



# Concept Environmental and Social Review Summary

## Concept Stage

### **(ESRS Concept Stage)**

Date Prepared/Updated: 04/23/2020 | Report No: ESRSC01355



**BASIC INFORMATION**

**A. Basic Project Data**

Country	Region	Project ID	Parent Project ID (if any)
Turkey	EUROPE AND CENTRAL ASIA	P173247	
Project Name	Energy Sector Support under EU/IPA 2018		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Energy & Extractives	Investment Project Financing		6/25/2020
Borrower(s)	Implementing Agency(ies)		
Ministry of Energy and Natural Resources (MENR)	Ministry of Energy and Natural Resources (MENR)		

**Proposed Development Objective(s)**

The project development objective is to: (i) identify low-carbon energy technologies to be deployed by BOTAS, (ii) increase MENR’s capacity to promote awareness of households on energy efficiency benefits, (iii) build EMRA’s capacity to increase the level of trust and market depth in natural gas market and, (iv) improve TEIAS’s capacity for enhanced electricity grid operations.

Financing (in USD Million)	Amount
<b>Total Project Cost</b>	<b>3.65</b>

**B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?**

No

**C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]**

The project is providing technical assistance to the Ministry of Energy and Natural Resources (MENR) and other beneficiary entities, including : 1) supporting utilization of efficient and low-carbon technologies at one BOTAS liquified natural gas (LNG) terminal for the establishment of flare gas recovery system, as well organization of site visits and workshops in EU member states to examine FGR systems at liquified natural gas (LNG) terminals; 2) Enhancing MENR’s capacity in implementing and measuring the impact of energy efficiency awareness-raising activities and strategies towards households; 3) Improving TEIAS’ planning-related activities, such as R&D



implementations, transmission and generation planning activities; 4) Developing EMRA's capacity to implement the Legislation on Transparency and Competition in Turkish Natural Gas Market in line with the REMIT directive and the legislation on natural gas market transactions and to monitor natural gas market transparency and transactions.

#### **D. Environmental and Social Overview**

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]

This is a technical assistance (TA) recipient executed activity which will include different types of studies and capacity building activities and will be implemented country-wide. The project will not create any adverse impacts on the physical and social environment as most of the activities to be implemented will be desk-based studies. The projects involves a range of diverse activities implemented by four different government agencies/SOEs operating in the energy space. Most of the components include analytical work, capacity building and training except the activity which includes preparation of feasibility study for FGR (Flare Gas Recovery) systems. Although there will be no investments in FGR within the scope of the TA, the results of the TA can lead to potential investments if the corresponding savings from implementing such technology is confirmed. In this case, the installation and operation of FGR systems could result in impacts related to civil works to be implemented on the sites (noise, dust emissions, waste generation etc.) and operational phase associated with wastewater generation and occupational health and safety risks such as working in confined space and community safety risks depending on the location and proximity to communities of the facility. Those potential risks and impacts will be assessed within the scope of the feasibility studies. However, the intent of this FGR study is not the preparation of the future Bank investments.

Increasing energy demand from Turkey's growing economy constitutes a macroeconomic challenge and an energy security risk. The relatively good performance of the Turkish economy between 2002 and 2012 was a major driver of energy demand and investment in the Turkish energy market. Although economic growth slowed down in 2013, energy demand continued to grow more than the world average. Demand growth is now slowing down from a compound annual growth rate of around 7 percent in the early 2000s to a more sustainable level of about 3-4 percent projected for the coming years, with demand expected to remain weak in 2019, and potentially in 2020, due to the current economic slowdown in the country. Since the early 2000s, Turkey's energy reforms have prioritized achievement of energy security for a fast-growing economy with rapidly increasing energy needs. These reforms included legislation regarding electricity, gas, renewable energy (RE), and energy efficiency (EE); establishment of an energy sector regulator (namely, the Energy Market Regulatory Authority or EMRA); creation of a functional electricity market (EPIAS) and large-scale introduction of natural gas; restructuring of state-owned energy enterprises; and large-scale private sector participation through privatization and new investment.

Improving energy efficiency contributes to a number of prevailing development challenges. Positive impacts on households include benefits arising from potential energy saving, due to more efficient consumption, and more insulation from tariff reforms, which adversely affect poorer households, and it is a relatively inexpensive method for reducing global and local pollution. Similarly, the TA will also support activities to improve the transparency and competitiveness of the electricity market, with positive impacts for electricity and gas consumers in Turkey. At this stage of the project, direct focus on vulnerable households is still under consideration. During project preparation it will be confirmed if the project will develop any targeted support to energy vulnerable households. One of the challenges is that vulnerable households face a challenge to access funds to invest in energy efficient technology.

#### **D. 2. Borrower's Institutional Capacity**



The Ministry of Energy and Natural Resources (MENR) will be the lead implementing agency. The Directorate General for Foreign Relations and International Projects (DGFRIP) is responsible for the management, supervision and coordination of the EU relations within the Ministry. As such, the implementation of activities of all the beneficiaries will be under the coordination and monitoring of the DGFRIP. While coordinating the overall activities, DGFRIP will rely on the technical expertise from the Directorate General for Energy Affairs (DGEA), Energy Market Regulatory Authority (EMRA), BOTAS (Petroleum Pipeline Corporation) and Turkish Electricity Transmission Company (TEIAS) to prepare technical documents and reviews associated with their specific activities. While MENR does not have solid experience with the World Bank safeguards policies and ESF, other implementing agencies have ongoing projects with the Bank.

The Directorate General for Energy Affairs (DGEA) is responsible for utilization of new and renewable energy resources and preparation/conduction of pilot projects in cooperation with research institutions, local administrations and NGOs, providing necessary consultancy for improvement of energy efficiency and utilization of renewable energy, awareness-raising regarding energy efficiency in industry and buildings, implementing energy efficiency projects approved by the Council under the Presidency, and determining renewable energy and energy efficiency targets and projections for Turkey.

The Petroleum Pipeline Corporation (BOTAS) is Turkey's state-owned fully integrated gas company. The World Bank has an extensive ongoing collaboration with BOTAS through various investment projects including two projects under implementation Gas Sector Development Project and Gas Sector Expansion Project. BOTAS has qualified environmental and social specialists and in the past six months they hired five new staff to strengthen the HSE team. Although the current projects are implemented following safeguards policies, BOTAS has also participated in Borrower's ESF training.

The Energy Market Regulatory Authority (EMRA) was established in 2001 in order to perform the regulatory and supervisory functions in the energy markets. The fundamental objective of EMRA is set forth in its founding document as to ensure development of financially sound and transparent energy markets operating in a competitive environment and delivery of sufficient, good quality, low-cost and environment-friendly energy to consumers and to ensure the autonomous regulation and supervision of electricity, natural gas, and downstream petroleum and liquefied petroleum gas (LPG) markets. EMRA will be the direct beneficiary of Activities 4.1, 4.2 and 4.3.

Turkish Electricity Transmission Company (TEIAS) is a state-owned company carrying out transmission activities by central and nationwide units responsible for project, installation, operation, maintenance and load dispatch, within the context of the "Transmission License" obtained from EMRA in 2003 and the current electricity market structure. TEIAS currently has a project under implementation financed by the Bank - Renewable Energy Implementation Project and the additional financing for the same project has been recently approved by the World Bank Board. TEIAS has an environmental and expropriation department including environmental and social specialists. Both of the projects of TEIAS are implemented following safeguards policies however, the agency has participated in Borrower's ESF training.

During implementation of TA activities the Bank will provide additional support to all agencies to implement stakeholder engagement activities in line with ESS10.

## II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

### A. Environmental and Social Risk Classification (ESRC)

Moderate



**Environmental Risk Rating**

Moderate

Environmental risk is rated as Moderate. Most of the project components are related to technical assistance and capacity building activities for various beneficiaries within the scope of the grant. The studies will be mostly desk based covering identification of low-carbon technologies and increase energy efficiency, and increase capacity to promote energy efficiency at household level, improving planning-related activities such as R&D implementations, transmission and generation planning; developing capacity to implement the legislation on transparency and competition in Turkish natural gas market, the legislation on natural gas market transactions and to monitor natural gas market transparency and transactions. Within the scope of the low carbon technologies, feasibility study, engineering design and procurement documents will be prepared for potential flare gas recovery (FGR) systems to be applied. The studies will be mainly desk-based except some measurements and tests to be potentially implemented in one of BOTAS' existing LNG facility. If any activities are required on site, these will be carried out by BOTAS personnel. Consultants hired to carry out technical studies will not be allowed to site, they will use already available data from BOTAS. . BOTAS's OHS procedures will be analysed at the appraisal stage. The study might lead to potential investment in the facility, if the corresponding savings from implementing such technology is confirmed. However, World Bank financing is not anticipated. In principle, the installation of FGR systems provide positive environmental outputs such as improved energy and resource efficiency, reduced thermal radiation, air pollution and emissions – and hence reduced GHG emissions - as well as reduced noise and light pollution due to recovery of gas instead of flaring. However, in the case that the studies lead to future to investments, the installation and operation of the FGR systems might result in environmental risks associated with minor construction works such as noise, dust emissions, waste generation and occupational health and safety risks such as working at heights, and wastewater generation. Community health and safety risks due to operation of the facilities such as fire could be other potential risks, depending on the location and operational conditions of the facility. Such risks that could be temporary and reversible, low in magnitude and site specific which can be easily mitigated through good management practices, will be considered within the scope of the feasibility studies with respect to World Bank Group (WBG) Environmental Health and Safety (EHS) Guidelines as well as industry specific WBG EHS Guidelines. The environmental risks and impacts will be assessed within the scope of the feasibility studies.

**Social Risk Rating**

Moderate

Social risk is rated Moderate as the the project will support technical assistance (TA) studies and capacity building activities in the energy sector. This is recipient-executed TA project financed by the EU IPA funds, and working with existing Bank clients in the energy sector in Turkey. The TA will produce studies to identify low-carbon energy technologies, increase the energy agency's capacity to promote awareness of households on energy efficiency benefits, improve planning-related activities of the transmission energy SOE such as R&D implementations, transmission and generation planning, and improve energy agency's capacity to implement the Legislation on Transparency and Competition in Turkish Natural Gas Market and the legislation on natural gas market transactions, and to monitor natural gas market transparency and transactions. These studies will mainly involve desk-based work. The studies will not require temporary access to the private land. Labor risk is low as the activities will be carried out by civil servants, and technical consultants who will be hired following Bank procurement procedures. Community health and safety risks are not expected as there will be no civil works, and any measurements and data collection will take place within existing facilities.

This TA would not involve the preparation for a concrete investment by the Bank in the energy sector which could have potential social risks and impacts. The TA will integrate environmental and social concerns into ToRs, studies and any other analytical products, that will ensure that the planning process includes adequate assessment of environmental and social implications and that the advice provided through this TA for addressing those implications

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is consistent with the ESS 1 - 10. Activities focusing on increasing the awareness on energy efficiency in households will integrate extensive stakeholder engagement and outreach to the energy users. Overall, the project will have positive social impacts as it will focus on energy efficiency and low carbon technologies.

## **B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered**

### **B.1. General Assessment**

#### **ESS1 Assessment and Management of Environmental and Social Risks and Impacts**

##### ***Overview of the relevance of the Standard for the Project:***

The project is providing technical assistance for the four beneficiaries including : 1) supporting utilization of efficient and low-carbon technologies (feasibility, detailed engineering, and cost-estimation studies for establishment of flare gas recovery (FGR) system at BOTAS and organization of multiple technical site visits and workshops in EU member states to examine the FGR systems at liquified natural gas (LNG) terminals; 2) Enhancing MENR's capacity in implementing and measuring the impact of energy efficiency awareness-raising activities and strategies towards households (Identification of market readiness and preparation of a road map for harmonization with EU's eco-design and labeling regulations in Turkey; development of a purchasing guide and a calculation tool for public procurement of energy efficient products including office equipment, lighting, household appliances and consumers electronics; organization of training on preparing communication strategy and plans, awareness-raising and PR campaigns; awareness-raising activities towards households including preparation of a communication plan; design of a public awareness campaign; preparation of brochures for efficient households appliances; design, recording, editing and delivery of public service advertisement videos; design of a brand face (logo/item/mascot etc.) representing energy efficiency campaign and supply and distribution of shopping bags made of recycled fabric/material with the brand face visuals on them to 500,000 households; site visits to EU member states for best practices; development of a sustainable energy efficiency financing mechanism for replacement of inefficient household appliances, office equipment, lighting, and consumers electronics; 3) Improving TEIAS' planning-related activities, such as R&D implementations, transmission and generation planning activities; 4) Developing EMRA's capacity to implement the Legislation on Transparency and Competition in Turkish Natural Gas Market in line with REMIT and the legislation on natural gas market transactions and to monitor natural gas market transparency and transactions.

These TA components of the project will have minimal physical and social footprint. These studies will involve desk-based analysis. Only FGR study may require equipment testing and measurements, but these will only take place within an existing BOTAS' LNG facility and would be carried out by BOTAS designated staff. The studies will not require temporary access to the private land. Labor risk is low as the activities will be carried out by civil servants, and technical consultants who will be hired following Bank procurement procedures. Community health and safety risks are not expected as there will be no civil works, and any potential measurements would take place within existing facilities, which have emergency procedures in place. The environmental impacts are anticipated to be positive. In the case that the studies related to FGR systems lead to investments, there could be potential environmental impacts associated with the civil works such as dust emissions, noise and waste generation, and wastewater generation, potential fire hazards and occupational health and safety risks as well as community safety risks (if applicable) for the operational phase. These potential risks and impacts will be assessed within the scope of the feasibility studies. However, at this stage the Bank is not planning to finance any investments which would result from this study. The Terms of Reference (ToR) for the feasibility study for FGR will also cover risks associated with labor and community health and safety issues during construction and operational phases.



This TA would not involve preparation for a concrete investment in the energy sector which could have potential social and environmental risks and impacts. However, the advice provided by this TA may have environmental and social implications on future Government of Turkey investments in energy sector. In line with OESRC Advisory Note - Technical Assistance and the Environmental and Social Framework (May 21, 2019), the project will integrate environmental and social concerns into ToRs, studies and any other analytical products, that will ensure that the planning process includes adequate assessment of environmental and social implications and that the advice provided through this TA for addressing those implications is consistent with the ESS 1 - 10. ToRs for studies will integrate environmental and social requirements of ESF, including those related to ESS2 and ESS4, as well as the World Bank Group (WBG) General Environmental Health and Safety Guidelines (EHSG) and sector specific EHSG including natural gas processing and electric power transmission and distribution. The draft TOR for the feasibility study for FGR will be prepared and disclosed by Appraisal.

Social and environmental impacts are expected to be positive as the project will support studies related to the use of low carbon technologies which will result in reduced air and thermal emissions, noise and increase energy efficiency and identification of savings through energy efficient appliances at the household level and awareness raising of households on energy efficiency. The project will integrate stakeholder engagement and consultation process into its activities especially in the Component 2. Enhancing MENR's capacity in implementing and measuring the impact of energy efficiency awareness-raising activities and strategies towards households. Special focus will be on active engagement of households, including vulnerable groups such as elderly, female headed households, youth. The studies will not require temporary access to the private land. Labor risk is low as the activities will be carried out by civil servants, employees of SOEs, and technical consultants who will be hired following Bank procurement procedures. Community health and safety risks are not expected as there will be no civil works, and measurements and testing will take place within existing facilities.

**Areas where "Use of Borrower Framework" is being considered:**

The Use of Borrower Framework is not being considered.

**ESS10 Stakeholder Engagement and Information Disclosure**

The Borrower will prepare the Stakeholder Engagement Plan (SEP) which will outline general principles and a collaborative strategy to identify stakeholders and plan for an engagement process in accordance with ESS10. The initial assessment indicated that the key stakeholders are: Ministry of Energy and Natural Resources, BOTAS, TEIAS, EMRA, DGEA, households to be targeted by the energy efficiency awareness campaign, firms producing in the energy efficient products. The SEP preparation process will identify additional direct and indirect stakeholders, particularly at the local level.

The SEP will present modalities of engagement that are tailored to the needs and characteristics of each stakeholder group. The Ministry of Energy and Natural Resources will ensure that all consultations are inclusive and accessible (both in format and location) and through channels that are suitable in the local context. The SEP will be disclosed to the public, but continue to be updated throughout the implementation phase as needed. The SEP will be prepared and disclosed prior to appraisal. If major changes are made to the SEP, a revised SEP will be prepared and publicly disclosed.

The SEP will include GRM procedures to address project related grievances and suggestions. The Government of Turkey has a centralized feedback mechanism CIMER (Alo 150) which is accessible to all citizens and they can raise any concerns. CIMER then channels these concerns to relevant responsible ministries and agencies. Experience with



previous WB funded projects indicated that citizens use this feedback mechanism to raise a wide range of concerns. Annex of the SEP will also describe workers' GRM.

## **B.2. Specific Risks and Impacts**

**A brief description of the potential environmental and social risks and impacts relevant to the Project.**

### **ESS2 Labor and Working Conditions**

It is expected that project workers will include direct workers (PIU staff and consultants engaged by PIU) and contracted workers (employees of firms carrying out studies and assessments). The Ministry of Energy and Natural resources employees who will be assigned to PIU are civil servants. Civil servants involved in project operations, regardless of whether they work full time or part time, will continue to work under terms and conditions of their existing contracts or appointments in the public sector. ESS2 provisions on occupational health and safety, and prohibition of child and forced labor shall apply to civil servants engaged in the project.

It is expected that contracted workers will be employees of technical consulting firms who will carry out studies and capacity building activities. Community workers will not be engaged in the project, and category of primary supply workers is not relevant in this project.

The labor risk is low, as the project will support TA activities only. Project workers will be civil servants and all consultants engaged in project activities who will be hired following the Bank's procurement guidelines. No physical works will be financed. Turkey's national labor law is overall consistent with and meet the requirement of the ESS2 relevant to the project (see below). It is proposed that labor issues be addressed through the Recipient's commitment in the ESCP and the SEP as follows: (1) the ESCP will include commitment of the Grant Recipient to strictly follow the Bank's guideline on the employment of consultants; and (2) requires the Recipient to include in the ToRs and contracts for consultants measures to ensure compliance with the ESS2, satisfactory to the Bank; in addition, (3) SEP will include grievance mechanisms that the project workers can use if they feel their contractual rights are not respected.

Turkish Labor Code (No. 4857) is to large extent consistent with the ESS 2. Turkey ratified all the four Core ILO Conventions and OHS ILO Conventions. The main gap with ESS2 is related to the requirement for the grievance mechanism for workers. While the national legislation provides for Labor Courts to raise labor rights concerns, the Labor Code does not include specific requirements for workplace grievance mechanism. Law on OHS (No. 6331) governs workplace environments and industries (both public and private) and all categories of employees including part-time workers, interns, and apprentices. The legislation is comprehensive and is generally applicable across all sectors and many industries. Law is consistent with the requirements of the ESS 2. The partial gap exists in the requirement for the provisions of facilities – the law only requires provisions of canteens.

The feasibility study of the FGR system will include in its scope the assessment of occupational health and safety risks associated with construction and operation of the FGR systems such as working at heights, and working in confined spaces. Such labor risks for future investment will be included in the TOR for the feasibility study for the FGR system.





### **ESS3 Resource Efficiency and Pollution Prevention and Management**

This standard is relevant. The project is anticipated to result in positive environmental impacts due to the nature of activities such as increase in capacity building of the energy agency for promoting energy efficiency awareness at household level and conducting feasibility for low carbon technologies such as FGR systems. The feasibility study for reduced carbon technologies is expected to have positive environmental impacts since FGR system provides energy efficiency and reduction of carbon emissions due to flaring in principle. The additional positive environmental impacts includes reduced air emissions (including GHG emissions) and pollution, noise and light pollution as well as thermal radiation and reduction of plant fuel and steam consumption due to recovery of flare gas.

On the other hand, the construction and operational risks and impacts of the FGR systems such as noise, dust emissions, waste generation which are due to regular construction works and wastewater generation due to operation of some of the FGR systems will be assessed within the scope of the feasibility studies.

### **ESS4 Community Health and Safety**

This standard is not found relevant at this stage since TA components will not include risks and impacts related to community health and safety. However, depending on the location of the facilities and proximity of the closest settlement that such systems can be installed, community safety risks should be assessed within the scope of the implementation stage ES instruments.

### **ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

TA components of the project will not include risks and impacts associated with land acquisition and resettlement. Studies will not require temporary access to the private land.

### **ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**

This standard is not found relevant at this stage since the flare gas recovery systems are installed in the existing facilities and no additional footprint is expected. TA component for the project will not include risks and impacts associated with biodiversity conservation and sustainable management of living natural resources.

### **ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

This standard is not relevant since no Indigenous Peoples are known to be present in Turkey.



**ESS8 Cultural Heritage**

This standard is not relevant since TA will not have risks and impacts associated with cultural heritage. The project will not finance any physical works.

**ESS9 Financial Intermediaries**

This standard is not relevant since financial intermediaries will not participate in the project implementation arrangements.

**C. Legal Operational Policies that Apply**

**OP 7.50 Projects on International Waterways** No

**OP 7.60 Projects in Disputed Areas** No

**III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE**

**A. Is a common approach being considered?** No

**Financing Partners**

NA

**B. Proposed Measures, Actions and Timing (Borrower’s commitments)**

**Actions to be completed prior to Bank Board Approval:**

Prepare and disclose ESCP

Prepare and disclose SEP

Prepare and disclose draft TOR for the feasibility study for FGR , which will integrate assessment of environmental and social concerns

**Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):**

Implement SEP

Develop and maintain workers' GRM

Comply with WB Procurement Guidelines when hiring consultants

Preparation of ToRs in line with ESF requirements

**C. Timing**

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**Tentative target date for preparing the Appraisal Stage ESRS**

22-May-2020

**IV. CONTACT POINTS**

**World Bank**

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**Borrower/Client/Recipient**

Borrower: Ministry of Energy and Natural Resources (MENR)

**Implementing Agency(ies)**

Implementing Agency: Ministry of Energy and Natural Resources (MENR)

**V. FOR MORE INFORMATION CONTACT**

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**VI. APPROVAL**

Task Team Leader(s): Ayse Yasemin Orucu, Manuel Berlengiero  
 Practice Manager (ENR/Social) Javaid Afzal Recommended on 23-Apr-2020 at 19:42:31 EDT