPAO has been established in order to perform hydrocarbon exploration, drilling, production, refinery and marketing activities on behalf of the Turkish Republic with the Law no 6327, in 1954.

TPAO continued exploration, production, refining, marketing and transportation activities until 1983 as an integrated oil company. TPAO has been acting as a state-owned exploration and production oil company since the legal regulations made in 1983 and some other more recent changes.

TPAO brought 17 big oil and gas, petrochemicals companies such as PETKİM, TÜPRAŞ and PETROL OFİSİ to Türkiye's economy for the first time in a period of more than half a century.[1]

TP-OTC was founded on 12 March 2019 upon a Resolution of the Board of Directors of the main company TPAO, which conducts and supports petroleum and natural gas exploration and production activities at the seas

[1] https://www.tpao.gov.tr/en/about-tpao

of Türkiye. The name TP-OTC was registered on 2 April 2019 following this resolution, and the company was structured specifically for the conducting of maritime operations.[2]

TP-OTC, 100% owned by TPAO will be conducting Project Management and EPCI for the Project.

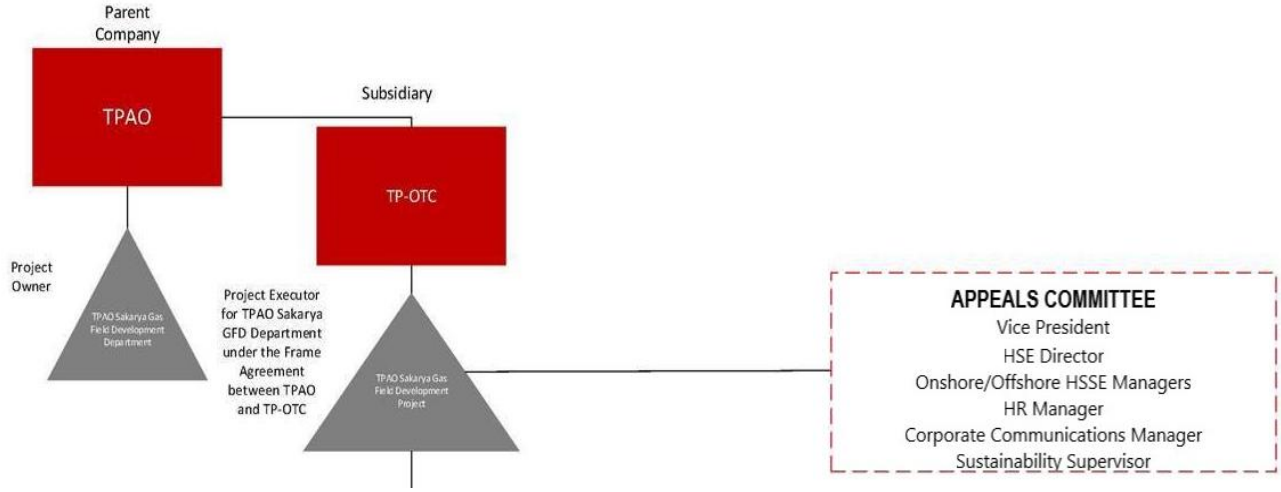

Figure 1-2: Relation of TPAO and TP-OTC with the Project

1.3 Purpose of the ESIA Report

1.3.1 Objectives

A bankable ESIA needs to comply with both the national legislation and international standards. IFC Performance Standard 1 (IFC, 2012) lists the overall objectives for an ESIA, including:

- to identify and assess social and environmental impacts, both adverse and beneficial, in the Project's area of influence;
- to follow the mitigation hierarchy of avoidance, minimization and mitigation of impacts and if needed compensation, with respect to adverse impacts to workers, other affected people, and the environment;
- to conduct meaningful consultation; and
- to promote improved social and environmental performance of companies through the effective use of management systems.

As described in IFC Performance Standard 1, the main components of the assessment will include:

- the potential environmental and social impacts of the Project throughout the full development cycle – preconstruction, construction, operation, decommissioning;
- a public consultation and disclosure plan to ensure that local communities and other key stakeholders are informed of the Project and have an opportunity to express their opinions concerning the Project;
- proposed mitigation activities to minimize adverse environmental impacts;

[2] https://tp-otc.com/en/about-us/

- the nature and significance of residual impacts (those adverse impacts that occur after mitigation has been applied) and ongoing monitoring and management plans to address them;
- the nature and significance of cumulative impacts;
- a social management plan to maximize benefits to the local community and promote a sustainable economy.

The ESIA package consists of the following components:

- ESIA Report;
- Non-Technical Summary (NTS);
- Biodiversity Management Plan (BMP);
- Stakeholder Engagement Plan (SEP);
- Livelihood Restoration Plan (LRP).

As Sakarya Gas Field Development Project as a whole, already has an existing and functional ESMS, the existing management system documentation, including the SEP, BMP and LRP, are updated to incorporate Phase 2 construction and operations.

1.3.2 Categorization of the Project

According to the IFC's Policy on E&S Sustainability (January 2012), as part of the review of environmental and social risks and impacts of a proposed investment, IFC uses a process of environmental and social categorization to reflect the magnitude of risks and impacts. The resulting category also specifies IFC's institutional requirements for disclosure in accordance with the IFC's Access to Information Policy. Accordingly, all projects are divided in four categories:

- Category A: business activities with potential significant adverse ES risks and/or impacts that are diverse, irreversible, or unprecedented;
- Category B: business activities with potential limited adverse ES risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures;
- Category C: business activities with minimal or no adverse ES risks and/or impacts; and
- Category FI: business activities involving investments in financial intermediaries or through delivery mechanisms involving financial intermediation. This category is further divided into three risk categories (FI-1, FI-2, FI-3).

As per the E&S categorisation criteria of the applicable standards given below, the Project is categorised as "Category A."

Table 1-1: Project Categorisation According to Applicable Standards

Applicable Standard	Category Explanation
IFC PSs (2012)	Category A: Business activities with potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented.

Applicable Standard	Category Explanation
EPIV (2020)	Category A: Projects with potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented.

1.3.3 Steps of the ESIA

1.3.3.1 Screening Phase

Sakarya Gas Field Development Project already has an existing and functional ESMS, where monitoring of the environmental, biodiversity and social components are ongoing. Additionally, several documents have been prepared to support the design, national EIA and the international ESIA process. The first stage of the ESIA process has been to review all existing documentation and proceed with the Screening Phase to identify requirements for an ESIA compliant with relevant international standards. The overall role of the Screening Phase was to review, existing technical documents, reports, studies to evaluate the possibility of using the data already available in the preparation of the international ESIA.

1.3.3.2 Baseline Data Collection

Baseline information for the ESIA is obtained from the Phase 1 monitoring studies and Project specific social, environmental and biological baseline surveys that have been initiated during Screening Phase and carried out as part of this ESIA, utilising both desktop study and field-based approaches.

These studies have been compiled through specifically surveys and collated from a range of sources including publicly available information and through consultation with stakeholders. The information used to support the assessment process is referenced in the relevant chapters and sections of this report.

1.3.3.3 Stakeholder Engagement

Stakeholder engagement is considered as an essential step for a successful management of the Project's environmental and social impacts (IFC PS1). Therefore, the most recent principles, regulations, and international standards and definitions were utilised to identify, approach and engage with all relevant stakeholders through a specifically developed stakeholder engagement program.

Stakeholder mapping and consultation activities were undertaken prior to Phase 1 of the SGFD. The Stakeholder Engagement Plan (SEP) was prepared, and grievance mechanism was set-up. Continuous stakeholder engagement has been carried out by the dedicated Social Impact Specialist and the Community Liaison Officer.

A public participation meeting, within the scope of the Phase 2 national Environmental Impact Assessment (EIA) was held in July 2024. A socio-economic baseline and livelihoods survey was done in August 2024 to establish the baseline for the Phase 2.

1.3.3.4 Impact Assessment and Mitigation Measures

The general methodology adopted by WSP for the ESIA has been designed to be highly transparent and to allow an analysis of the impacts on the various environmental and social components. The steps in WSP's Impact Assessment methodology are the following:

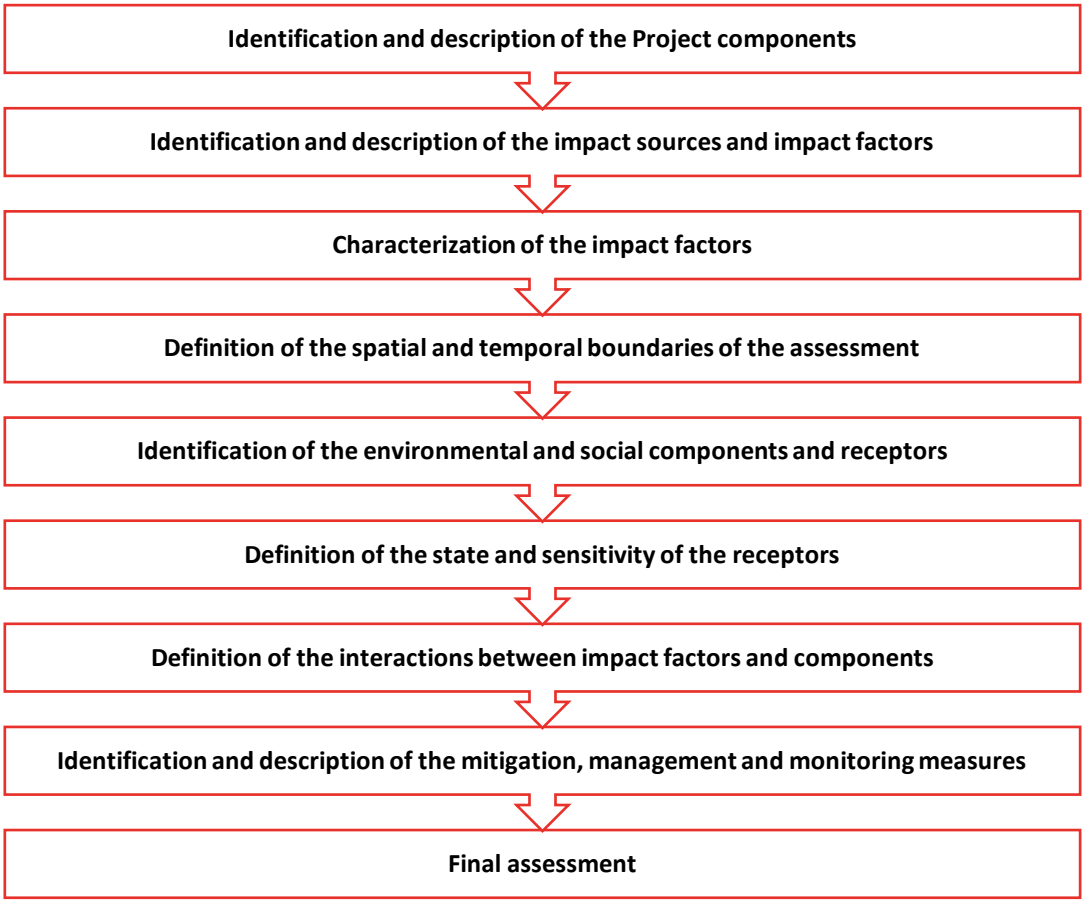

Figure 1-3: Steps of WSP's Impact Assessment methodology

WSP's Impact Assessment methodology is described in detail in Chapter 5 of this report.

1.4 Uncertainties

This ESIA is prepared based on the Project information provided by the TP-OTC and the information collected during the site visits. Like most ESIAs, the current ESIA has faced a number of challenges in terms of retrieving baseline information, ongoing design changes until design is finalized, the level of accuracy of predicting impacts, and developing appropriate mitigations. Furthermore, even with a firm Project design and an unchanging environment, predictions are by definition, uncertain.

Areas of uncertainty, known or future likely data gaps and deficiencies are highlighted within the ESIA report. In order to address the uncertainties, monitoring will be undertaken by the TP-OTC to understand whether the identified mitigation measures are sufficient or there is a need for any refinements.

1.5 Environmental and Social Management and Monitoring

The applicable lenders standards require that an Environmental and Social Management System (ESMS) for the Project is prepared and implemented through the Project lifecycle. The ESMS was prepared for Phase 1 and has been successfully implemented since then. The management system documentation has been updated to incorporate construction and operation phases of the Phase 2. The components of the Project ESMS is described in Chapter 12 of this report.

1.6 Outline of the ESIA Report

This ESIA Report includes the following chapters:

- Introduction (Chapter 1);
- Regulatory and Policy Framework (Chapter 2);
- Project Description (Chapter 3);
- Alternatives Analysis (Chapter 4);
- Methodology of the ESIA (Chapter 5);
- Environmental and Social Baseline (Chapter 6);
- Impact Assessment and Mitigations (Chapter 7);
- Offshore Risk of Accidental Releases (Chapter 8);
- Climate Change Risk Assessment (Chapter 9);
- Cumulative Impact Assessment (Chapter 10);
- Residual Impacts and Conclusions (Chapter 11);
- Environmental and Social Management Framework (Chapter 12);
- References;
- Appendices.

2.0 REGULATORY AND POLICY FRAMEWORK

This chapter provides an overview of the national and international regulatory framework, including policies, legislation, requirements, guidelines and standards applicable to the Project. In the presence of multiple standards coming from different regulatory sources, the Project will apply the most stringent standards in order to protect the environment and the communities potentially affected by the Project.

Applicable Environmental and Social Requirements of the Project are defined based on the IFC Performance Standards (PS), Guidance Documents, IFC Sectoral and General EHS Guidelines, Equator Principles (EP)and the National Turkish legislation.

2.1 Applicable Turkish Legislation

The Turkish legal framework for environmental protection was developed in line with national and international initiatives and standards, and some of them have been revised recently to be harmonized with the European Union (EU) Directives in the scope of pre-accession efforts of Türkiye to the EU. In the following sections, related institutions, legislation, processes, and procedures that are related to the environmental and social aspects of the proposed Project are described.

Republic of Türkiye Ministry of Environment, Urbanization and Climate Change (MoEUCC) is the responsible organization for the issuing and implementation of policies and legislation adopted for protection and conservation of the environment, for sustainable development and for management of climate change.

The Ministry of Agriculture and Forestry (MoAF) is the responsible organization for the issuing and implementation of policies and legislation adopted for the protected areas and management of natural resources.

The Turkish Environment Law No. 2872, which came into force in 1983, deals with environmental issues on a very broad scope. According to the basic principles that govern the application of the Environment Law, and as stated in the Constitution, citizens as well as the state bear responsibility for the protection of environment. Complementary to the Environment Law and its regulations, other laws also govern the protection and conservation of the environment, the prevention and control of pollution, and the implementation of measures for the prevention of pollution.

The Environment Law of 1983 has a comprehensive structure that has a holistic and integrated vision for the environment. “Polluter pays” and “user pays” principles and carrying capacity concepts form the basis of regulatory tools in the Environmental Law. The Law is supported by numerous regulations and decrees prepared or updated in the process of alignment with EU legislation, thus contributing significantly to compensating the gaps within the former legislative system of Türkiye.

A list of regulations currently in force and applicable to the context of the Project are outlined in Appendix B.

2.1.1 Labour and H&S Regulations

Labour and occupational health & safety issues in Türkiye are regulated by the Ministry of Labour and Social Security. Turkish law and the major regulations relevant to labour and working conditions are given in Appendix B.

2.1.2 Permitting Framework

The main permits and approvals applicable to the scope of works are given below.

Table 2-1: The Main Permits and Approvals Required

Subject	Permit / Approval	Relevant Regulatory Framework
Land Use	Land use agreements for state owned lands Easement Preliminary Permit for Marine Spaces (Territorial Waters) Approval Process for the Zoning Plans of the Sea Section Approval Process for the Zoning Plans of the Onshore Section Marine areas usage permit Approval of the Onshore Geological-Geotechnical Survey Report Approval of the Offshore Geological-Geotechnical Survey Report Zoning plans with a 1/5,000 and 1/1,000 scales for the Onshore Section Zoning plans with a 1/5,000 and 1/1,000 scales for the SURF (for the portion from the coastal line of the SURF up to the Turkish territorial waters)	Relevant laws and regulations specific to the land use type Industrial Zones Law (No: 4737, 2002) Regulation on the Management of Treasury Properties Coastal Law No. 3621 and its sub-legislation
	Permit for the use of agricultural lands for non-agricultural purposes (if required)	Law on Soil Protection and Land Use (No: 5403, 2005)
	Approval of expropriation plans (if required)	Expropriation Law (No: 2942, 1983)
	Permit for the use of forest lands (if required)	Forestry Law (No. 6831,1956) Implementation Regulation of 16th Article of the Forestry Law Implementation Regulation of 17/3rd and 18th Articles of the Forestry Law
	Permit for the use of pasture lands (change of the purpose of allocation) (if required)	Pasture Law (No: 4342, 1998)
	Establishing a transit agreement with the cable owners in the event a cable transit is encountered	-
	Confirmation from the Turkish Navy whether there is an existing unexploded military ordnance (UXO) on the pipeline route.	-
	Bathymetric and oceanographic report approval	Regulation on Navigation, Hydrography and Oceanography Services
Construction	EIA Approval	Regulation on Environmental Impact Assessment

Subject	Permit / Approval	Relevant Regulatory Framework
	Dredging conformity certificate Dredging permit Dredging pre-authorization	Regulation on Environmental Management of Dredging Material Regulation on Sea and Inland water Drilling Regulation on Sea and Inland Water Drilling
	Waste transportation and acceptance certificate (excavation)	Regulation on the Control of Excavation Soil, Construction and Demolition Waste
	Permits and approvals for roads, water bodies, canals, energy supply lines, pipelines, utilization of municipal infrastructure etc.	Protocols/approvals/official letters of related state authorities
	Workplace notification for construction camp sites Site permits and subscriptions	Regulation on Opening a Business and Working Licenses (No: 25902, 2005)
	Trial permit /Business licence	Regulation on Opening a Business and Working Licenses (No: 25902, 2005)
	Construction permit	Industrial Zones Law (No: 4737, 2002)
	Permit for on-site fuel storage	Regulation on Environmental Permits and Licenses (No: 29115, 2014)
	Approval of wastewater treatment plant application project	Wastewater Treatment/Deep Sea Discharge Facility Project Approval Circular (No: 2018/14, 2018)
	Temporary operating certificate/environmental permit (discharge, emission, etc.) for camp site wastewater discharge, emission due to heating, generator usage, concrete batching plant operation	Regulation on Environmental Permits and Licenses Water Pollution Control Regulation Industrial Air Pollution Control Regulation
	Water use agreement with relevant Municipalities	-
	Waste management plan approval, Temporary storage permit (if a thousand kilograms or more of hazardous waste will be produced per month) Agreements made with licensed waste management and disposal companies	Waste Management Regulation
	Night work permit (if required)	Regulation on Control of Environmental Noise
	Foreign personnel work permits	International Labour Law (No:6735, 2016)
	Diving Permit Revision	Regulation on Ports (No:28453, 2012)

Subject	Permit / Approval	Relevant Regulatory Framework
	Private security permit	Regulation on the Implementation of the Law Concerning Private Security Services
Operation	Building permits, Occupancy permits	Zoning Law No. 3194 and its sub-legislation
	Energy identity certificate (for buildings)	Regulation on Energy Performance in Buildings
	Confirmation that the seabed umbilical and pipelines have been built in accordance with the Project	Presidential Decree No. 1 on the Presidency Organization
	Fire report approval	Regulation on Fire Protection of Buildings
	Offshore facility emergency response plan approval	Law No. 5312 on the Principles of Emergency Response and Compensation for Damages in Pollution of the Marine Environment with Petroleum and Other Harmful Substances and its related regulations
	Approval of wastewater treatment plant application projects	Wastewater Treatment/Deep Sea Discharge Facility Project Approval Circular No. 2018/14
	Temporary operating certificate/environmental permit for wastewater discharge, emissions and noise	Regulation on Environmental Permits and Licenses (No: 29115, 2014)
	Permit for facilities with a total combustion system thermal power of 2 MW or more and less than 100 MW and using gaseous fuel and/or more than one fuel	Regulation on Environmental Permits and Licenses (No: 29115, 2014)
	Permit for combined cycle, combined heat power plants, internal combustion engines, gas turbines, generators with a total combustion system thermal power of 1 MW or more and less than 100 MW	Regulation on Environmental Permits and Licenses (No: 29115, 2014)
	Permit for urban and/or domestic wastewater treatment facilities with a capacity of less than 20,000 m3/day1,2	Regulation on Environmental Permits and Licenses (No: 29115, 2014)
	Permit for Facilities storing organic chemicals and having a total storage capacity of 200 tons or more and less than 50,000 tons	Regulation on Environmental Permits and Licenses (No: 29115, 2014)
	Hazardous substance activity certificate within the scope of ADR	Regulation on Carriage of Dangerous Goods by Road
	Greenhouse gas emission monitoring report approval	Regulation on the Monitoring of Greenhouse Gas Emissions

Subject	Permit / Approval	Relevant Regulatory Framework
	Groundwater use permit Groundwater exploration permit	Law on Groundwater Resources (No. 167, 1960)
	Waste management plan approval, Temporary Storage Permit (if a thousand kilograms or more of hazardous waste will be produced per month) Agreements made with licensed waste management and disposal companies Waste Transport Permit	Waste Management Regulation Regulation on Receiving Waste from Ships and Control of Waste
	Permit for on-site fuel storage Wastewater Discharge Permit	Regulation on Environmental Permits and Licenses (No: 29115, 2014) Water Pollution Control Regulation
	Seveso declaration	Regulation on Prevention and Mitigation of Major Industrial Accidents
	Hazardous substance activity certificate	Directive on the Procedures and Principles Regarding Issuing Hazardous Substances Activity Document
	Business license for subsea production system	The Turkish Petroleum Law No. 6491
	Energy Market Regulatory Authority (EMRA) requirements	Electricity Market Law No. 28603 Natural Gas Market Law No. 4646
	Private security permit	Regulation on the Implementation of the Law Concerning Private Security Services

2.2 Applicable International Legislation

Türkiye is a party to many international agreements regarding multiple social and environmental subjects. These are listed in Appendix B and their applicability will be further discussed in the relevant chapters of this ESIA.

Türkiye has also ratified the following international conventions and agreements related to human rights that apply may apply to this Project.

Council of Europe Documents

- European Convention for the Protection of Human Rights and Fundamental Freedoms (As Amended by Protocol No. 11)
- Council of Europe Convention on the Prevention of Terrorism
- European Convention on the Exercise of Children's Rights
- Protocol No. 4 to the Convention for The Protection of Human Rights and Fundamental Freedoms Securing Certain Rights and Freedoms Other Than Those Already Included in the Convention and in the First Protocol Thereto
- Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms

- European Social Charter

United Nations Documents

- The Statute of The Council of Europe
- Report of The Office of The United Nations High Commissioner for Human Rights on the International Workshop on Enhancing Cooperation Between International and Regional Mechanisms for The Promotion and Protection of Human Rights
- The Role of The Ombudsman, Mediator and Other National Human Rights Institutions in the Promotion and Protection of Human Rights
- International Covenant on Civil and Political Rights
- The Universal Declaration of Human Rights

The ILO Conventions Ratified by Türkiye

- C 2 Unemployment Convention, 1919
- C 11 Right of Association (Agriculture) Convention, 1921
- C 14 Weekly Rest (Industry) Convention, 1921
- C 15 Minimum Age (Trimmers and Stokers) Convention, 1921
- C 26 Minimum Wage-Fixing Machinery Convention, 1928
- C 29 Forced Labour Convention, 1930
- C 34 Fee-Charging Employment Agencies Convention, 1933
- C 42 Workmen's Compensation (Occupational Diseases) Convention (Revised), 1934
- C 45 Underground Work (Women) Convention, 1935
- C 53 Officers' Competency Certificates Convention, 1936
- C 55 Shipowners' Liability (Sick and Injured Seamen) Convention, 1936
- C 58 Minimum Age (Sea) Convention (Revised), 1936
- C 59 Minimum Age (Industry) Convention (Revised), 1937
- C 68 Food and Catering (Ships' Crews) Convention, 1946
- C 69 Certification of Ships' Cooks Convention, 1946
- C 73 Medical Examination (Seafarers Convention, 1946
- C 77 Medical Examination of Young Persons (Industry) Convention, 1946
- C 80 Final Articles Révision Convention, 1946
- C 81 Labour Inspection Convention, 1947

- C 87 Freedom of Association and Protection of the Right to Organise Convention, 1948
- C 88 Employment Service Convention, 1948
- C 92 Accommodation of Crews Convention (Revised), 1949
- C 94 Labour Clauses (Public Contracts) Convention, 1949
- C 95 Protection of Wages Convention, 1949
- C 96 Fee-Charging Employment Agencies Convention (Revised), 1949
- C 98 Right to Organise and Collective Bargaining Convention, 1949
- C 99 Minimum Wage Fixing Machinery (Agriculture) Convention, 1951
- C100 Equal Remuneration Convention, 1951
- C102 Social Security (Minimum Standards) Convention, 1952
- C105 Abolition of Forced Labour Convention, 1957
- C108 Seafarers' Identity Documents Convention, 1958
- C111 Discrimination (Employment and Occupation) Convention, 1958
- C115 Radiation Protection Convention, 1960
- C116 Final Articles Révision Convention, 1961
- C118 Equality of Treatment (Social Security Convention, 1962
- C119 Guarding of Machinery Convention, 1963
- C122 Employment Policy Convention, 1964
- C123 Minimum Age (Underground Work) Convention, 1965
- C127 Maximum Weight Convention, 1967
- C133 Accommodation of Crews (Supplementary Provisions) Convention, 1970
- C134 Prevention of Accidents (Seafarers) Convention, 1970
- C135 Workers' Representatives Convention, 1971
- C138 Minimum Age Convention, 1973
- C142 Human Resources Development Convention, 1975
- C144 Tripartite Consultation (International Labour Standards) Convention, 1976
- C146 Seafarers' Annual Leave with Pay Convention, 1976
- C151 Labour Relations (Public Service) Convention, 1978
- C152 Occupational Safety and Health (Dock Work) Convention, 1979

- C153 Hours of Work and Rest Periods (Road Transport) Convention, 1979
- C155 Occupational Safety and Health Convention, 1981
- C158 Termination of Employment Convention, 1982
- C159 Vocational Rehabilitation and Employment (Disabled Persons) Convention, 1983
- C161 Occupational Health Services Convention, 1985
- C164 Health Protection and Medical Care (Seafarers) Convention, 1987
- C166 Repatriation of Seafarers Convention (Revised), 1987
- C167 Safety and Health in Construction Convention, 1988
- C176 Safety and Health in Mines Convention, 1995
- C182 Worst Forms of Child Labour Convention, 1999
- C187 Promotional Framework for Occupational Safety and Health Convention, 2006.

Other International Standards

The following standards are referred to within the IFC Guidelines:

- WHO Ambient Air Quality Standards, and
- WHO Drinking Water Standards.

In addition, the following guidelines and standards may be utilized:

- Dutch Intervention Values for Soil Quality, as/if needed, and
- IUCN Red Data Book for protected species (fauna and flora).
- International Convention for the Safety of Life at Sea (SOLAS)
- International Convention for the Prevention of Pollution from Ships (MARPOL)
- The Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention)
- Guidance on Heritage Impact Assessments for Cultural World Heritage Properties, ICOMOS 2011

2.3 Equator Principles, IFC Performance Standards

For the preparation of the present document, international conventions and agreements, ESIA International Standards (i.e., Equator Principles, and IFC Performance Standards and guidelines) have been analysed and considered together with national standards.

The Equator Principles Financial Institutions (EPFIs) emphasize that they will not provide loans to projects where the borrower will not or is unable to comply with the EPFIs social and environmental policies and procedures that implement the Equator Principles.

In addition, the Equator Principles endorse the applicable IFC Performance Standards, IFC General EHS Guidelines and IFC Industry Specific EHS Guidelines. The Performance Standards establish the standards that

the project is to meet throughout the life of an investment by the IFC or other relevant financial institutions. General and Industry Specific EHS Guidelines provide implementation guidance and environmental quality limits that projects should comply with.

The Equator Principles, the IFC Performance Standards and Other Guidelines are listed below.

2.3.1 Equator Principles IV (2020)

The EPFIs have ten principles which are given below:

- Principle 1: Review and Categorization
- Principle 2: Environmental and Social Assessment
- Principle 3: Applicable Environmental and Social Standards
- Principle 4: Environmental and Social Management System and Equator Principles Action Plan
- Principle 5: Stakeholder Engagement
- Principle 6: Grievance Mechanism
- Principle 7: Independent Review
- Principle 8: Covenants
- Principle 9: Independent Monitoring and Reporting
- Principle 10: Reporting and Transparency

2.3.2 IFC Performance Standards (2012)

The eight Performance Standards (PSs) establish the standards that a project is to meet throughout the life of an investment by the IFC or any other relevant financial institution. These are the followings:

- Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
- Performance Standard 2: Labour and Working Conditions
- Performance Standard 3: Resource Efficiency and Pollution Prevention
- Performance Standard 4: Community Health, Safety, and Security
- Performance Standard 5: Land Acquisition and Involuntary Resettlement
- Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- Performance Standard 7: Indigenous Peoples (not applicable to the Project)
- Performance Standard 8: Cultural Heritage

2.3.2.1 IFC General EHS Guidelines

The General EHS Guidelines (dated April 30th, 2007) provide guidance to users on common EHS issues potentially applicable to all industry sectors. During the design, construction, operation and decommissioning of

a project (the project lifecycle) the project owner will consider ambient conditions and apply pollution prevention and control technologies and practices (techniques) that are best suited to avoid or, where avoidance is not feasible, minimize or reduce adverse impacts on human health and the environment while remaining technically and financially feasible and cost-effective. The project-specific pollution prevention and control techniques included in General EHS Guidelines involve the subjects listed below:

- Air emissions and ambient air quality,
- Energy conservation,
- Wastewater and ambient water quality,
- Water conservation,
- Hazardous materials management,
- Waste management,
- Noise,
- Contaminated land,
- Occupational Health & Safety,
- Community Health & Safety, and
- Construction and Decommissioning.

2.3.2.2 IFC EHS Guidelines for Onshore Oil and Gas Development

Published on May 31st, 2017, the EHS Guidelines for Onshore Oil and Gas Development include information relevant to seismic exploration; exploration and production drilling; development and production activities; transportation activities including pipelines; other facilities including pump stations, metering stations, pigging stations, compressor stations and storage facilities; ancillary and support operations; and decommissioning. The document addresses the following issues:

- Air Emissions,
- Wastewaters,
- Waste Management,
- Hazardous Material Management,
- Noise
- Terrestrial Impacts and Project Footprint
- Spills,
- Occupational Health & Safety,
- Community Health & Safety,
- Performance Indicators and Monitoring,

- Emissions, Effluent and Waste Levels,
- Occupational Health and Safety Monitoring,
- Occupational Health & Safety Guidelines,
- Accident and Fatality Rates.

2.3.2.3 IFC EHS Guidelines for Offshore Oil and Gas Development

Published on June 5th, 2015, the EHS Guidelines for Offshore Oil and Gas Development include information relevant to seismic exploration, exploratory and production drilling, development and production activities, offshore pipeline operations, offshore transportation, tanker loading and unloading, ancillary and support operations, and decommissioning. They also address potential onshore impacts that may result from offshore oil and gas activities. The document addresses the following issues:

- Air Emissions,
- Wastewaters,
- Waste Management,
- Hazardous Material Management,
- Noise
- Spills,
- Loading, Storage, Processing, and Offloading Operations,
- Occupational Health & Safety,
- Community Health & Safety,
- Emission and Effluent Guidelines,
- Environmental Monitoring,
- Occupational Health and Safety Monitoring,
- Occupational Health & Safety Guidelines,
- Accident and Fatality Rates.

2.3.2.4 IFC EHS Guidelines for Shipping

Published on April 30th, 2017, the EHS Guidelines for Shipping include information relevant to the operation and maintenance of ships used for the transport of bulk cargo, and goods. The document addresses the following issues:

- Petroleum and Hazardous Materials Management,
- Wastewater and Other Effluents,
- Air Emissions,

- Waste,
- Noise
- Occupational Health & Safety,
- Community Health & Safety,

2.3.2.5 Performance Indicators and Monitoring, Documents Pertaining to Human Rights

The IFC's Sustainability Framework – consisting of the Policy on Environmental and Social Sustainability, Performance Standards on Environmental and Social Sustainability, and Access to Information Policy – were released publicly on August 1st, 2011, with an effective date of January 1st, 2012.

The external context has evolved rapidly in certain thematic areas, including increased attention towards climate change, ecosystem services, financial intermediaries, and human rights. With regard to the latter, the consultation process confirmed that human rights are now a major sustainability issue for businesses and their stakeholders. The IFC's commitment to respecting human rights in its business activities is captured in the Sustainability Policy, while IFC Owners' responsibility to respect human rights is captured in Performance Standard 1. Other provisions in the Performance Standards also support various human rights relevant to business. In that context, many human rights risks for business can be effectively addressed through social and environmental considerations. Some major items in that respect will be under the categories of:

- Labour and Working Conditions;
- Community Health, Safety, and Security;
- Land Acquisition and Involuntary Resettlement;
- Indigenous Peoples (not applicable to the Project); and
- Cultural Heritage.

2.3.2.6 Other IFC Guidelines

IFC Guidelines that are applicable to the Project are provided as follows:

- IFC's Good Practice Note on Addressing Grievances from Project-Affected Communities (2009)
- IFC's Good Practice Note on Managing Contractors' Environmental and Social Performance (2017)
- IFC's Good Practice Handbook on Use of Security Forces: Assessing and Managing Risks and Impacts (2017)
- IFC's Handbook for Addressing Project-Induced In-Migration (2009)
- IFC's Introduction to Health Impact Assessment (2009)
- IFC and EBRD's Guidance Note on Workers' Accommodation: Processes and Standards (2009)
- IFC's Good Practice Handbook on Cumulative Impact Assessment and Management: Guidance for the Private Sector in Emerging Markets (2013)

- IFC's Environmental and Social Management System Implementation Handbook: Construction (2014)
- IFC's Environmental and Social Management System Implementation Handbook: General (2015)
- IFC's Stakeholder Engagement Handbook: A Good Practice Handbook for Companies Doing Business in Emerging Markets (2007)
- Interim Advice for IFC Clients on Supporting Workers in the Context of COVID-19

2.3.3 Environmental Limits

A list of potentially applicable limits and criteria derived from the applicable requirements are presented in Appendix C for each environmental component. The strictest of limits are marked as Project Standards, aligned with the Phase 1 Project Standards.