ASIAN INFRASTRUCTURE INVESTMENT BANK

P000546
Nov. 7, 2022

Project Document
of the Asian Infrastructure Investment Bank

Sovereign-Backed Financing

Republic of Türkiye: TSKB Sustainable Energy and Infrastructure On-lending Facility, Phase 2

Currency Equivalents
(As of Nov. 4, 2022)

Currency Unit – Turkish Lira (TRY)
TRY 1.00 = USD 0.054
USD 1.00 = TRY 18.57

Borrower's Fiscal year
Jan. 1 – Dec. 31

Abbreviations

AIIB	Asian Infrastructure Investment Bank
BAT	Best Available Techniques
BESS	Battery Energy Storage Systems
BIST	Borsa Istanbul Stock Exchange
BRSA	Banking Regulation and Supervision Authority
CA	Climate Adaptation
CBAM	Carbon Border Adjustment Mechanism
CBRT	Central Bank of the Republic of Türkiye
CEO	Chief Executive Officer
CI	Climate Industries
CM	Climate Mitigation
CO_2	Carbon Dioxide
CRET	Climate Risk Evaluation Tool
CUA	Customs Union Agreement
DA	Designated Account
DL	Disbursement Letter
E&S	Environmental and Social
EC	European Commission
ECM	External Communications Mechanism
EE	Energy Efficiency
EGD	European Green Deal
ELTI	European Association of Long-term Investors
ESEL	Environmental and Social Exclusion List
ESF	Environmental and Social Framework
ESMS	Environmental and Social Management System
ESS	Environmental and Social Standards
EU	European Union
EV	Electric Vehicle
EVP	Executive Vice President
FI	Financial Intermediaries
FX	Foreign Currency
GDAP	Green Deal Action Plan
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
GRM	Grievances Redress Mechanism
GW	Gigawatt
GWh	Gigawatt-hour

IDFC	International Development Finance Club
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
IPP	Independent Power Producer
kW	Kilowatt
kWh	Kilowatt-hour
LARP	Land Acquisition and Resettlement Action Plan
LTIC	Long Term Investors Club
MDB	Multilateral Development Bank
MENR	Ministry of Energy and Natural Resources
MW	Megawatt
MWh	Megawatt-hour
NACE	Nomenclature of Economic Activities
NDC	National Defined Contribution
NEEAP	National Energy Efficiency Action Plan
NPL	Non-performing Loans
NSBF	Non-sovereign backed financing
OPIR	Operational Policy on International Relations
PAP	Project-affected People
PCM	Private Capital Mobilization
PIR	Procurement Instructions for Recipients
PO	Project Objective
POM	Project Operations Manual
PP	Procurement Policy
PPP	Policy on Prohibited Practice
PRB	Principles of Responsible Banking
RES	Renewable Energy Sources
RWA	Risk-weighted Assets
SA	Sub-loan Account
SBF	Sovereign-backed financing
SDG	Sustainable Development Goal
SMS	Sustainability Management System
SOE	Statement of Expenditures
tCO2eq	Tons of Carbon Dioxide Equivalent
TFCD	Task Force on Climate-related Financial Disclosures
TKYB	Türkiye Kalkınma ve Yatırım Bankası
TPES	Total Primary Energy Supply
TRY	Turkish Lira
TSKB	Türkiye Sınai Kalkınma Bankası A.Ş.
TW	Terawatt
TWh	Terawatt-hour
UNEP-FI	United Nations Environment Program Finance Initiative
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
YEKDEM	Yenilenebilir Enerji Kaynakları Destekleme Mekanizması (Renewable Energy Support Scheme)

Contents

1. Summary Sheet

<table>
<tr><td>Project No.</td><td>000546</td></tr>
<tr><td>Project Name</td><td>TSKB Sustainable Energy and Infrastructure On-lending Facility, Phase 2</td></tr>
<tr><td>AIIB Member</td><td>Republic of Türkiye</td></tr>
<tr><td>Borrower</td><td>Türkiye Sınai Kalkınma Bankası A.Ş. (TSKB)</td></tr>
<tr><td>Guarantor</td><td>Republic of Türkiye</td></tr>
<tr><td>Project Implementation Entity</td><td>TSKB</td></tr>
<tr><td>Sector</td><td>Multisector:
Energy, Infrastructure, and Other Productive Sectors</td></tr>
<tr><td>Sub-sector</td><td>Intermediary financing</td></tr>
<tr><td>Project Objective</td><td>To contribute to the Republic of Türkiye’s climate mitigation and adaptation goals in line with the Paris Climate Agreement.</td></tr>
<tr><td>Project Description</td><td>A sovereign-backed multi-sector facility (the Phase 2 Facility) in favor of the Borrower to support Türkiye’s climate mitigation and adaptation commitments under the recently-ratified Paris Climate Agreement (Oct. 2021). Proceeds from the Phase 2 Facility will be on-lent in the form of Sub-loans to eligible private sector entities (the Sub-borrowers) to finance eligible climate mitigation (CM), climate adaptation (CA) and climate industry (CI) projects in Türkiye’s energy, infrastructure, and other productive sectors (the Sub-projects). The Phase 2 Facility proceeds will be allocated to the following key areas:
<table>
<tr><th>Area</th><th>Description</th><th>Allocation</th></tr>
<tr><td>Climate Mitigation: RES</td><td>Investments in grid-connected or captive renewable energy sources (RES) generation installed capacity in eligible technologies.</td><td>≥60 percent</td></tr>
<tr><td>Climate Mitigation: Energy Efficiency (EE)</td><td>Investments in buildings, systems, equipment, and processes that contribute to a reduction of primary energy, electricity consumption or losses in eligible industries.</td><td>≥20 percent</td></tr>
<tr><td>Climate Adaptation</td><td>Investments in processes and structures to mitigate the possible negative impacts or take advantage of climate change related opportunities in eligible industries.</td><td>5-15 percent</td></tr>
<tr><td>Climate industries</td><td>Investments in eligible manufacturing processes and activities that contribute towards the country’s CM and CA goals</td><td>5-15 percent</td></tr>
</table>
</td></tr>
</table>

Implementation Period	Start Date: November/December 2022 End Date: December 2025
Expected Loan Closing Date	December 2025
Cost and Financing Plan	Total project cost: USD 200 million
Size and Terms of AIIB Loan	(i) Committed loan: up to USD 200 million. (ii) Tenor: up to 15 years with a 3.5-year grace period. (iii) Repayment: amortizing level payments. (iv) Interest: standard USD variable spread loan.
Environmental and Social (E&S) Category	FI
Risk (Low/Medium/High)	Medium
Conditions of Effectiveness	Standard conditions for FI sovereign-backed financing loans. Agreed Project Operations Manual (POM).
Key Covenants	Compliance with applicable prudential regulation of the Republic of Türkiye and the Banking Regulation and Supervision Authority (BRSA).
Conditions for Disbursement	Standard conditions for FI sovereign-backed financing loans.
Retroactive Financing (Loan % and dates)	The AIIB loan may include retroactive financing for eligible expenditures already incurred by the Borrower. The retroactive financing portion is limited to 20 percent of the loan proceeds (across all components) and cannot be more than 12 months prior to the expected signing date.
Policy Waivers Required	Not required
Policy Assurance	The Vice President, Policy and Strategy, confirms an overall assurance that the proposed Bank Financing complies with the applicable Bank operational policies.
Project Approval (indicative)	Board of Directors

President	Jin Liqun
Vice President	Konstantin Limitovskiy
Acting Director General	Gregory Liu
Team Leader	Francisco Fortuny, Senior Investment Operations Specialist
Team Members	Chee Wee Tan, Senior E&S Specialist (Private Sector) Rabindra Shah, Procurement Associate Rui Xiang, Financial Management Specialist Liu Yang, Counsel Marcin Sasin, Senior Economist Bilal Muhammad Khan, Economist Komron Rajabiyon, Investment Associate Daniel Perez Pedraza, Investment Associate Yongxi Liu, Project Assistant

2. Project Description

A. Project Overview

1. **Project Objective (PO)**. To contribute to the Republic of Türkiye's climate mitigation and adaptation goals in line with the Paris Climate Agreement.

2. **Background.** The Asian Infrastructure Investment Bank (AIIB) signed the first USD200 million TSKB Sustainable Energy and Infrastructure Facility (P000132) in 2018 (the Phase 1 Facility). The Phase 1 Facility successfully reached closing on Apr. 1, 2022 (see **Section 3.A**). During the implementation of the Phase 1 Facility, new and emerging challenges have changed Türkiye's economic and sectoral landscape, including the COVID-19 pandemic, international conflicts, macroeconomic shocks, such as high inflation and rising hard-currency funding rates, new trade barriers and regulations, as well as threats to the country's security of energy supply and affordability. Concurrently, new opportunities have arisen when, on Oct. 21, 2021, Türkiye's General Assembly unanimously voted in favor of the ratification of the Paris Climate Agreement of Dec. 12, 2015, setting the country on its path to achieve net zero emissions[1] by 2053. As a result of these opportunities and challenges, substantial investment in Climate Mitigation (CM) and Climate Adaptation (CA) will be required. Private Capital Mobilization (PCM) and the development of domestic Climate Industries (CI) will be critical in this endeavor.

3. **Project description**. The proposed Project (the Phase 2 Facility) considers Türkiye's current energy and industrial landscape and will respond to the demand of long-term investments in the areas of CM, CA and CI. The Phase 2 Facility will build on the experience, procedures, and systems already used during the implementation of the Phase 1 Facility. By providing long-term financing (Sub-loans), the Phase 2 Facility will focus on supporting private sector borrowers (Sub-borrowers) with Eligible Investments that are aligned with the PO (Sub-projects). All Sub-projects under the Phase 2 Facility will be aligned with the principles of the Paris Agreement, in accordance with the Multilateral Development Banks (MDB) methodology.[2] See **Annex 2** for further details.

4. **Eligible Investments.** The Phase 2 Facility scope will have four main uses:[3]

(i) Climate mitigation: Renewable Energy Sources (RES). To promote the rapid and large-scale reduction of greenhouse gas (GHG) emissions in the energy sector, the Phase 2 Facility will support investments in RES generation, including onshore and offshore wind power plants, utility-scale and decentralized solar photovoltaic (PV) plants, hybrid solutions (e.g., floating solar, combined solar and wind), biogas or landfill gas, and associated technology solutions such as battery energy storage systems (BESS). Captive RES plants associated with industrial processes will be included under this category. This category will exclude investments which entail complex cost-benefit assessments, such as geothermal, hydropower, and hybrid solutions involving fossil fuels. At least 60 percent of the Phase 2 Facility resources will be allocated to this category.

[1] Türkiye accounts for ca. 1.13 percent of the global GHG emissions, according to the World Bank.
[2] International Development Finance Club (IDFC). Common Principles for Climate Mitigation Finance Tracking. Version 3 (Oct. 18, 2021).
[3] The same Sub-project can contribute to two or more categories if the components can be clearly identified.

(ii) Climate mitigation: Energy Efficiency (EE). To promote investments in buildings, equipment, systems, processes, and networks that reduce the consumption or loss of primary energy or final electricity in eligible industries, including hard-to-abate sectors. At least 20 percent of the Phase 2 Facility's resources will be allocated to one or more of the following uses:

a. *Industrial processes.* Investments in industrial and manufacturing operations that achieve significant and measurable EE improvements in the form of higher energy savings ratios, reduced GHG emissions and/or energy cost savings per unit of output above certain thresholds.

b. *Buildings*. Investments in green buildings and retrofits (e.g., insulation, heating) across multiple eligible industries. Sub-projects under this category will contribute towards the attainment of environmental certifications (e.g., LEED-Silver, BREEAM-Good), in accordance with specific criteria and alignment with the Bank's Sustainable Cities Strategy.

c. *Networks*. Investments in utility networks to promote demand-side consumption management, smart grids, smart metering, electricity loss control or reduction, and maintenance investments with significant and measurable EE impacts over the network's performance.

(iii) Climate Adaptation (CA). To promote investments in climate resilience of processes, equipment, buildings, and structures in eligible industries to mitigate the negative impacts or take advantage of positive impacts of climate change, in line with the country's adaptation strategies and the relevant MDB methodologies.[4] Sub-projects under this category are expected to benefit water-intense eligible industries by promoting resource preservation and recycling. Other key areas under this category will include structure and building reinforcement and disaster protection measures. Sub-borrowers in eligible industries are expected to adopt and integrate climate resilience measures into their processes and use EU's Best Available Techniques (BAT) and other guidelines in the identification of such opportunities. Under this category, the Bank will finance CA measures added to make greenfield and brownfield assets climate resilient as well as standalone projects that promote CA. Given the fragmented nature of private sector investments in CA and the comparative difficulty to find bankable CA projects, a minimum of 5 percent and a maximum of 15 percent of the Phase 2 Facility will be dedicated to this category.

(iv) Climate industries (CI). Investments in eligible manufacturing activities that contribute to the supply of goods and services that align with the country's CM and CA goals. The Bank and the Borrower will agree on a list of eligible industries that will include, among other, e-mobility (e.g., electric vehicle charging infrastructure and manufacturing), RES technology (e.g., solar panel, inverters, trackers, wind turbines, BESS), grid technologies (e.g., smart meters, smart grids), clean hydrogen among other. As a secondary use of the facility, between 5 and 15 percent of the Phase 2 Facility will support CI investments.

[4] IDFC. Common Principles for Climate Change Adaptation Finance Tracking (Mar. 31, 2015).

Table 1. Phase 2 Facility Scope

Climate Mitigation (CM)

RES Generation

Not less than 60 percent allocation

Investment in electricity generation from renewable sources in eligible technologies. Grid-connected and captive RES plants will be included under this category.

Examples of eligible technologies:

- *Wind onshore and offshore.*
- *Utility-scale and decentralized solar PV.*
- *Battery energy storage systems (BESS).*
- *Hybrid power plants (RES only).*
- *Biogas/landfill gas.*

Energy Efficiency

Not less than 20 percent allocation

Investments in buildings, equipment, systems, processes, and networks that reduce the consumption or loss of primary energy or final electricity in eligible industries, including hard-to-abate sectors.

Specific uses:

- *Processes: EE investments resulting in increased output volume/capacity expansion with lower energy consumption per unit in eligible industries.*
- *Buildings: Green buildings and retrofits qualifying towards environmental certifications (e.g., LEED-Silver, BREEAM-Good) in eligible industries.*
- *Networks: investments in demand side management, smart grids, smart metering, electricity loss reduction, and network efficiency.*

Climate Adaptation (CA)

5-15 percent allocation

Investments in climate resilience of processes, equipment, buildings, and structures in eligible industries to mitigate the negative impacts or take advantage of positive impacts of climate change, in line with the country's adaptation strategies and the relevant MDB methodologies.

Examples:

- *Upgrade of urban water infrastructure.*
- *Water efficiency in industry and agriculture.*
- *Water resources and treatment.*
- *Water transmission and drainage.*
- *Biodiversity/nature-based solutions.*
- *Coastal resilience, flood protection.*
- *Disaster prevention.*
- *Passive cooling, insulation.*

Climate Industries (CI)

5-15 percent allocation

Investments in eligible manufacturing activities that contribute to the supply of goods and services that align with the country's CM and CA goals.

Examples:

- *EV charging infrastructure.*
- *EV manufacturing.*
- *RES manufacturing (wind, solar).*
- *BESS manufacturing.*
- *Smart network technologies.*
- *Digital systems.*
- *Clean hydrogen*

5. **Expected Results**. The project expects to substantially contribute to the expansion of the installed capacity of RES generation and improve the EE performance of existing production assets, buildings, and networks in Türkiye. To a lesser extent, the Project will support investments in CA and CI. Given the multi-sector focus of the Phase 2 Facility, its specific contribution to the AIIB's Results Monitoring Framework will be determined once the Sub-projects have been approved and funded. The expected results may be measured by the following indicators (see **Annex 1**):

(i) Climate Mitigation – RES Generation

a. Total RES capacity installed, MW;

b. Battery energy storage systems (BESS) capacity installed, MW; and

c. GHG avoidance, tons of CO_2 equivalent per year (ex-ante)

(ii) Climate Mitigation – EE investments:

a. Primary energy consumption saved, GWh per year; and

b. GHG emissions reduction, tons of CO2 equivalent per year (ex-ante).

(iii) Intermediate indicators:

a. AIIB investments, RES sub-projects, USD million;

b. AIIB investment, EE sub-projects, USD million;

c. AIIB investment, CA sub-projects, USD million;

d. AIIB investment, CI sub-projects, USD million;

e. Natural disaster resilience projects, no. of projects;

f. Private Capital mobilized (PCM, equity), USD million;

g. Technology-enabled investments, USD million;

h. Total electricity lines financed, km;

i. Amount of AIIB co-financing, USD million;

j. Non-performing loans (Phase 2 Facility), percentage; and

k. Gender-disaggregated data on Sub-borrower/Sub-project's technical and managerial workforce, percentage.

6. **Expected Beneficiaries**. Direct and indirect beneficiaries of the Project include:

(i) electricity consumers, who will access cleaner energy generation;

(ii) electricity producers, who will benefit from long-term capital and liquidity;

(iii) private industrial enterprises, who will gain access to long-term EE finance to reduce their energy costs and enhance their competitivity;

(iv) private enterprises engaged in CA projects, which will improve the climate resilience of their operations and reduce their climate risks; and

(v) private manufacturers and service providers in the CI sector, who will be able to expand their operations and meet the growing demand for climate assets.

B. Rationale

7. **Strategic fit for AIIB**. The Bank's vision for climate action from 2023 to 2025 is rooted in and guided by its Corporate Strategy (2020), which aims to achieve at least a 50 percent of climate finance volume by 2025. AIIB will do so by supporting its Members in delivering on their net-zero commitments under the Paris Agreement and promoting their transition towards green and sustainable development. The Phase 2 Facility therefore delivers on the climate finance objectives of the Bank by providing a substantial volume of financing and indirect PCM through FI on-lending, a product that has proven effective and competitive as the Phase 1 Facility implementation showed.

8. The Project is aligned with the Bank's thematic priorities, namely:

(i) Green Infrastructure, by supporting CM in the form of RES generation and EE investments, CA, and CI across multiple industries. Hundred percent of the Phase 2 Facility commitment will be considered Climate Finance under the relevant MDB joint methodologies;

(ii) Private Capital Mobilization (PCM), by contributing to the indirect mobilization of equity capital into Sub-projects;[5] and

(iii) Technology-enabled Infrastructure, by potentially supporting the manufacturing and adoption of climate-related technologies such as BESS, EV, charging infrastructure, smart grids/meters, and other technological solutions.[6]

9. The Project is broadly in line with Bank's Energy Sector Strategy (currently under review) in terms of CM (RES, EE). The Project has potential overlap and alignment with other Bank strategies, including the Sustainable Cities Strategy, the Transport Strategy, and the Water Sector Strategy in terms of CM and CA. The Project also contributes to the Sustainable Development Goal (SDG) 6: *Clean Water*, SDG 7: *Sustainable Energy for All*, SDG 7: *Responsible Consumption and Production*, and SDG 13: *Climate Action*.

10. **Strategic fit for Türkiye.** The Project has the overarching objective of supporting Türkiye's climate goals and Nationally Determined Contributions (NDC) to the Paris Climate Agreement (2015), ratified on Oct. 21, 2021. Türkiye's NDC target a reduction of GHG emissions by 21 percent from the established benchmark. The Project also builds on other key roadmap policies, including the National Energy Efficiency Action Plan (NEEAP) (2018), the Climate Change Action Plan 2011-2023, and the Adaptation Strategy and Action Plan 2010-2023, all of which aim to reduce emissions that cause climate change, mitigate or avoid the adverse impacts of climate change through preparedness, and contribute to the global strategic objectives on mitigation, adaptation, technology transfer and finance, within the framework of "common but differentiated responsibilities", a basic tenet of the UN Framework Convention on Climate Change (UNFCC). See **Annex 2** for a detailed overview of the Project Context.

[5] To ensure PCM, all Sub-projects would require the Sub-borrowers to provide a minimum of 15 percent equity to the Sub-project unless otherwise agreed with AIIB and/or stipulated in the Project Operations Manual (POM).

[6] While the exact amount of investment in technology-enabled capex is uncertain and will be determined during the Project implementation, it is estimated that approximately 10 percent of the Phase 2 Facility proceeds will support technology-enabled infrastructure according to the relevant AIIB methodology.

11. The new Green Deal Action Plan (GDAP) (2021)[7] also provides a roadmap in support of Türkiye's green transformation following the introduction of the European Green Deal (EGD), and contemplates the preparation of various strategy revisions, such as the Climate Change Action Plan 2023-2030 and 2050 Climate Change Strategy. In this context, the Sustainable Banking Strategic Plan 2022-2025 published by BRSA in Dec. 2021, defines a roadmap for FIs to support Türkiye's climate transformation goals under the Paris Climate Agreement and the EGD, manage the financial risks stemming from climate change and promote sustainable banking activities in the country.

12. **Value addition by AIIB**. The Bank will contribute a substantial amount of long-term capital in support of the PO, at a time when liquidity in the Turkish FI sector and international foreign investments is being constrained by the global macroeconomic conditions. The Project is inherently counter cyclical by supporting investment and PCM into the country's decarbonization through CM, CA, and CI Sub-projects.

13. **Value addition to AIIB**. The Phase 2 Facility represents a continuation of the Bank's long-standing relationship with TSKB, which started in 2018, with the Phase 1 Facility. The Project will contribute to the Bank's strategic goals in terms of climate finance and to apply the learnings from the Phase 1 Facility, as summarized in **Section 2.C**. The proposed structure will fine-tune the Bank's on-lending approach, creating space for previously under-explored investment areas (e.g., CA, EE, CI) and providing a clearer framework for co-financing opportunities with the Borrower. The Phase 2 Facility will continue building the Bank's knowledge of the local market.

C. Components

14. The financing plan under the Phase 2 Facility is presented below. A minimum of 80 percent of the facility will be allocated to CM, namely RES (minimum 60 percent) and EE (minimum 20 percent). The remaining part will be allocated to CA and CI (between 5 and 15 percent each). The Bank will retain discretion to agree to a different allocation during the implementation. See **Table 2** below.

Table 2. Project Cost and Financing Plan

Item	**Project Cost USD million**	**AIIB Financing**	
		USD million	**%**
A. Climate Mitigation	160.0	160.0	≥ 80%
- *RES generation*	*120.0*	*120.0*	≥ *60%*
- *EE: processes, buildings, networks*	*40.0*	*40.0*	≥ *20%*
B. Climate Adaptation	10.0-30.0	10.0-30.0	5-15%
C. Climate Industries	10.0-30.0	10.0-30.0	5-15%
Grand Total	**200.0**	**200.0**	**100%**

[7] The Presidential Circular published in the Official Gazette dated July 16, 2021 and the GDAP was subsequently announced by the Ministry of Commerce. The GDAP allocates to BRSA the responsibility and coordination of action "3.2.5. Determining a roadmap for the development of sustainable banking" associated with the target "3.2. Developing an ecosystem that will enable the development of green finance in our country". A BRSA Sustainability Working Group was established in 2021.

D. Lessons Learnt

15. The Phase 1 Facility has provided AIIB with ample learning opportunities and experience that have been incorporated into the preparation, design, and supervision of subsequent similar FI facilities in Türkiye and other Members. Moreover, the Phase 1 Facility was subject to an Early Learning Assessment (ELA) during Q2 2021, which helped crystalize and document the key lessons learned during its implementation. Some of the key lessons include:

(i) Partner selection. The success of FI facilities is heavily dependent on the selection of good partners. In the Phase 1 Facility, AIIB benefited from working with an experienced FI, that puts sustainable infrastructure and green transformation at the core of its investment mandate and corporate focus. AIIB should consider working with experienced FIs that have been thoroughly assessed for their implementation capacity.

(ii) Focus on Climate Finance. The Phase 1 Facility was designed to focus primarily on RES and EE financing, which can be recognized as climate finance under the relevant joint-MDB methodology, but also allowed investments in other industries. Facilities like the proposed Phase 2 Facility, with a clearly defined scope, help AIIB quickly rollout climate financing to projects in its Members.

(iii) Sub-project pipeline projection and retroactive financing. The development of a solid investable Sub-project pipeline requires considerable work and calls for flexibility regarding the timing of Sub-project funding. Building on the experience of the Phase 1 Facility, the Bank should consider using the full retroactive finance window (12 months), in line with the limits of the Bank's Directives for sovereign-backed financing and provide flexibility to the allocation of resources within the broad objectives of the facility.

(iv) Selective prior review of FI sub-projects. Monitoring of FI's due diligence and site visits can help ensure that the Bank's Environmental and Social Framework (ESF) requirements are met and that Sub-projects are not mis-categorized. In the new Phase 2 Facility, AIIB will consider applying a more selective prior review process and certain limits to high-risk Sub-projects (Category A) under the ESF. Such an approach will help AIIB recognize the strengths of the FI partner and realize operational efficiencies.

(v) Enhancing institutional capacity. Through AIIB's prior review and approval of Sub-projects under the Phase 1 Facility, the Bank has been able to steer and improve the scope, depth, and evaluation of the Borrower's Environmental and Social (E&S) screening capabilities, due diligence, and documentation. As most of the Sub-projects under the Phase 1 Facility were RES-related and had common E&S risks, TSKB built confidence in the identification and assessment of common implementation issues. The Bank has thus been able to recognize the strengths and capabilities of the Borrower and can now realize the operational efficiencies through the Phase 2 Facility.

(vi) Understanding of the local market. During the Phase 1 Facility implementation, TSKB provided AIIB the opportunity to understand its deal pipeline, lending process, and local network. This helped AIIB learn and build its knowledge on Türkiye's financial and RES sector. This knowledge can be now applied to non-sovereign direct and FI on-lending facilities.

E. Implementation Arrangements

16. **Implementation period**. Based on the experience of rapid allocation and absorption of the Bank's commitment in the Phase 1 Facility, the Phase 2 Facility will be implemented over three years, spanning from November 2022 until December 2025.

17. **Implementation Management**. The Borrower will be responsible for the implementation of the Phase 2 Facility through the selection, analysis, monitoring of all Sub-projects, as regulated in the Project Operations Manual (POM). The Borrower has established a Project Implementation Unit (PIU) with representatives from various departments (i.e., DFI relations, Engineering, Environment, Portfolio) who will provide adequate human resource support to the management of the Phase 2 Facility portfolio and pipeline. The PIU shall also ensure compliance of the Borrower and Sub-borrower with the Turkish legislation and standards, including the relevant foreign currency lending provisions, and AIIB's fiduciary and safeguard requirements, including the Environmental and Social Framework (ESF), the Policy on Prohibited Practices (PPP), the Procurement Policy (PP) and the Interim Operational Directive on Procurement Instructions for Recipients (PIR). The PIU will coordinate with the Borrower's lending department the execution and disbursement of the Sub-loans, and with the loan allocation and loan monitoring departments their implementation and reporting.

18. **Eligible Investments**. Eligible Investments under the Phase 2 Facility will be defined in the POM in accordance with **Sections 2.A** and **2.B** above. Specific definitions and exclusions will be reflected and adjusted from time to time during the implementation. The POM will include a list based on a well-known classification of industries and economic activities (e.g., NACE Rev. 2 or similar),[8] and will reflect specific exclusions such as those of the Bank's Environmental and Social Exclusion List (ESEL). A preliminary indicative pipeline has been submitted to the Bank but remains subject to further adjustment by the Borrower during the implementation (see **Annex 3**). All Sub-projects in the pipeline should be aligned with the Eligibility Criteria in the POM.

19. **Eligible Sub-borrowers.** Eligible Sub-borrowers under the Phase 2 Facility are private entities,[9] not directly or indirectly controlled by the state, operating autonomously on a commercial basis and registered in the Republic of Türkiye, as per the requirements to be set out in the POM. Eligible Sub-borrowers must not be included in the AIIB Debarment List nor engage in activities listed in the Bank's ESEL.

20. **Eligible Sub-projects**. The Sub-projects should be Eligible Investments approved by the Bank and subject to the requirements of the POM. Eligible Sub-projects under the Phase 2 Facility will be located and undertaken in the territory of the Republic Türkiye, and have all necessary approvals, permits, and certifications and comply with all applicable regulations and legislations. Eligible Sub-projects must be compliant with AIIB's policies including but not limited to the Bank's ESF, ESEL, PPP, PP and PIR. The Sub-projects must not fall under the scope of the Bank's Operational Policy on International Relations (OPIR). See **Section 3.E** below.

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[8] NACE (Nomenclature of Economic Activities) is the European statistical classification of economic activities that groups organizations according to their business activities.

[9] Entities not owned or directly/indirectly controlled by the state, where more than 50 percent of their shares are private and operating on a com

21. **Eligible Sub-loans**. Eligible Sub-loans are to be negotiated on a commercial basis between the Borrower and the Sub-borrowers based on sound banking and market principles. The Borrower is expected to conduct the necessary financial due diligence of each Sub-loan and Sub-borrower to ensure the financial viability of the investment. The Sub-loan pricing and maturity will be (i) consistent with the market conditions, and (ii) provide adequate return to cover the Borrower's risk and costs while ensuring an adequate profit margin for the Borrower. Sub-loans will have a minimum tenor of 48 months and a maximum tenor no longer than the final maturity of the Phase 2 Facility. The maximum Phase 2 Facility allocation of per Sub-loan is USD30 million unless specifically authorized by the Bank. Proceeds of the Sub-loans to support solely Eligible Investments as regulated by the POM. Legal terms and documentation must protect the interests of the Borrower, the Guarantor, and the Bank, and include AIIB Funding Requirements to be agreed between the Borrower and AIIB in advance.

22. **Retroactive Finance**. The Project may include retroactive financing for Eligible Investments already incurred by the Borrower.[10] The retroactive financing portion is limited to 20 percent of the loan proceeds (across all components) and cannot be more than 12 months prior to the expected signing date.

23. **Disbursements**. The disbursement arrangements from the Bank to the Borrower will be communicated in a Disbursement Letter (DL). Both the *advance* and *reimbursement* methods will be contemplated in the DL. Separate withdrawal applications will be submitted by the Borrower to the Bank for advances and reimbursements under the same disbursement and will have two authorized signatories to be designated in advance. Disbursements will be for a minimum of USD2 million and a maximum of USD50 million. Sub-loan disbursements will made by the Borrower to the Sub-borrower upon confirmation that that the Sub-loan meets the AIIB funding, except in the cases of retroactive financing.

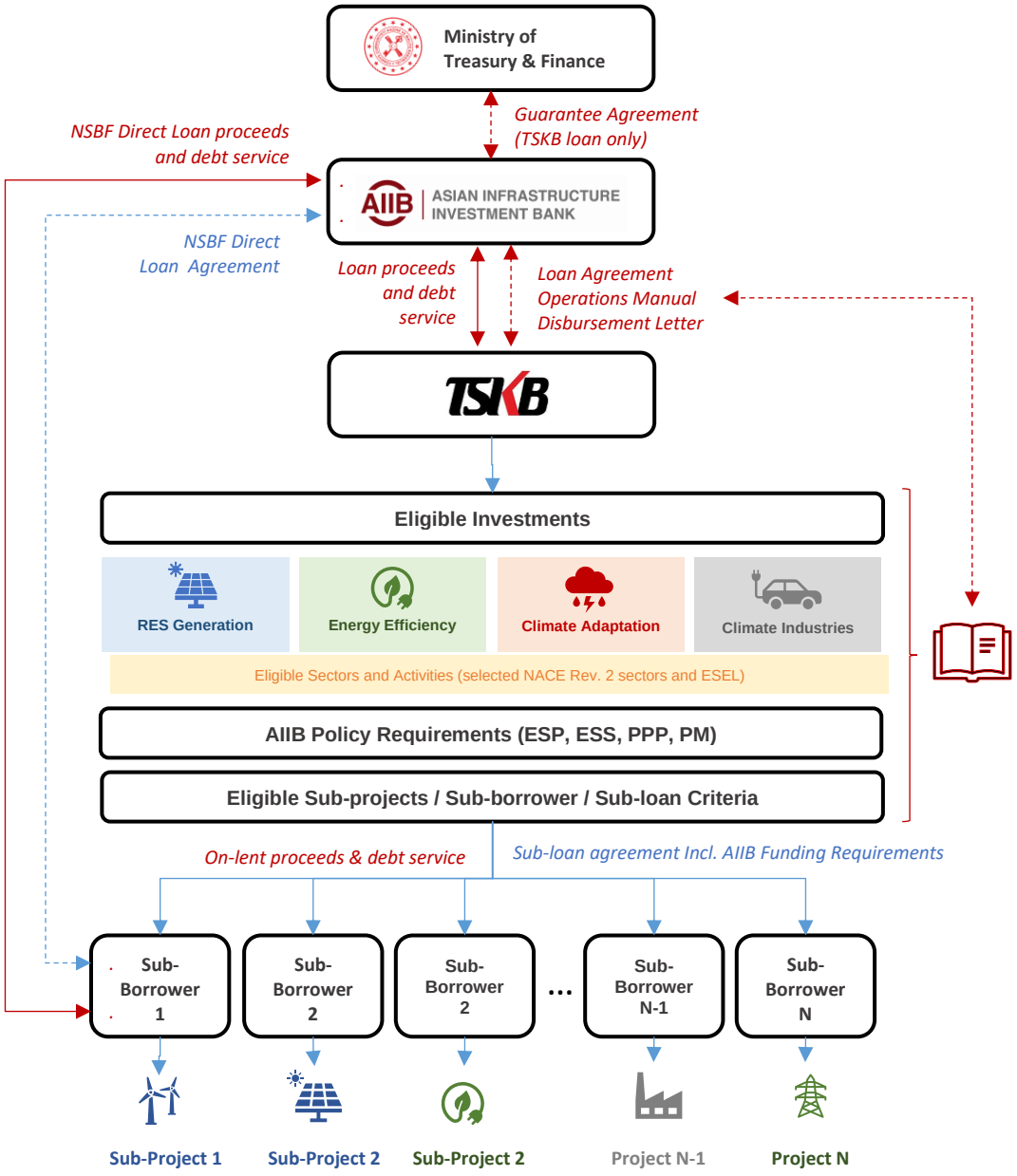
24. **Funds flow.** The Borrower will open and maintain a segregated Designated Account (DA) in USD to receive withdrawals under the Phase 2 Facility for the further on-lending of Sub-loan proceeds to Sub-borrowers through separate Sub-loan Accounts (SA) to be maintained in the same currency as the Sub-loan. Each SA will be also used for the purpose of receiving payment of interest, charges, and principal repayments from the Sub-borrower. Exchange gains or losses arising from the transfer of loan proceeds between the DA and SA cannot be absorbed by the Phase 2 Facility.

25. The Borrower shall separately report the utilization of principal repayments made by Sub-borrowers under the Sub-loans (to the extent these funds are not required to meet the Borrower's payment and repayment obligations to AIIB under the Loan Agreement) to finance additional Sub-loans in accordance with the terms stipulated in the POM. The DA and SA will be recorded in a Statement of Expenditure (SOE) and supporting documents will be retained by the Borrower and made available to AIIB upon request.

[10] The Loan Agreement will provide for the financing of Retroactive Payments by specifying the Retroactive Payments eligible for financing, the Retroactive Financing Date, and the Retroactive Financing Limit. In the context of this transaction, Eligible Expenditures are the expenditures incurred by the Sub-borrower *before* the Borrower disburses the Sub-loan to be financed with AIIB proceeds as well as disbursements made by the Borrower to the Sub-borrower for the financing of Sub-project expenditures.

26. **Co-financing opportunities.** AIIB has traditionally used FI on-lending to invest in smaller Sub-projects that it would not finance directly. While this approach suits smaller and fragmented RES, EE and CA investments, the Bank's experience shows that opportunities for co-investment in larger and more challenging private sector projects may still emerge during the implementation. AIIB will therefore preserve the option to co-finance sizeable opportunities with the Borrower on a case-by-case basis. The criteria (size parameters) and workflow process will be developed in the POM.

Figure 1. Overview of Project Structure



27. **Project reporting and monitoring**. Information about the Project's implementation including details of the Sub-projects will be periodically reported to AIIB through various reports at the stipulated frequency in the POM, presented in **Annex 4**. In addition, AIIB shall retain the right to conduct supervision visits (including on-site visits to the Sub-borrowers and the Sub-projects) at its discretion and request. Implementation monitoring missions (physical or virtual) are expected to take place annually.

3. Project Assessment

A. Technical

28. **Implementation track record.** TSKB has a long track record managing FI facilities funded by various supranational IFIs and foreign banks[11]. The Borrower's FI investments focus particularly in the areas of infrastructure and energy, where it has developed strong in-house expertise. TSKB has a proven track record in its niche market and has established long-lasting relationships with Türkiye's largest industrial groups. Based on the five-year cooperation record, the Borrower has hitherto demonstrated a strong capacity to implement FI loans and act as a strategic partner in the pursuit of common climate finance goals.

29. **Phase 1 Facility Implementation.** On Sep. 28, 2018, the AIIB approved the Phase 1 Facility (P000132), a USD200 million sovereign-backed financing which objective was to support Türkiye's sustainable infrastructure development by providing a long-term source of financing for RES and EE Sub-projects. The Phase 1 Facility reached its closing on Apr. 1, 2022. The Project Completion Note[12] confirming the project's satisfactory performance was circulated to the Board of Directors on Sep. 26, 2022. Between 2019 and 2022, the Phase 1 Facility supported eight Sub-projects for a total cost of USD 1,196 million, that included 480 MW of additional RES installed capacity (wind and geothermal), as well as EE and electricity distribution investments. In 2020, the Borrower also participated alongside Türkiye Kalkınma ve Yatırım Bankası (TKYB) in the project Türkiye: COVID-19 Credit Line Project (P000381), a USD500 million credit line aimed at mitigating the liquidity constraints caused by the COVID-19 crisis and facilitate the access to finance of corporates and small and medium-sized enterprises (SMEs) operating in eligible infrastructure and other productive sectors. Both facilities (P000132 and P000381) have been fully disbursed and allocated.

30. **Project Design and Operational Sustainability**. The Phase 2 Facility design described in **Section 2.E** is considered adequate considering the alternative structures. TSKB has local presence and extensive corporate relations, and has capacity to undertake due diligence, credit analysis and monitoring of Sub-loans in an efficient and cost-effective manner. TSKB can cater for the needs of fragmented Sub-projects like CA and EE and lend in TRY if needed, but also participate in large project finance transactions. As confirmed through the monitoring of the two previous facilities (P000132 and P000381), the Borrower has adequate staff, resources, management systems and organization to undertake the Project and monitor the Sub-projects. TSKB has experienced loan officers, environmental specialists, engineers, and legal teams that ensure adequate execution of the financings. After disbursement, the loan monitoring team takes over the management of the Sub-loan and oversees the credit ratings, ownership, collateral, and performance of the Sub-projects. TSKB presents a conservative financial profile, as presented in **Section 3.B.** below.

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[11] TSKB works with International Bank for Reconstruction & Development (IBRD), International Finance Corporation (IFC), European Investment Bank (EIB), Kreditanstalt fuer Wiederaufbau (KfW), Council of Europe Development Bank (CEB), French Development Agency (AFD), Overseas Private Investment Corp. (OPIC), Japan Bank for International Cooperation (JBIC), European Bank for Reconstruction & Development (EBRD), China Development Bank (CDB), Austrian Development Bank (OeEB), and Islamic Development Bank (IDB).

[12] Türkiye TSKB Sustainable Energy and Infrastructure On-Lending Facility Project Completion Note. Link.

B. Financial Analysis

31. **Profile**. The Borrower will be the primary source of repayment of the Phase 2 Facility. TSKB is an Istanbul-based development and investment bank which was founded in 1950 with the support of the World Bank, the Central Bank of the Republic of Türkiye (CBRT) and private commercial banks. TSKB is Türkiye's first privately-owned development and investment bank whose main goal is to support sustainable and inclusive growth in Türkiye. Despite its policy and developmental focus, TSKB also provides corporate banking, investment banking and consultancy services. It is a non-deposit institution, and it occupies a niche franchise position within Türkiye's Banking sector. TSKB is non-systemic (it represents approximately 1 percent of the FI sector's assets, as of end Q2 2022, see **Annex 5**), which provides it flexibility to pursue its mandate. As of Sep. 30, 2022, the largest shareholder is Türkiye İş Bankası A.Ş. (İşbank Group), one of Türkiye's leading commercial banks, who controls a 50.48 percent through Türkiye İş Bankası, Milli Reasürans and Anadolu Sigorta, followed by Türkiye Vakiflar Bankasi T.A.O with 8.4 percent. Remaining shares are in free float.

32. **Asset Quality.** TSKB has a track record of strong asset quality relative to peers due to its focus on the large corporates segment, investment projects with varied degrees of government support and guarantees, and prudent underwriting standards. TSKB exhibits however high loan book concentration and significant exposure to the energy sector due to its policy role. Approximately 70 percent of TSKB's loan book as of Q2 of 2022 is comprised of project finance loans with long-dated maturities (asset average maturity: 5.4 years). Over 43 percent of TSKB's loan book concentrates in electricity generation (mainly RES, where projects have priority of dispatch and tariffs are largely USD-linked under the Government's incentive scheme or YEKDEM), and 7 percent in electricity distribution; other large exposures include financial sector (7 percent) and tourism (6 percent). The Borrower's Stage-2 loan ratio and non-performing loan (NPL) ratio are 13.4 percent and 3.3 percent respective, as of Q2 2022. No new inflows to NPLs have been reported during Q2 2022 and the total loan loss allowances cover 1.71x of its NPL. Notwithstanding, the low NPL ratio reflects TSKB's robust underwriting policies, prudent lending approach, long-term profile of loans despite loan growth contraction in 2021-2022. TSKB's total outstanding free provision stock has reached TRY720 million with an extra TRY65 million set aside in Q2 2022.

33. **Profitability.** TSKB presents consistent performance, with a strong cost-to-income ratio of 8.4 percent in 2021 (6.8 in Q2 2022). Its return on assets and equity are above or in line with industry (see **Annex 5**). TSKB has historically outperformed the banking sector in terms of its profit/risk-weighted assets (RWA) ratio, underpinned by its reasonable net interest margin (that reflects access to sovereign-guaranteed funding from IFIs and exposure predominantly to FX interest rates), adequate cost control and lean operating expense base (TSKB has approximately 400 employees and one branch), substantial liquidity portfolio of Turkish government securities (with inflation linked returns), and manageable but increasing loan impairment charges (2021: 57 percent of pre-impairment operating profit), providing a loss-absorption buffer through the income statement. In 2021, TSKB reported net income of TRY1.1 billion. The profitability of the Bank may expand with nominal loan growth and gains on inflation-linked assets but may be challenged by a further FX deterioration (although FX deterioration has a positive short-term impact on the reported revenues), slowdown of credit growth, credit losses, and pressures on funding and operating costs.

34. **Capitalization**. The Bank presents moderate core capitalization levels, above regulatory requirements. TSKB's capitalization presents sensitivity [13] to TRY depreciation due to high FX portfolio concentration and inflation. TSKB's core Tier 1 equity ratio without BRSA temporary measures[14] stands at 13.94 percent. Its capital position is improved by a USD 200 million additional Tier 1 capital increase from its parent Türkiye Is Bankasi A.S., which replaced a Tier 2 Eurobond that was called during March 2022.

Table 3. TSKB Capital Adequacy Ratios (source: TSKB)

August 2022	With Temporary Measures	Without Temporary Measures
CET1 Ratio (%)	13.12	9.98
Tier-1 Ratio (%)	17.99	13.94
Capital Adequacy Ratio (%)	19.14	15.10

35. **Funding.** TSKB is a non-deposit FI and depends on external wholesale funding but has a stable and diversified funding base: 67 percent of its funding is comprised of FX-denominated credit lines and on-lending facilities from various IFIs[15] benefiting from preferred creditor status and sovereign guarantees (57 percent of funding) and long-dated maturities (11-12 years on average). 25 percent of the funding accounts for securities issued and subordinated debt. ESG-related funding constitutes approximately 80 percent of TSKB's liabilities. TSKB also uses short-term borrowings to finance bridge loans, as well as equity and repos to fund TRY loans and securities. Once a year, TSKB also taps syndication loan market for diversification of its funding base. For the last 2 years, TSKB linked its syndication loan to ESG targets.

36. **Liquidity**. As of Q2 2022, TSKB's liquid assets (mainly Turkish government securities) stand at TRY20.7 billion or USD 1.23 billion equivalent and represent close to 20 percent of its total assets. The duration of the liquidity portfolio is around 3.2 years. Approximately 34 percent of the portfolio is invested in TRY securities (TRY7.1 billion), including CPI-linked securities and fixed-rate bonds, while the remaining 66 percent is comprised of FX securities (USD823 million), mainly fixed-rate Turkish sovereign Eurobonds. TSKB also presents substantial undrawn funds from IFI lenders (USD540 million-equivalent). FX loan repayments are another important source of liquidity. Funding maturities are reasonably diversified with well-spaced out repayment schedules, mitigating refinancing risks. To note, the collection ratio of the Bank has been above 85 percent. During 2021, TSKB disbursed USD1.3 billion in cash loans to its clients as part of its Corporate Banking and Project Finance activities. USD 991 million of this amount was disbursed to corporate customers as long-term investment and short/medium term working capital loans.

37. **Currency**. TSKB operates a highly dollarized balance sheet compared to other institutions. Its assets and liabilities are primarily denominated in hard currency, as it

[13] According to the results of the stress tests performed on the base level without temporary measures, a 10 (20) percent depreciation of TRY results in circa 80 bps (150 bps) decrease in CAR. If the NPLs rise at the level of 5 percent and TRY depreciates 20 percent, then CAR is expected to decrease circa 280 bps.
[14] BRSA's decision dated 28 April 2022 introduced temporary measures, prompting banks to use the 31 December 2021 exchange rate in the calculation of RWA instead of the erstwhile 252-trading-day average FX and exclude the impact of losses on mark-to market from the calculation of capital levels.
[15] TSKB's top funding partners are IBRD (43 percent of funding base), EIB (14 percent) and AIIB (11 per cent). During 2022, TSKB has borrowed USD374 million from several IFIs.

borrows and lends in EUR and USD, with a small portion of its assets, income and costs denominated in TRY. Over 94 percent of its gross loans are FX denominated (USD: 58 percent and EUR: 36 percent). The Borrower uses hedges to manage its currency risks. Borrower FX revenue generation capabilities are critical requirements for TSKB funding. The bank runs periodical analysis for the currency risks borne by the clients.

38. **Credit Rating**. On August 22, 2022, Moody's affirmed TSKB's issuer and senior debt ratings at B3 stable. The rating reflects a moderate probability of affiliate support from Türkiye Is Bankasi A.S. (B3 stable), and a high probability of government support from the Turkish sovereign (B3 stable). Moody's baseline credit assessment is driven by the bank's modest capitalization and high reliance on wholesale funding in a challenging operating environment. These risks are partially offset by the low level of problem loans, recovering profitability and favorable term structure of wholesale funding. On Jul. 26, 2022, Fitch affirmed TSKB's long-term FX issuer credit rating and senior debt rating at B, at the same level of as the sovereign, with a negative outlook. Fitch argues that that the bank's credit profile, and capital and FX liquidity buffers, are only commensurate with the risks of the Turkish operating environment given its policy role and exceptionally high balance-sheet dollarization.

C. Fiduciary and Governance

39. **Corporate and ESG Governance.** The Borrower has adopted and follows best market practices in terms of corporate governance, as recognized by Istanbul Stock Exchange i.e., Borsa Istanbul (BIST) in its Corporate Governance Index, which features TSKB among the highest-rated companies in Türkiye (SAHA Corporate Governance rating: 9.59/10). The Borrower was also the first bank in Türkiye to issue green and sustainable infrastructure Eurobonds. The Borrower has established an adequate E&S Management System (ESMS), and the Climate Change Mitigation and Adaptation Policy and related climate risk screening tools are implemented as part of its Sustainability Management System (SMS). TSKB is a member of mission clubs such as the Task Force on Climate Related Financial Disclosures (TCFD), the Principles of Responsible Banking (PRB), and the International Development Finance Club (IDFC), European Association Long-Term Investors (ELTI) and Long-Term Investors Club (D20-LTIC). See **Section 3.D** below.

40. **Procurement.** Based on the monitoring and reporting of prior facilities, the Borrower has adequate capacity to ensure AIIB's Procurement Policy is followed. AIIB will provide the Phase 2 Facility to the Borrower to finance eligible Sub-projects through the Sub-loans, in accordance with the POM. The procurement of goods, works, and services to be financed by the Sub-loans will follow the Bank's Procurement Policy as applicable to private sector entities.[16] The Borrower will ensure that the procurement provisions are included among the funding requirements and are complied with by demonstrating that established commercial practices and appropriate procurement methods have been followed to achieve market pricing.

41. **Financial Management.** Based on the monitoring and reporting of prior facilities, Borrower's financial management systems are deemed satisfactory, with adequate

[16] The rules applicable to public sector entities are not expected to apply to this financing as state-owned entities are not eligible Sub-borrowers under the loan.

systems and procedures in place to manage IFI-financed projects. The Borrower has a good track record in the management of disbursement applications and funds flow. AIIB will ensure the continued compliance of the Borrower with domestic prudential regulations through the annual audit reports, to be prepared in accordance with IFRS, and subjected to independent audit. All Sub-loans would also be appropriately documented and accounted for in the mid-year unaudited financial reports and annual end-year audited financial statements denoting the activities of the DA and the SA. The annual end-year audited financial statements would be made publicly available.

42. **Compliance and Anti-corruption**. The Borrower is committed to preventing fraud and corruption across its operations. It shall therefore ensure that its Sub-loans and Sub-projects are in strict compliance with AIIB's Policy on Prohibited Practices. The implementation of the Sub-projects will be monitored regularly by the Borrower, and AIIB will be notified of any suspected Prohibited Practices and investigations on Prohibited Practices involving the Borrower, a Sub-borrower, or a Sub-project.

D. Environmental and Social

43. **Applicable Policy, Categorization, and Instruments.** AIIB's ESP including the ESEL, and Environmental and Social Standards (ESS) apply to this Project. The Project is placed in Category FI, as the financing structure involves the provision of funds to TSKB pursuant to which AIIB delegates the decision-making related to the use of the AIIB's funds insofar the sub-projects meet the conditions of the Operations Manual. This will include the selection, appraisal, approval, and monitoring of sub-projects in accordance with AIIB's ESP requirements. TSKB's Environmental and Social Management System (ESMS), together with the Project Operations Manual (POM), is materially aligned with AIIB's ESP and will be used as the project's E&S instrument.

44. **Environmental and Social Capacity and Resources.** TSKB's Sustainability Committee consists of four Board Members as well as the Chief Executive Officer (CEO) and two Executive Vice Presidents (EVP). They are responsible for the sustainability vision, strategy, and policies. In addition, there is a Sustainability Management Committee consisting of 14 members from the executive management (including the CEO and two EVP) and various departments. They are responsible for integrating sustainability into the business, reporting sustainability performance and others. Finally, the ongoing engagement and performance monitoring of the Phase 1 Facility has confirmed the competence of TSKB in implementing its ESMS and the agreed operations manual. Nevertheless, the POM will be reviewed and enhanced, if needed, to be in accordance with updated AIIB ESP 2021 requirements.

45. **Environmental and Social Management System (ESMS).** Since 2012, TSKB's E&S policies, processes and tools have been integrated into a Sustainability Management System. TSKB is also certified with ISO 14001 Environmental Management System and ISO 14064 GHG Accounting and Verification. At the corporate level, TSKB scored 13.6 (the lower the better) for Sustainalytics ESG Risk rating, labeled as low risk and is among the top 6 percentile among banking industry. TSKB is required under its ESMS to (i) screen the sub-projects proposals against its E&S exclusion list, (ii) assign an E&S categorization, (iii) conduct E&S risk assessment, (iv) monitor E&S risks and impacts, (v) report to its management accordingly, (vi) disclose E&S information, and (vii) conduct meaningful consultation with stakeholders. Specifications

for implementing AIIB E&S requirements are defined in the POM, including the adoption of the AIIB's ESEL**.**

46. **Experience with the Phase 1 Facility.** Through AIIB's prior review and approval of these subprojects, the Project Team has provided feedback to improve the scope, depth, and evaluation of the ES due diligence. Over time, the Project Team observed a gradual improvement on TSKB's ES capacity, due diligence, and documentation. As most of the sub-projects are renewable energy related in Türkiye and they have common E&S risks, TSKB has gained familiarity and confidence with common implementation issues. For example, TSKB requires selected wind-related subprojects with high biodiversity risks to have experts conduct ex-situ conservation studies before construction phase, in-situ conservation studies during migration seasons and bird & bat monitoring studies during operational phase. For selected subprojects with land acquisition, TSKB will require Land Acquisition and Resettlement Plan (LARP) that commensurate to the extent of impact. Features include and as part of stakeholder engagement plan, having experts to conduct interviews with project affected people, survey the land and communicate the entitlement matrix, and post-acquisition, conduct livelihood monitoring survey study. Overall, AIIB has thus been able to recognize the strength and capability of TSKB as a client and can now realize the operational efficiency that FI operations afford.

47. **Environmental and Social Characteristics.** The preliminary pipeline comprises 23 subprojects across the renewables (e.g., wind, solar), energy efficiency (e.g., green buildings), climate adaptation and climate industries (e.g., manufacturing battery storage). This Project supports Türkiye ratification of Paris Climate Agreement on mitigation and adaptation in 2021 and will contribute positively to SDGs such as SDG 7 Renewable Energy and SDG 13 Climate Action. Impacts on communities' health and safety, involuntary resettlement and land acquisition, sensitive habitats, ecosystems and its services, and employment working conditions are potential E&S risks associated with such sub-projects. Every subproject will be screened to identify the risks and following the assessment, appropriate mitigation measures will be adopted.

48. The Project Team will conduct prior review and approval for all Category A Sub-projects, which will be capped at three Sub-projects. Based on experience from the Phase 1 Facility and ESP Section 27.3(b), the Project Team is satisfied that TSKB's ESMS is robust enough in design and implementation not to require other subprojects to be subjected to the Bank's prior review and approval. AIIB would retain the right to require prior review of these subprojects. To this end, the Project Team will regularly review the initial assessment form for each proposed subproject to confirm the appropriateness of its ES categorization by TSKB. Activities in AIIB's ESEL will not be eligible for financing. Coal mining, coal transportation or coal-fired power plants, as well as infrastructure exclusively dedicated to support any of these activities will also be excluded.

49. **Supply Chain**. TSKB has been advised by AIIB of the need for provisions on labor and working conditions related to renewable energy subprojects. The Project Team has examined TSKB's ESMS concerning labor and working conditions. As part of the POM, all suppliers of the subprojects will be advised of the importance of implementation of appropriate management measures to identify and address issues related to E&S provisions of the ESMS, including labor and working conditions and

health and safety matters. Compliance with TSKB's ESMS is an essential part of the contract documents used in the procurement. The subprojects will also apply TSKB's ESMS to its suppliers and contractors. Representations and warranties on labor and working conditions to be provided by suppliers and contractors to the subprojects, will be incorporated into agreements and contracts.

50. **Climate risks**. TSKB has established a climate change mitigation and adaptation policy and adopted a climate risk evaluation tool (CRET) to screen both transition and physical risks under different scenarios and time periods, and the assessment is integrated into credit evaluation. Therefore, all the subprojects at the facility level will be screened against climate risks. Furthermore, projects such as solar photovoltaics, energy-efficient equipment and others have significantly lower lifecycle emissions than fossil fuel-based generation. All subprojects will also be required to measure their GHG emissions under the IFIs Interim Guideline for a Harmonized Approach to GHG Accounting.

51. **Paris Alignment**. Based on the current pipeline and joint MDB methodologies, the proposed subprojects are automatically considered Paris Aligned under BB1 (mitigation) as the on-lending is committed to deliver climate mitigation causes. It is also considered Paris Aligned under BB2 (adaptation) as (i) TSKB has set up climate risk evaluation tool for screening of sub-projects and (ii) TSKB is a signatory to both TCFD and United Nations Environment Program Finance Initiative (UNEP-FI) which are committed to embark on a gradual and credible alignment pathway. The Bank estimates that 100 percent of the current pipeline will qualify as climate finance, with 95 percent as climate mitigation finance and 5 percent as climate adaptation financing.

52. **Gender.** At the corporate level, TSKB has established a gender equality policy and is committed to promoting gender equality in the workplace, through its activities and all banking operations and human resource practices, including those of its subsidiaries, and aims to create opportunities to increase awareness on gender equality for all its stakeholders. TSKB offers a women-friendly working environment with its high rates of female employees and managers. Some 53 percent of TSKB's total employees and 20 percent of TSKB's senior management and directors are female. TSKB will require subprojects to adopt (i) Code of Conduct for Contractor's Workers to be included in bidding documents and (ii) Code of Conduct for E&S Consultants to be included in terms of reference on the E&S assessment of sub-projects, with an emphasis on gender aspects, including preventing gender-based violence.

53. **Information Disclosure**. TSKB maintains and publishes its ESMS in both Turkish and English. At the facility level, TSKB will continue to disclose the E&S documentation timely for all higher risk Sub-projects.[17] At the corporate level, TSKB will continue to disclose its integrated report which includes Principles for Responsible Banking (PRB), Global Reporting Initiative (GRI) and TCFD requirements.

[17] Higher- risk transactions include the following activities financed by the Bank through the FI: (a) all Category A activities; and (b) selected Category B activities, as determined by the Bank, that may potentially result in: (i) land acquisition or involuntary resettlement; (ii) risk of adverse impacts on indigenous peoples and/or vulnerable groups; (iii) significant risks to or impacts on the environment, community health and safety, biodiversity and/or cultural resources; (iv) significant retrenchment of more than 20 percent of direct employees and recurrent contractors; and/or (iv) significant occupational health and safety risks.

54. **External Communications Mechanism**. TSKB has established an external communications mechanism (ECM), including contacts and processes to receive and handle related E&S matters, and its information including PPM of AIIB will be disclosed timely in both Turkish and English, in an appropriate manner. The ECM will be made available to project-affected people (PAPs) and project contracted workers. Under the POM, TSKB will require its Sub-borrowers to establish a suitable subproject-level Grievances Redress Mechanism (GRM) or equivalent and inform people in the subproject's footprint about its availability. The GRM will receive and facilitate resolution of the concerns and complaints of people who believe they have been adversely affected by the project's E&S impacts.

55. **AIIB Independent Accountability Mechanism**. The Policy on the Project-affected Peoples' Mechanism (PPM) applies to the Project. The PPM has been established by the Bank to provide an opportunity for an independent and impartial review of submissions from project-affected people who believe they have been or are likely to be adversely affected by AIIB's failure to implement its ESP in situations when their concerns cannot be addressed satisfactorily through the project-level ECM or the processes of AIIB's Management. Information on the PPM is available at Policy on the Project-affected People's Mechanism – Operational Policies and Directives – AIIB.

56. **Monitoring and Supervision Arrangements**. TSKB will rely on information provided directly by the subprojects to conduct both E&S assessment and ongoing monitoring. TSKB will be required to maintain a comprehensive database comprising all relevant E&S information and report to AIIB semi-annually, a summary of the E&S aspects and overview of the E&S performance of the project's portfolio. AIIB will conduct post-reviews of the selection and implementation of subprojects as part of its regular supervision, comprising engagement with TSKB, potential site visits once conditions allow and detailed review of the E&S documentation of selected subprojects.

E. Operational Policy on International Relations

57. **Operational Policy on International Relations (OPIR).** Because the pipeline of subprojects for this operation is not fully identified at present, and they may be located in diverse regions within Türkiye, the possibility that the OPIR might be applicable in a given case cannot be ruled out. Consequently, TSKB will screen subprojects against the OPIR and exclude from AIIB financing any subproject that would involve any of the matters covered in the OPIR. The Bank will work with TSKB to facilitate its application of this exclusion.

F. Risk and Mitigation Measures

Table 4. Summary of Risks and Mitigating Measures

Risk Description	Assessment (H/M/L)	Mitigation Measures
Macroeconomic Risks[18] *Further deterioration of the FI operating environment.* *Economic vulnerabilities amid accommodative monetary policy.* *Inflation in excess of CBRT targets.* *Devaluation and inflation impact on FI sector's asset quality, profitability and capital.* *Tighter global credit conditions.* *Lingering COVID-19 impacts on the pace of economic recovery.* *Uncertainty associated with upcoming 2023 elections.*	*High*	• Strong expected GDP growth performance in 2022-2023 after macroeconomic rebound from Q2 2020, driven by consumption and investment. • Resilient Turkish FI sector, relative improvements in profitability and asset quality. • Relative improvements in FI funding (reduced reliance on short term wholesale FX) • Expanding FX liquidity and inflows. • Firmer monetary stance with credit tightening. • Pursuit of prudent fiscal policy over the medium term.
Asset quality / Credit Risks *Greater-than-expected deterioration in core capitalization or asset quality due to TRY depreciation and high inflation.* *Risk of increases in NPL, stage 2 and stage 3 loans.* *Further deterioration of the FI operating environment.* *Single-name and sector concentration (energy sector).* *Slow long-term amortization profiles (project finance).*	*Medium*	• Strong collections performance in 2022. • Shrinking loan book on an FX-adjusted basis in 2020-2022, limiting seasonal risks. • High loan loss coverage ratios and conservative provisioning and risk appetite. • Adequate risk management systems and monitoring. • Exposure to large corporates with strong fundamentals. • Energy sector concentration underpinned by a substantial share of USD-linked and government-backed projects.

[18] See Annex 7 for an update on the sovereign credit of the Member.

		• Pre-impairment profits provide a solid buffer to absorb losses through the income statement.
FX Risks *High volume of FX denominated loan. Mismatch between funding and Sub-loan commitments (USD, EUR, TRY). FX lending and funding exposed to volatility, refinancing risks, open exposure or limited hedging by clients, dependence on FX wholesale funding and reliance on FX reflows and IFI funding to cover short term FX wholesale borrowing needs.*	*Medium*	• Subdued market demand for long-term FX loans given TRY weakness in the short term. • TSKB is a non-deposit institution. It finances itself with long term FX loans from IFIs. • Strong Balance Sheet to accommodate the repayment of the FX loans. • Government guaranteed SBF funding mitigates dependence on wholesale FX market. • Well-spaced redemptions from clients versus repayments to fund providers • Capacity to develop new funding products • Longstanding relationship with DFIs and FIs
E&S Risks *E&S assessments of the subprojects may not meet AIIB's ESF requirements.*	*Medium*	• The Project Team will conduct prior review and approval for Category A subprojects**.** • AIIB's ongoing engagement and performance monitoring of the Phase 1 Facility has confirmed the competence of TSKB in implementing its ESMS and the agreed POM.

Annex 1: Results Monitoring Framework

Project Objective:	To contribute to the Republic of Türkiye's climate mitigation and adaptation goals in line with the Paris Climate Agreement.

Indicator Name	**Unit of measure**	**Baseline 2022**	**Cumulative Target Values**				**End Target**	**Frequency**	**Responsibility**
			YR1	**YR2**	**YR3**	**YR4**			
Project Objective Indicators:									
Climate Mitigation: RES Generation									
1. RES capacity installed	MW	-	The exact intermediate and end targets will depend on the specific projects to be financed by the Phase 2 Facility and will be finalized during the project's implementation				300.0	Annual	Borrower
2. BESS capacity installed	MW	-					-	Annual	Borrower
3. GHG emissions avoidance	$MtCO_2e/yr$	-					750,000	Annual	Borrower
Climate Mitigation: Energy Efficiency									
1. Primary energy consumption saved	GWh/year	-	The exact intermediate and end targets will depend on the specific projects to be financed by the Phase 2 Facility and will be finalized during the project's implementation				-	Annual	Borrower
2. GHG emissions reduction	$MtCO_2e/yr$	-					750,000	Annual	Borrower

Indicator Name	Unit of measure	Baseline 2022	Cumulative Target Values				End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4			
Intermediate Results Indicators:									
1. AIIB investment, RES generation	USD mio.	-	The exact intermediate and end targets will depend on the specific projects to be financed by the Phase 2 Facility and will be finalized during the project's implementation				120.0	Annual	Borrower
2. AIIB investments, EE	USD mio.	-					40.0	Annual	Borrower
3. AIIB investment, CA[19]	USD mio.	-					> 10.0	Annual	Borrower
4. AIIB investment, CI[20]	USD mio.	-					> 10.0	Annual	Borrower
5. Natural disaster resilience projects	# Projects	-					-	Annual	Borrower
6. Private capital mobilization (equity)[21]	USD mio.	-					75.0	Annual	Borrower
7. Technology-enabled investments[22]	USD mio.	-					20.0	Annual	Borrower
8. Total T&D lines financed	km	-					-	Annual	Borrower
9. AIIB co-financing amount	USD mio.	-					50.0	Annual	Borrower
10. Non-performing loans (facility)	%	-	Ratio to be maintained below 5%				<5.0%	Annual	Borrower
11. Gender-disaggregated data	%	TBD	To be determined				TBD	Annual	Bororwer

[19] Equivalent to 5 percent of the Phase 2 Facility.
[20] Equivalent to 5 percent of the Phase 2 Facility.
[21] Indirect private capital mobilization through project equity.
[22] Equivalent to 20 percent of the Phase 2 Facility

Annex Annex 2: Detailed Project Context and Description

1. **Country context**. Türkiye is a large upper-middle-income country with a history of strong economic growth. While exposed to the impacts of the COVID-19 pandemic, the economy showed a strong rebound after the initial shock with an GDP growth of 1.9 percent for 2020 and 11.4 percent in 2021 and growth expectation of 5 percent from 2022 and 3 percent for 2023 onwards.[23] The accommodative fiscal and monetary policy helped the recovery, but combined with external events, it has also exacerbated pre-existing vulnerabilities in terms of current account deficit, CPI and FX exposure. The TRY depreciation and the increased post-pandemic external demand from trade partners has helped Türkiye's trade balance in the short run. However, the sharply weaker TRY also fueled high inflation. Türkiye has experienced credit rating downgrades in 2021 and 2022, which impacted its private sector's access to long-term funding and can also have an effect on the pace and quantum of climate investments.

2. **Financial Sector.** Türkiye has a developed financial sector, comprised of 51 financial institutions (FI), including 16 development and investment banks. The FI sector has USD643 billion assets and USD371 billion loans, supported by USD386 billion of deposits and USD57 billion of equity, as of Jun. 30, 2022[24] (see **Annex 5**). The FI sector's project finance exposure to the Turkish infrastructure, energy and real estate sectors amounts to ca. USD88 billion as of Jun. 2022; the energy sector accounts for approximately half of the amount. The currently challenging operating environment of the Turkish FI sector affects the standalone credit profile, asset quality and capitalization of domestic banks. Banks need to manage liquidity and refinancing risks given their reliance to varying degrees on external FX wholesale funding. TRY depreciation has likely negatively affected banks' FX borrowers. Notwithstanding that, most financial metrics remain reasonable, and profitability has recently strengthened.

3. **Türkiye energy mix.** The last two decades of strong economic growth have underpinned commensurate increases of Türkiye's total primary energy supply (TPES) and electricity consumption in per capita terms.[25] Türkiye presents a high dependence on imported fossil fuels, which account for 83 percent of TPES (2020), as domestic energy generation covers only 30 percent of TPES (2020)[26]. Import dependency contributes to the country's widening current account deficit and GHG intensity.

4. **Renewable Energy.** Over the last decade, Türkiye has shifted its energy mix away from fossil fuels to RES by expanding its hydro, wind, solar and geothermal installed capacity. By the end of September, Türkiye's RES installed capacity has doubled compared to 2009 levels and has reached 55.6 gigawatts (GW), more than 54 percent of the total (102.3 GW). RES electricity output has reached 36 percent in 2021, below the 38.8 percent target set out in Türkiye's 11th Development Plan 2019-23. These figures still fall short of the Ministry of Energy and Natural Resources (MENR) Strategic Plan 2019-2023 in terms of RES generation (65 percent and 20 GW of wind and solar installed capacity combined in the period 2017-2027.

[23] IMF, World Economic Outlook, October 2021.
[24] The Banks Association of Türkiye. Statistical Reports, June 2022.
[25] TPES per capita has increased to 74GJ in 2020 from 50GJ in 2000 and electricity consumption per capita has increased to 3.3 MWh in 2020, up from 1.6 MWh in 2000.
[26] Türkiye imports substantial shares of its hydrocarbon needs (gas: 99 percent, oil: 93 percent; coal: 58 percent) according to data from the International Energy Agency (IEA).

5. **Electricity distribution and storage**. Türkiye electricity distribution network supplies 47.3 million consumers, through a privately operated network of 1,363,320 km of electricity lines and 508,880 transformers. Its grid-connected storage capacity remains largely underdeveloped. Rapid growth in intermittent supply from RES and increased participation in Türkiye's organized electricity markets has spurred demand for grid and storage capacity. Sharp increases in the cost of electricity during 2021 and 2022 have added pressure to the budgets of wholesale and retail electricity suppliers as well as consumers, calling for investment in electricity storage and demand-based energy efficiency solutions such as smart grids/metering, and network efficiency. Türkiye's privately-operated 21 distribution operators are at the frontline of this effort.

6. **Energy Efficiency (EE).** Türkiye's industrial sector heavily relies on imported fossil fuels for electricity consumption and processes and is therefore vulnerable to supply shocks. Export-oriented and energy-intense manufacturing industries are facing increased competitive pressures. While EE investments can help mitigate rising operating costs, industries are faced with barriers: high upfront costs of EE equipment, long payback periods, high funding rates, lack of assessment tools, limited long-term capital available, among other.[27] While the FI sector has provided substantial support to the expansion of RES capacity in the past decade by extending project finance to independent power producers (IPPs) under USD-linked tariff schemes, limited financing product lines for EE investments have been reported. EE investments in buildings[28] and manufacturing processes remain critical for Türkiye's decarbonization, and for the commercial sustainability of its industry. As a major exporter to the European Union (EU), Türkiye's industry is exposed to new carbon regulations (see **Box 1**).

7. **Climate Adaptation (CA).** Due to its geographical location and semi-arid climate, Türkiye is exposes it to climate-related impacts. As global temperatures continue to progress towards 1.5-2.0°C above pre-industrial levels, the incidence of climate events such as floods, maritime impacts, extreme temperatures, strong winds, landslides, forest fires, and sandstorms increases. Türkiye's water stress levels compared to other emerging market economies [29] highlights the need for efficient management of hydrological resources in the industrial and agricultural sectors. Climate events pose risks to ecosystem-dependent industries such as food production, which represents two-thirds of Türkiye's water use, and have widespread impacts on human health, food and water security, livelihoods, productive capacity, infrastructure stock, local economies, and biodiversity. Timely investments in water resource management as well as resilience investments in structures and buildings can contribute to ensure the continuity of service and productive capacity in the face of climate risks. In particular, water efficiency represents a key building block of climate resilience in the industrial and commercial sector, and one key area accessible through FI on-lending.[30]

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[27] UNFCCC. Activity Database. Energy Efficiency Financing – Türkiye. Link.

[28] According to the World Bank, ca. one-third of Türkiye's energy consumption is attributable to the operation of public, commercial, and residential buildings.

[29] Türkiye has an estimated 112,900 million cubic meters (m^3) of renewable fresh water available annually and a population of over 84 million. The Falkenmark indicator (m^3/person/year) is 1,339, which places the country in a low ranking compared to other economies (e.g., China: 2,041; Russia: 31,278, Brazil: 39,640).

[30] In its Adaptation Theme Study (Sep. 2021), TSKB identifies several water-intense industries such as manufacturing of food, textiles, paper, chemicals, processing of non-metallic minerals (glass, cement, ceramics) and metals (iron, steel). Also, the study highlights investments in Organized Industrial Zones (OIZ) as potentially benefiting multiple industries. TSKB has financed between 2014 and 2017 projects that have contributed to save approximately to 1.2 million of cubic meters of water annually.

Figure 1. TPES, 1990-2020 (source: IEA)

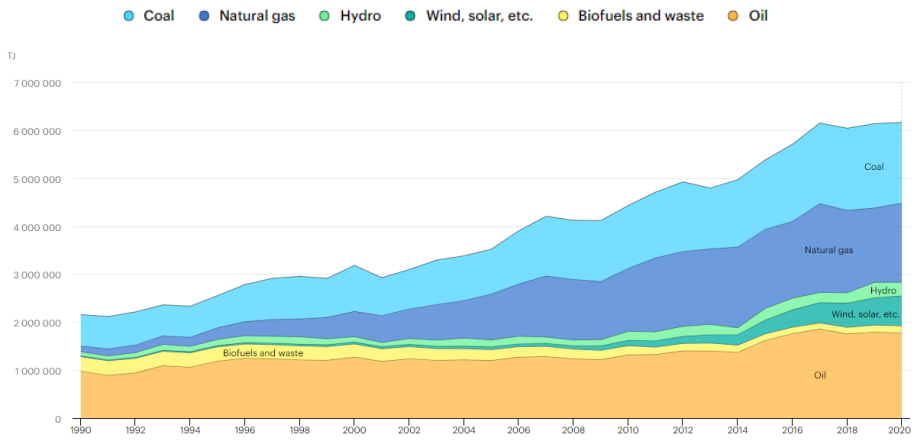


Figure 2. Türkiye, Electricity generation by source, 1990-2020 (IEA)

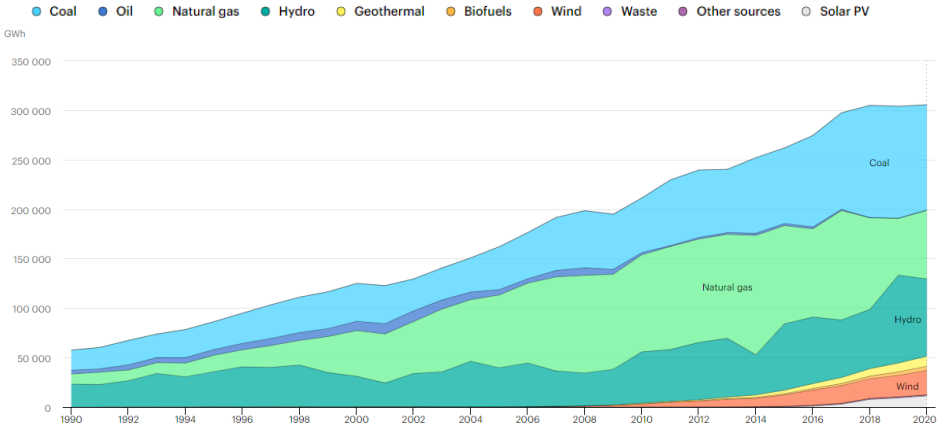


Figure 3. Total final consumption by sector, 1990-2020 (source: IEA)

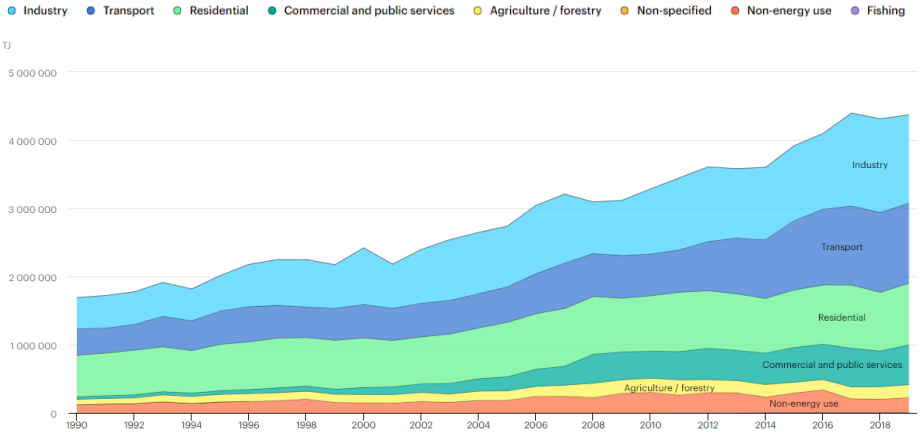
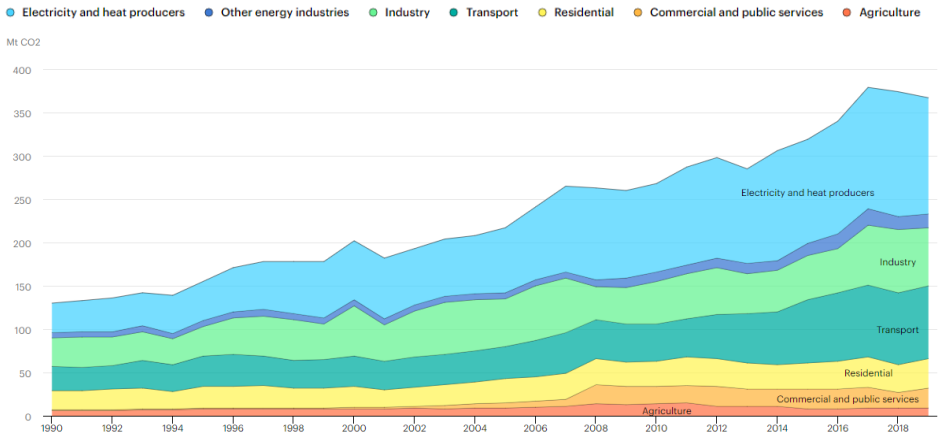


Figure 4. Total MtCO2 emissions, 1990-2020 (source: IEA)



Box 1. The European Green Deal (EGD)

The EGD, announced on Dec. 11, 2019, and approved in 2020, is a set of policy initiatives by the European Commission (EC) that aim to make the EU climate neutral by 2050. The EGD is an ambitious multi-dimensional package of legislative roadmaps with actions targeted at promoting efficient use of resources, innovation, circular economy, climate change mitigation, biodiversity loss reversal and pollution abatement across the EU's industry and agricultural[31] sectors. The plan is estimated to require an annual investment of EUR 260 billion until 2030.[32]

To manage the risk that the EGD becomes an asymmetric effort, due to *carbon leakage*,[33] the EGD refers to the need for a carbon border adjustment mechanism (CBAM) as a possible instrument to mitigate the risk of investment and trade diversion and ensure that the EGD also impacts the EU trade partners like Türkiye. The EGD aims thus to send a strong signal to third country governments, investors and exporters of CBAM-covered goods into the EU block and create an imperative to invest in decarbonization and technological improvements to avoid stranded asset risks.

The CBAM is a levy on imported goods in term of their carbon footprint (scope 1 direct emissions and scope 2 indirect embedded emissions). EU importers would be required to purchase digital certificates, the prices of which will be linked to the cost of carbon in the Emissions Trading System (ETS) platform.

The CBAM's impact will not only depend on the relative emissions intensity of the exporter and its EU counterparts, but also on the comparative position of the exporter with its competitors outside the EU. Key drivers of CBAM impact are: (i) the level of fossil fuel intensity of the partner's industries and energy mix, (ii) the weight of the EU on the total exports of that country, and (iii) the share of CBAM-covered products out of the total exports.[34]

The Republic of Türkiye is one of the EU's key trading partners and has a prevailing Customs Union Agreement (CUA). The value of Türkiye's exports to the EU in 2021 amounted to EUR 79 billion, representing ca. 3.6 percent of the EU block's total. Türkiye's exports are predominantly manufactured goods (83 percent), including machinery and vehicles (40 percent), followed by other manufactured goods (22 percent) and chemicals (21 percent), based on data from Eurostat. The country is among the six largest exporters to the EU; its largest trade partners in terms of export value are Germany (EUR 15 billion), Italy (EUR 9.8 billion) and Spain (EUR 8 billion).

On March 15, 2022, the CBAM proposal was approved by the Council of the EU with minor amendments, a step closer towards its adoption as EU legislation. A three-year transition period is under consideration before the CBAM enters into force in Jan. 2026. The introduction of the CBAM will impact Türkiye's industrial competitiveness across multiple sectors, including iron, steel, aluminum, cement, fertilizers, machinery and equipment manufacturing, and electricity generation. These Industries will require upgrades to meet the decarbonization and the circular economy principles of the EGD.

[31] The EU has devised a strategy set for agricultural and food systems under the name of the Farm to Fork Strategy, a holistic approach toward emission mitigation in the food and agriculture industry.
[32] European Parliament. *Briefing: European Green Deal Investment Plan.* Apr. 2020. Link.
[33] Carbon leakage can be defined as the increase in foreign emissions caused by the introduction of a domestic regulation, as domestic climate policies may increase relative production costs, shifting production and its associated emissions to less stringent regions. See Fowlie & Reguant (2018). *Challenges in the Measurement of Leakage Risk*. AEA Papers and Proceedings, 124-129.
[34] TSKB (Sep. 2021). *Adaptation Theme Study*. Link.

Table 1. Türkiye, recent major climate events, 2020-2021 (source: TSKB)

Climate Risk	Definition	Climate Events
Heat Waves	Seasonal normal temperatures 3-5°C above average maximum levels for 5 days or more.	Cizre and Sirnak recorded 49.1°C on July 20, 2021, the warmest month in Türkiye in 50 years.[35]
Floods and inundations	Rapid increases in the volume of water in rivers, streams or creek beds due to abnormal rainfall.	Floods in Bartin, Kastamonu and Sinop provinces on August 11, 2021 causing 81 death.
Mucilage or Sea Snot	An organic substance excreted into sea water due to excessive planktonic organisms' reproduction because of pollution and heat.	May 2021 Mucilage event in the Sea of Marmara.
Forest fires	Hot weather and arid climatic conditions increase the risk of forest fires.	299 forest fires affected 54 cities in the Aegean and South-east regions in 2021.
Sandstorms	Low-atmosphere events caused by strong wind erosion releasing sediment particles from ground surface.	September 12, 2020, Polatli and Haymana districts of Ankara were affected by heavy sandstorms.
Water scarcity	Semi-arid conditions, high population density and consumption putting stress on the availability of water resources and affect the output of hydro dams.	Severe droughts in 2007-08, 2013-14 and 2020-21. 2021 was recorded as the driest year in two decades.

8. **Climate Industries (CI).** Türkiye's private sector is developing its manufacturing capacity to address the growing demand for clean technologies. Türkiye sophisticated workforce, technological edge and established capacity are helping to transform the country into a manufacturing hub for climate-related technologies. Three key industries are emerging in the short-to-medium term. Emerging climate industries include:

(i) *Solar*. With at least 16 operating companies, Türkiye is Europe's biggest solar panel manufacturer and the fourth in the world, with a production capacity of 7,960 MW/year, equivalent to 4 percent of the global supply (China: 124,000MW/year; Vietnam: 14,000MW/year; South Korea: 9,200MW/year). Türkiye aims to increase its panel production capacity to 9,110MW/year by 2023 and become one of the top three producers

(ii) *Wind*. Türkiye is the fifth largest sourcing country in Europe, with 12 active production sites producing towers, blades, and molding, representing local sourcing of up to 72 percent of the required equipment. The country exports approx. 80 percent of its windfarm outputs. The country is expected to grow its wind turbine manufacturing capacity in the coming years.

(iii) *Electric Vehicles (EV)*. Türkiye ranks among the five largest automobile manufacturers in Europe. Its automotive industry is stepping up efforts to keep up with the global shift towards EV. Although EV car sales remain limited, the pace of growth is increasing off the back of fiscal incentives. Original Equipment Manufacturers are currently investing in EV production chains, including EV batteries. Charging infrastructure is expected to also develop in the coming years.

[35] According to data from the Turkish State Meteorology Service (MGM).

Annex 3: Indicative Pipeline

This pipeline is indicative and provided for illustration purposes. The pipeline is subject to change during the implementation of the Phase 2 Facility.

Sub-project #	Investment (mn USD)	TSKB Sub-loan (mn USD)	AIIB Sub-loan (mn USD)	Equity Finance	Other	Project Theme	Industry NACE Rev 2 Classification	Project Type	Installed Capacity	Output (MWh)	Potential GHG Reduction (tCO2eq)
Sub-project 1	25.00	15.00	15.00	3.75	6.25	Climate Mitigation & Renewable Energy	16. Manufacture of wood products	Captive ORC biomass (wood chip) power plant	14.70	87,500.00	49,000.00
Sub-project 2	30.00	12.00	12.00	4.50	13.50	Climate Mitigation & Energy Efficiency	C. Manufacturing	New machinery upgrade (electricity savings)	NA	NA	NA
Sub-project 3	25.70	8.00	8.00	17.70	0.00	Climate industries	27. Manufacturing of electrical equipment	Manufacturing of RES equipment (wind)	NA	NA	NA
Sub-project 4	10.00	8.00	8.00	2.00	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Biomass (Landfill gas to energy) capacity expansion	2.80	15,000.00	45,000.00
Sub-project 5	28.50	22.70	22.70	5.80	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Solar Power Plant (Distributed)	44.20	72,000.00	50,000.00
Sub-project 6	15.30	13.10	13.10	2.20	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Wind power plant	16.00	46,000.00	32,000.00
Sub-project 7	47.24	24.60	24.60	9.67	12.97	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Wind power plant	33.60	78,000.00	540,000.00
Sub-project 8	36.00	15.00	15.00	5.40	15.60	Climate Mitigation & Energy Efficiency	24.1 Manufacture of steel and ferroalloys	Steel operation CO2 and dust reduction system.	NA	NA	NA
Sub-project 9	8.40	6.72	6.72	1.68	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Biomass (landfill gas) expansion and waste separation	1.40	7,500.00	26,800.00
Sub-project 10	29.00	21.50	21.50	7.50	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Hybrid solar power and wind power plant	50.00	92,000.00	64,000.00
Sub-project 11	9.00	4.50	4.50	0.00	4.50	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Solar Power Plant (Distributed)	14.10	19,500.00	13,500.00

Sub-project 12	0.90	0.90	0.90	0.00	0.00	Climate Mitigation & Energy Efficiency	50.2 Sea and coastal freight water transport	Alternative maritime power/cold ironing for GHG reduction.	NA	NA	NA
Sub-project 13	8.00	6.00	6.00	2.00	0.00	Climate Mitigation & Renewable Energy	23.5 Manufacture of cement	10 MW solar power plant captive of cement factory	10.00	15,000.00	10,000.00
Sub-project 14	0.90	0.75	0.75	0.00	0.15	Climate Mitigation & Renewable Energy	27.2 Manufacture of batteries/accumulators	Energy storage facility based on lithium iron phosphate batteries.	NA	NA	NA
Sub-project 15	9.50	7.50	7.50	2.00	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Solar Power Plant (Distributed)	10.00	16,000.00	11,000.00
Sub-project 16	72.00	60.00	30.00	12.00	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Solar Power Plant (Distributed)	87.00	135,000.00	93,000.00
Sub-project 17	8.50	6.50	6.50	2.00	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Solar Power Plant (Distributed)	12.00	19,000.00	13,000.00
Sub-project 18	3.10	2.50	2.50	0.60	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Solar Power Plant (Distributed/rooftop)	5.50	6,150.00	4,200.00
Sub-project 19	11.55	10.00	10.00	1.55	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Wind Power Plant (Extension)	13.00	34,000.00	23,000.00
Sub-project 20	11.95	10.00	10.00	1.95	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Wind Power Plant Extension)	13.00	34,000.00	23,000.00
Sub-project 21	96.00	60.00	30.00	36.00	0.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Hybrid Wind Power Plant (Extension) and Solar Plant	49.00	128,000.00	89,000.00
Sub-project 22	20.00	15.00	15.00	5.00	0.00	Climate Mitigation & Energy Efficiency	23.5 Manufacture of cement	9.5MW ORC type-Waste Heat Recovery facility and Solar Power Plant.	9.50	72,000.00	40,000.00
Sub-project 23	60.00	15.00	15.00	15.00	30.00	Climate Mitigation & Renewable Energy	35.11 Production of electricity	Solar power plant with BESS	NA	NA	NA
	566.54	**345.27**	**285.27**	**138.30**	**82.97**				**385.80**	**876,650.00**	**1,126,500.00**

Annex 4: Reporting Framework

No.	Monitoring Report	Frequency
1	**Project Appraisal Form** Borrower's proposal for allocation of Sub-loan proceeds to Sub-projects and Sub-borrowers.	One per Sub-project
2	**Borrower's audited financial statements** Annual audited financial statements, prepared in accordance with IFRS; and the corresponding Management Letter.	Annual
3	**Borrower's audited financial statements** Annual audited financial statements, prepared in accordance with BRSA requirements.	Annual
4	**Certificate of Compliance** Confirming compliance with the applicable prudential regulations of the Republic of Türkiye and BRSA requirements.	Annual
5	**Unaudited Mid-Year Project Financial Statement** Comprising the statement of expenditures (SOE) and activities of the Designated Account (DA), and Sub-loan Account (SA) covering the period of the first six months of the Borrower's financial year.	Annual
6	**Audited End-Year Project Financial Statement** Comprising the SOE and activities of the DA, and SA covering the period of the first six months of the Borrower's financial year.	Annual
7	**E&S Monitoring Report** Report on the E&S performance of the Sub-project portfolio. Portfolio breakdown by industry sectors and product lines, including RES installed capacity, CO_2 reduction/avoidance and other indicators. Report on any changes to the Borrower's ESMS (where applicable). Details on higher risk[36] Sub-projects undergoing monitoring. Discussion of all issues arising from non-compliance during the implementation of Sub-projects and explain how the issues have been or are being addressed during the implementation of the Sub- project(s) Details on the operation of and any complaints received under the Sub-project's Grievances Redress Mechanism (GRM) and the Borrower's External Communication Mechanism (ECM).	Semi-Annual
8	**Procurement report** Procurement Report containing a list of all Sub-loans and relevant completed contracts in accordance with POM requirements.	Annual

[36] Higher Risk activity is any of the following types of activities financed by the Bank under an FI Project: (a) a Category A activity; and (b) as determined by the Bank, selected Category B activities that may potentially result in: (i) Involuntary Resettlement; (ii) risk of adverse impacts on Indigenous Peoples and/or vulnerable groups;(iii) significant risks to, or impacts on, the environment, community health and safety, biodiversity and cultural resources; (iv) significant retrenchment representing more than 20 percent of direct employees and recurrent contractors; and/or (v) significant occupational health and safety risks.

Annex 5: Borrower Key Financial Information

Table A. Top-30 Turkish Banks List, ranked by Total Assets, as of Jun. 30, 2022 (source: the Banks Association of Türkiye)

	USD million, unless otherwise stated	Type	Total Assets		Total Loans*		Total Deposits		Equity	Net Income	Off BS Commit.	No. of Emp'ees
1	Türkiye Cumhuriyeti Ziraat Bankası A.Ş.	State-owned Deposit B.	105,414	*16.4%*	61,961	*16.7%*	73,537	*19.0%*	9,186	971	255,943	24579
2	Türkiye Vakıflar Bankası T.A.O.	State-owned Deposit B.	76,951	*12.0%*	44,740	*12.1%*	47,275	*12.2%*	4,833	601	1,165,234	16888
3	Türkiye İş Bankası A.Ş.	Privately-owned Deposit B.	68,770	*10.7%*	39,141	*10.5%*	44,244	*11.4%*	7,488	1,379	195,907	22757
4	Türkiye Halk Bankası A.Ş.	State-owned Deposit B.	65,415	*10.2%*	39,684	*10.7%*	44,839	*11.6%*	4,029	276	239,498	20120
5	Türkiye Garanti Bankası A.Ş.	Foreign B.	58,918	*9.2%*	33,193	*8.9%*	39,534	*10.2%*	6,706	1,266	300,323	18689
6	Yapı ve Kredi Bankası A.Ş.	Privately-owned Deposit B.	55,819	*8.7%*	30,763	*8.3%*	29,833	*7.7%*	5,668	1,151	141,766	15403
7	Akbank T.A.Ş.	Privately-owned Deposit B.	55,348	*8.6%*	28,018	*7.5%*	34,879	*9.0%*	6,166	1,270	228,912	12230
8	QNB Finansbank A.Ş.	Foreign B.	29,775	*4.6%*	17,695	*4.8%*	18,270	*4.7%*	1,876	457	179,946	11142
9	Türk Eximbank	Dev't and Inv't B.	21,373	*3.3%*	18,617	*5.0%*	-	*0.0%*	1,208	169	57,633	732
10	Denizbank A.Ş.	Foreign B.	25,144	*3.9%*	15,093	*4.1%*	15,816	*4.1%*	2,372	551	149,159	12636
11	Türk Ekonomi Bankası A.Ş.	Privately-owned Deposit B.	15,373	*2.4%*	8,969	*2.4%*	11,155	*2.9%*	1,125	282	39,355	8501
12	Türkiye Sınai Kalkınma Bankası A.Ş.	Dev't and Inv't B.	5,950	*0.9%*	4,153	*1.1%*	-	*0.0%*	487	91	80,669	400
13	ING Bank A.Ş.	Foreign B.	5,516	*0.9%*	3,353	*0.9%*	3,662	*0.9%*	715	70	26,963	3018
14	HSBC Bank A.Ş.	Foreign B.	4,945	*0.8%*	2,119	*0.6%*	3,961	*1.0%*	338	77	27,283	1856
15	İller Bankası A.Ş.	Dev't and Inv't B.	4,940	*0.8%*	2,173	*0.6%*	-	*0.0%*	1,852	97	3,181	2599
16	Odea Bank A.Ş.	Foreign B.	3,732	*0.6%*	1,902	*0.5%*	2,591	*0.7%*	279	21	25,085	1083
17	Şekerbank T.A.Ş.	Privately-owned Deposit B.	3,492	*0.5%*	2,022	*0.5%*	2,597	*0.7%*	237	45	103,913	3414
18	Alternatifbank A.Ş.	Foreign B.	3,631	*0.6%*	2,066	*0.6%*	2,007	*0.5%*	187	20	18,301	802
19	Türkiye Kalkınma ve Yatırım Bankası A.Ş.	Dev't and Inv't B.	4,262	*0.7%*	3,007	*0.8%*	-	*0.0%*	314	44	10,100	297
20	Fibabanka A.Ş.	Privately-owned Deposit B.	3,674	*0.6%*	1,687	*0.5%*	2,608	*0.7%*	279	73	33,713	1799
21	İstanbul Takas ve Saklama Bankası A.Ş.	Dev't and Inv't B.	3,624	*0.6%*	86	*0.0%*	-	*0.0%*	207	40	316,203	310
22	ICBC Türkiye Bank A.Ş.	Foreign B.	3,019	*0.5%*	1,214	*0.3%*	1,517	*0.4%*	116	46	16,329	735
23	Burgan Bank A.Ş.	Foreign B.	2,875	*0.4%*	1,871	*0.5%*	1,868	*0.5%*	256	34	24,339	937
24	Intesa Sanpaolo S.p.A.	Foreign B.	2,372	*0.4%*	1,997	*0.5%*	1,203	*0.3%*	158	22	55	32
25	Anadolubank A.Ş.	Privately-owned Deposit B.	2,552	*0.4%*	1,347	*0.4%*	2,029	*0.5%*	307	43	17,424	1649
26	Aktif Yatırım Bankası A.Ş.	Dev't and Inv't B.	2,469	*0.4%*	995	*0.3%*	-	*0.0%*	223	59	11,485	768
27	Citibank A.Ş.	Foreign B.	2,039	*0.3%*	603	*0.2%*	1,671	*0.4%*	307	56	3,883	388
28	MUFG Bank Türkiye A.Ş.	Foreign B.	1,683	*0.3%*	1,041	*0.3%*	705	*0.2%*	103	15	1,679	81
29	Arap Türk Bankası A.Ş.	Foreign B.	684	*0.1%*	206	*0.1%*	288	*0.1%*	85	7	568	279
30	Nurol Yatırım Bankası A.Ş.	Dev't and Inv't B.	637	*0.1%*	280	*0.1%*	-	*0.0%*	73	27	1,621	78
-	Other institutions		2,877	*0.4%*	1,190	*0.3%*	759	*0.2%*	693	76	10,528	1454
	Total		**643,273**	*100.0%*	**371,189**	*100.0%*	**386,844**	*100.0%*	**57,872**	**9,337**	**3,686,999**	**185,656**

Table B. TSKB Summary Key Financials (source: S&P Capital IQ)

USD million	***2019 FY***	***2020 FY***	***2021 FY***		***2021 Q2***	***2022 Q2***
Spot Exchange Rate	*0.1681*	*0.1347*	*0.0757*		*0.1152*	*0.0599*
Average Exchange Rate	*0.1763*	*0.1437*	*0.1157*		*0.1192*	*0.0636*
Accounting Principle	TFRS	TFRS	TFRS		TFRS	TFRS
Balance Sheet						
Total Assets ($M)	7,101	7,060	6,521		7,044	6,052
Net Loans to Customers ($M)	5,214	5,101	4,666		5,160	3,983
Total Deposits from Customers ($M)	-	-	-		-	-
Total Equity ($M)	870	826	532		745	491
Equity Attributable to Parent Company ($M)	864	818	525		738	485
Total Equity/ Total Assets (%)	*12.26*	*11.69*	*8.16*		*10.58*	*8.11*
Profitability						
Net Profit ($M)	130	102	127		30	58
ROAE (%)	*15.93*	*12.87*	*16.96*		*16.08*	46.20
ROAA (%)	*1.79*	*1.44*	*1.74*		*1.67*	3.78
Return on Avg Risk-weighted Assets (%)	*1.81*	*1.68*	*2.12*		*1.97*	5.65
Net Interest Margin (%)	*4.86*	*4.31*	*4.83*		*4.48*	6.56
Net Interest Income/ Avg Assets (%)	*4.65*	*4.12*	*4.60*		*4.27*	6.33
Cost-to-Income (%)	*15.74*	*17.28*	*14.00*		*12.92*	9.42
Asset Quality						
Non-performing loans ($M)	186	228	158		201	139
NPL / Gross Customer Loans (%)	*3.47*	*4.26*	*3.22*		*3.72*	*3.30*
NPL / Tangible Equity & Reserves (%)	*18.29*	*21.43*	*20.54*		*20.20*	*19.10*
NPL / Risk-weighted Assets (%)	*2.59*	*3.73*	*3.66*		*3.31*	*3.16*
Loan Loss Reserves/ NPL (%)	*79.73*	*104.04*	*149.83*		*125.14*	*171.52*
Loan Provision/ Avg Loans at Amortized Cost (%)	*1.34*	*2.52*	*3.12*		*1.90*	*3.76*
Credit Costs/ Pre-impairment Operating Profit (%)	*31.71*	*51.88*	*50.57*		*38.98*	*32.94*
Regulatory Capital (Basel III)						
Core Tier 1 Ratio (%)	*12.07*	*13.37*	*12.74*		*12.14*	*11.99*
Tier 1 Ratio (%)	*12.07*	*13.37*	*12.74*		*12.14*	*16.50*
Total Capital Ratio (%)	*17.39*	*19.37*	*20.80*		*18.21*	*17.65*
Basel III Leverage Ratio (%)	*10.57*	*9.41*	*7.63*		*8.86*	*10.11*
Liquidity & Funding						
Liquid Assets ($M)	1,043	967	1,189		977	1,231
Liquid Assets/ Assets (%)	*14.69*	*13.69*	*18.23*		*13.86*	*20.34*
Liquid Assets/ Total Deposits & Borrowings (%)	*17.24*	*16.09*	*20.59*		*16.00*	*23.05*
Wholesale Funding ($M)	6,050	6,007	5,773		6,104	5,340
Wholesale Funding Maturing < 1 Year ($M)	1,500	1,410	1,268		1,424	1,345
Total Debt/ Total Equity (x)	*6.95*	*7.28*	*10.85*		*8.20*	*10.88*
Liquidity Coverage Ratio (%)	*125.85*	*194.53*	*322.98*		*189.10*	*362.19*

Table C. FI sector and TSKB key ratios (source: the Banks Association of Türkiye)

Capital Adequacy										
	Capital Adequacy Ratio		Shareholders' Equity / Total Assets		(Shareholders' Equity-Permanent Assets) / Total Assets		Shareholders' Equity / (Deposits + Non-Deposit Funds)		N(on+off) Balance-sheet Position / Total Shareholders' Equity	
In % unless stated otherwise	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Banking System in Türkiye	**18.4**	**18.8**	**8.0**	**10.1**	**5.0**	**6.8**	**9.7**	**12.5**	**10.0**	**4.4**
Deposit Banks	18.1	18.3	7.8	9.8	4.7	6.4	9.4	12.2	6.7	4.5
Development and Investment Banks	22.6	25.8	10.4	13.7	9.2	12.3	12.5	16.9	41.7	2.6
Türkiye Sınai Kalkınma Bankası A.Ş.	20.8	19.4	8.3	11.9	6.0	9.2	9.8	14.7	374	18.5

Balance Sheet and Asset Quality										
	TC Assets / Total Assets		FC Assets / Total Assets		TC Liabilities / Total Liabilities		FC Liabilities / Total Liabilities		Funds Borrowed / Total Assets	
In % unless stated otherwise	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Banking System in Türkiye	**49.7**	**58.3**	**50.3**	**41.7**	**42.7**	**49.9**	**57.3**	**50.1**	**10.8**	**10.0**
Deposit Banks	51.6	60.3	48.4	39.7	44.1	51.4	55.9	48.6	6.9	6.4
Development and Investment Banks	25.7	31.3	74.3	68.7	24.8	29.2	75.2	70.8	60.3	59.2
Türkiye Sınai Kalkınma Bankası A.Ş.	19.9	26.0	80.1	74.0	10.7	15.0	89.3	85.0	64.5	62.8
	Financial Assets (Net) / Total Assets		Total Loans / Total Assets		Loans under follow-up (gross) / Total Loans		Permanent Assets / Total Assets			
In % unless stated otherwise	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**		
Banking System in Türkiye	**33.4**	**26.3**	**57.5**	**63.7**	**3.4**	**4.4**	**2.9**	**3.3**		
Deposit Banks	34.3	26.8	56.3	63.0	3.7	4.7	3.1	3.4		
Development and Investment Banks	22.1	19.8	72.6	73.6	1.0	1.1	1.2	1.4		
Türkiye Sınai Kalkınma Bankası A.Ş.	20.1	17.2	75.6	75.6	3.2	4.3	2.2	2.7		

Liquidity Ratios										
	Liquid Assets / Total Assets		Liquid Assets / Short-term Liabilities		TC Liquid Assets / Total Assets		Liquid Assets / (Deposits + Non-Deposit Funds)		FC Liquid Assets / FC Liabilities	
In % unless stated otherwise	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Banking System in Türkiye	**19.8**	**13.7**	**33.0**	**23.7**	**3.4**	**2.9**	**24.0**	**16.9**	**28.6**	**21.6**
Deposit Banks	20.0	13.5	31.5	22.2	2.9	2.3	24.3	16.7	30.7	23.1
Development and Investment Banks	17.5	15.9	101.7	112.2	10.8	10.5	20.9	19.6	8.8	7.7
Türkiye Sınai Kalkınma Bankası A.Ş.	6.2	5.2	284.4	119.4	1.8	2.9	7.4	6.4	4.9	2.7

Profitability										
	Average Return on Assets		Average Return on Shareholders' Equity		Net Interest Income After Specific Provisions / Total Assets		Interest Income / Interest Expense		Interest Income / Total Assets	
In % unless stated otherwise	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Banking System in Türkiye	**1.2**	**1.1**	**14.0**	**10.5**	**1.6**	**1.9**	**172.2**	**203.8**	**7.2**	**7.1**
Deposit Banks	1.2	1.1	13.7	10.3	1.5	1.9	170.2	203.0	7.4	7.3
Development and Investment Banks	2.0	1.8	16.9	12.5	1.7	1.8	239.6	225.6	4.0	4.2
Türkiye Sınai Kalkınma Bankası A.Ş.	1.7	1.5	16.7	12.9	1.0	1.9	270.6	257.8	5.4	6.3

Annex 6: Member and Sector Context

A. Member context

1. Türkiye has achieved significant economic and social development since the early 2000s, leading to increased employment and making Türkiye an upper-middle-income country. During this time, Türkiye rapidly urbanized, maintained strong macroeconomic and fiscal policy frameworks, opened to foreign trade and finance, harmonized many laws and regulations with the European Union (EU) standards, and greatly expanded access to public services. The proportion of people in poverty fell from 42 percent in 2003 to about 13 percent in 2019[37]. It developed expertise in medium-technology production, shifting much of the labour force from farms to factories and increase the share of manufacturing and services in GDP as well as employment. Türkiye's economy is relatively diverse in nature and does not rely on a single major exporting product. According to 2021 figures, major exports include textile and clothing (14.8 percent), electrical and electronics machinery (12.5 percent), vehicles and their parts (13.9 percent), and iron and other metals (12.8 percent). The top five exporting destinations are Germany (8.6 percent), the United States (6.5 percent), United Kingdom (6.1 percent), , Italy (5.1 percent) and Iraq (4.9percent).[38]

2. Türkiye has relatively performed better than other economies in the region, in terms of improving the infrastructure over the last two decades and hence, will require relatively lesser proportion of GDP, with respect to average of upper-middle income economies, to fulfill the infrastructure needs between 2016-2040. Though, among the different infrastructure needs, *Electricity* infrastructure will still require around 0.7 percent of GDP, second only to *Roads* infrastructure over this period. It is estimated that Türkiye is expected to spend, on average, around USD7.8 billion annually for electricity infrastructure as per current trends whereas the estimated annual investment needs are around USD9.7 billion, resulting in an annual gap of USD1.9 billion[39].

3. Despite significant growth in productivity and income, Türkiye still employs a fifth of the workforce in agriculture-related activities, well above the average for high-income countries. Despite considerable improvement in the last decade, female labor force participation is still well below the average for industrialized countries. Türkiye is one of the few major economies whose population is still expected to grow, and the dependency ratio to fall in the next two decades. It would require creating new and better jobs to accommodate the growing labor force. As Türkiye has already exploited the medium technology production, new sources of productivity growth will have to come from technology absorption, innovation, and 'moving up the value chain' in the manufacturing and services sector. Türkiye's growth prospects, therefore, rely on the extent to which it can establish the conditions for such within-sector productivity growth.

[37] World Bank. Poverty headcount ratio at $6.85 a day (2017 PPP) (percentage of population). Link.
[38] Turkstat. Link.
[39] Global Infrastructure Outlook 2022 Link.

4. In the aftermath of the pandemic outbreak, Türkiye had lost 2.3 million jobs (8.2 percent of total employment) in first two quarters of 2020, with job losses concentrated among informal workers, lower-skilled, women and youth. High inflation also contributed to increasing poverty. With the quick recovery, the economy recouped 869 thousand jobs (or two-third of the job losses) in the third quarter of 2020 but most of these jobs were in the formal sector and for the skilled workers, according to Turkstat labor data. The job recovery was even stronger in 2021 where over 3.2 million jobs were regained by December 2021, as compared to the year ago. The young and female workers contributed a significant share in this recovery and helped the total employment to cross pre-pandemic levels. The jobs among the informal workers are also decreasing on four-quarter moving average since the end of 2019 despite the seasonal volatility[40]. The renewed focus of the government on technology-enabled and environmentally sustainable growth will provide new avenues to generate green and sustainable jobs for growing labor force in the medium term.

5. Turkish banking sector has been resilient despite the recent crises. It is adequately capitalized with capital adequacy ratios (CAR) well above the levels stipulated by international standards. Due to the large increase in TRY credit, exchange rate-driven growth of loan balances and some loan restructuring, the non-performing loans (NPL) ratio remains low at 2.3 percent, and standard CAR is 18.8 percent as of Sep. 2022.[41] State banks' reported NPL ratios are lower than those of private banks. [42] However, Türkiye's reliance on USD debt to fund its credit expansion over the past decade has increased, with nonfinancial corporates and banks taking on external debts. The banking sector faces a large external debt obligation, equivalent to USD137.3 billion as of June 2022, of which more than a third is short-term debt.[43] The development of domestic capital markets as a source of long-term finance will be crucial in funding the new sources of economic growth. The regulatory frameworks, including the recent revisions in the Capital Market Law, are conducive to capital markets development in Türkiye[44]. The stable macro-financial environment, including the robust banking sector, financial openness, and policy predictability, will be crucial in assuring confidence in the domestic capital markets.

6. The government encourages PPPs in all kinds of infrastructure projects to fill the infrastructure investment gap. There have been more than 250 different types of active PPP infrastructure projects in Türkiye, currently in operation or under-construction, with an aggregate investment of USD155 billion. Economic growth, coupled with population growth, will drive strong growth in energy demand and non-hydro renewable energy is well-poised to double the installed capacity in the next decade.[45] In 2020 and 2021, projects worth more than USD1.5 billion achieved financial closures under PPP framework in the renewable energy sector, including Karapinar Solar PV plant project (USD1.1 billion)[46].

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[40] Turkstat, Labor Statistics, August 2022 and Labor Statistics, II. Quarter 2022. Link.
[41] BDDK, update September 2022. Link.
[42] Turkish Economic Monitor February 2022 Link.
[43] Central Bank of the Republic of Türkiye, EVDS. Link.
[44]The International Capital Markets review: Türkiye Link.
[45] Fitch Solutions. Türkiye Renewables report. Update Q3-2021. Link.
[46] The World Bank, PPP Knowledge Lab, Türkiye page. Link.

7. Türkiye is increasingly exposed to the risks of climate change. The country faces the risk of more frequent extreme weather events— including flooding, droughts, forest fires, and coastal erosion—due to climate change. Without adequate mitigation measures, these risks could lead to reductions in food production and disruptions in industrial supply chains. A survey of large Türkiye-based publicly traded firm in 2018 found that 31 percent of them had suffered detrimental financial impacts from water-related events during the most recent 12-month period.[47] These climate risks also provide opportunities for the financial sector, including the banking sector, to provide innovative products assisting in switching to low-carbon and climate resilient economy.

B. Sector and Institutional Context

8. Türkiye is highly dependent on fossil fuel imports, particularly oil and gas. In 2020, fossil fuels accounted for approximately 83 percent of total primary energy supply (TPES), among which a significant 77 percent is imported. As a result, the country's total energy self-sufficiency, at around 30 percent is among one of the lowest in AIIB members. On the demand side, in 2019, the industrial sector accounted for the highest share of total final energy consumption (TFC) with 30 percent, followed by the transport sector with 27 percent, residential sector with 21 percent and services/other sectors with 23 percent.[48]

9. Electricity generation grew rapidly in the last ten years from 210 terawatt hours (TWh) in 2010 to 331.5 TWh in 2021. Over 64% of the electricity is generated from thermal power generation, followed by hydropower and other renewable energy. However, last two years saw a sharp contraction of hydropower generation from 29% in 2019 to 17% in 2021 on the back of a widespread drought. To compensate for the shortfall, there was a short-term boost in gas power generation from 19% in 2019 to 33% in 2021, however, this trend is likely to be reversed in 2022 as a result of tight fuel supply and pricing volatilities induced by geopolitical tensions. The uncertainties set a strong basis for accelerated development on non-hydro renewable energy as domestic energy sources. The share of renewable energy including solar, wind and geothermal has been on a steady rise from only 2% in 2010 to 19% in 2021. Comparatively installed electricity capacity rose from 49.5 gigawatts (GW) in 2010 to about 99.8 GW in 2021, including around 31.5 GW hydropower, 25.6 GW gas power, 20.4 GW coal-fired power, 10.6 GW wind, 7.8 GW solar, 1.7 GW geothermal, among others.[49]

10. The Ministry of Energy and Natural Resources (MENR) is responsible for formulating and implementing energy policies and regulating the energy sector. The Electricity Generating Company (EUAS), which owns the public-owned power plants, and the Turkish Electricity Trade and Contracting Company (TETAS), which was responsible for electricity wholesale trading, are both state-owned and formally merged in 2018. The Turkish Electricity Transmission Company (TEIAS) is the sole transmission grid owner and power system operator and is responsible for maintaining and developing new transmission lines and system operation (load dispatch and

[47] CDP Worldwide, CDP Climate Change and Water Report 2018, Türkiye Edition.
[48] IEA, 2021. World Energy Balance and Statistics. Link.
[49] TEIAS, 2021. Türkiye Electricity and Transmission Statistics. Link.

balancing). The Turkish Electricity Distribution Company (TEDAŞ) is asset owner of the distribution grid and responsible for the supervision and control of investments from the 21 distribution companies. The Energy Market Regulatory Authority (EMRA) is the regulator of the electricity, natural gas, downstream petroleum, and liquefied petroleum gas markets.[50]

11. Türkiye's 11th Development Plan (2019-2023) provides the long-term vision and roadmap for the country.[51] For the energy sector, the Plan sets specific targets to be met by 2023, such as:

a. Reducing the share of natural gas in electricity production from 29.9 percent to 20.7 percent;
b. Increasing the share of renewable energy sources in electricity production from 32.5 percent to 38.8 percent;
c. Increasing the amount of electricity generated from domestic energy sources from 150 TWh to 219.5 TWh;
d. increasing primary energy usage per capita from 1.81 tonnes oil equivalent (toe) to 2.01 toe;
e. increasing electricity usage per capita from 3.7 megawatthours (MWh) to 4.3 MWh to be closer to the world average.

12. The Economic Reform Action Plan (March 2021) sets specific actions related to the energy sector such as i) supporting energy efficiency in the building, agriculture and service sectors through amendments to the Energy Efficiency Law; ii) establishment of legal framework for energy storage facilities; iii) restructuring of the natural gas market to enable a free and competitive market; iv) establishment of green organized industrial zones with high resource efficiency and able to meet their own energy needs; v) preparation of a National Circular Economy Action Plan; vi) development of environmentally friendly, sustainable and smart transportation infrastructure; v) establishment of electric vehicle charging infrastructure and vi) promotion of electric vehicle use in public transport and services.

13. The Ministry of Energy and Natural Resources (MENR) Strategic Plan (2019-2023) sets six broad goals for the energy sector: (i) ensuring sustainable and secure energy supply; (ii) prioritizing and increasing energy efficiency; (iii) strengthening institutional and sectoral capacity; (iv) increasing regional and global trade in energy and natural resources; (v) increasing domestic technology development; and (vi) increasing energy market predictability.[52]

14. Under the MENR Strategic Plan (2019-2023), the are several specific targets to be achieved by 2023, such as:

a. Increase electricity supply from domestic and renewable energy resources from 59 percent to 65 percent;
b. Increase installed solar power capacity from 5 GW to 10 GW;
c. Increase installed wind power capacity from 7 GW to 12 GW;
d. Increase installed hydropower capacity from 28 GW to 32 GW;

[50] IEA, 2021. Türkiye 2021 – Energy Policy Review. Link.
[51] Presidency of the Republic of Türkiye. 11th Development Plan (2019-2023). Link.
[52] MENR, 2019. Strategic Plan (2019-2023). Link.

e. Increase installed geothermal and biomass capacity from 2 GW to 3 GW.

15. The National Renewable Energy Action Plan (2014) aims to increase renewable energy power capacity to 61 GW by 2023, of which 34 GW for hydropower, 20 GW for wind, 5 GW solar, 1 GW geothermal and 1 GW biomass. The geothermal target was recently revised to 4 GW by 2030. In 2018, Türkiye had already surpassed the solar and geothermal targets, but it is unlikely to meet the hydropower and wind goals by 2023 at the current growth rate. Therefore, the MENR Strategic Plan (2019-2023) is a more achievable and realistic roadmap for reference.[53]

16. In September 2021, Türkiye announced its pledge to achieve net-zero by 2053. In the following month, the parliament rectified its first Nationally Determined Contribution (NDC), establishing an unprecedented commitment to tackle climate change and energy related emissions. The NDC set a target to deliver up to 21 percent reduction in GHG emissions from the Business-as-Usual level by 2030. Accordingly, longer-term vision is set out for renewable energy development including setting up 10 GW solar and 16 GW wind until 2030 – almost doubling the capacity in 2022. Energy efficiency, particularly for the industrial and building sectors, is also highlighted as an important means to achieve its climate objectives[54].

17. From 2019-2024, the International Energy Agency (IEA) expects additional renewable energy capacity of 21 GW, driven mainly by new policy support for distributed solar PV and utility scale auctions (YEKA). Under IEA's main scenario, Türkiye's renewable energy capacity is expected to rise from 42 GW in 2018 to reach 63 GW by 2024, of which an additional 3 GW will be from distributed solar PV. IEA indicates that affordable financing remains a challenge for the renewable energy sector due to the TRY depreciation and high interest rates for loans.[55]

18. Türkiye has four main renewable energy incentive schemes: i) Renewable Energy Support Mechanism (YEKDEM); ii) Renewable Energy Resource Areas (YEKA); iii) unlicensed electricity generation regime and iv) net metering.

19. The Renewable Energy Support Mechanism (YEKDEM) sets the feed-in tariffs for wind, solar, biomass, hydropower[56] and geothermal projects. YEKDEM expired at the end of 2020 but was extended by six months until June 2021 due to the COVID-19 pandemic. In January 2021, the tariffs were updated with significant decreases in prices for all renewable energy sources. The tariffs are now valid for 10 years and eligible projects must be in operation from 1st July 2021 to 31st December 2025. Additional tariffs for locally manufactured equipment are valid for 5 years.

20. YEKA is an auction mechanism for large scale renewable energy projects located in allocated areas specific for renewable energy development. A total of seven YEKA auctions were issued from March 2017 to September 2022 with 15-year feed-tariffs awarded to the winning bids:

[53] National Renewable Energy Action Plan for Türkiye. Link.
[54] Türkiye's first NDC. Link.
[55] IEA. 2019. Renewables 2019 - Market analysis and forecast from 2019 to 2024. Link.
[56] Only run-of-river and diversion type hydropower plants and hydropower with reservoir areas less than 15 square kilometres.

a. The first 1 GW auction was for solar PV projects, awarded in March 2017, with requirements to setup local manufacturing and with 65 percent local content requirement.
b. The second 1 GW auction was for onshore wind projects, awarded in August 2017, with 65 percent local content requirement.
c. The third 1 GW auction for onshore wind projects, awarded in March 2019.
d. The fourth 1 GW auction for solar PV projects, awarded in March 2021. This auction comprised of 74 tenders across 36 regions. Project capacities ranged from 10-20 MW and tariff was fixed at 0.35 TRY/kWh (0.048 USD/kWh) for a period of 15 years.
e. The 1.2 GW offshore wind auction issued in 2018 was postponed.
f. The fifth 1 GW auction for solar PV projects, awarded in May and June 2022. This auction was comprised of 13 tenders across three regions. Project capacities ranged from 50-100 MW.
g. The sixth 850 MW auction for wind projects, awarded in June 2022. This auction was comprised of 20 tenders. Project capacities ranged from 20-80 MW.

21. The unlicensed electricity generation regime, introduced in 2013, comprised of attractive feed-in tariffs led to a major growth of rooftop and ground-mounted solar PV projects from 1 MW to 5 MW capacity. To help address the huge growth of unlicensed solar PV projects, the government introduced a net metering scheme in 2019 for residential, commercial, and industrial sectors. It covers both self-consumption and supply of excess generation to the grid. The eligible projects are mainly solar rooftop applications. Eligible projects cannot exceed the capacity required by the respective consumption facilities and therefore it is limited to maximum 10 kW for only 10 years of surplus generation. Based on the World Bank, 3 GW of 3.9 GW economical potential for rooftop solar PV is in the commercial (1.5 GW) and industrial sectors (1.5 GW).[57]

[57] World Bank, 2018. Türkiye - Rooftop Solar PV Market Assessment. Link.

Annex 7: Sovereign Credit Fact Sheet (Sep. 2022)

A. Background

1. Türkiye is an upper-middle-income country with income per capita of around USD9,654 (or around USD34,884 in purchasing power parity) and a population of around 84.7 million as of 2021, based on IMF World Economic Outlook (WEO) data.[58] Türkiye is a large, diversified, dynamic and business-oriented economy. Between early 2000s and mid-2010s, it enjoyed robust growth, around 6 percent per year on average, underpinned by a strong focus on development and reforms. GDP per capita (in USD terms) quadrupled between 2001 and 2013, while poverty fell from around 42 percent in 2003 to 13 percent in 2019[59]. During this time, Türkiye has urbanized, maintained macroeconomic stability, established a strong fiscal framework, opened further to foreign trade and finance, harmonized many regulations with European Union standards, and earned an investment grade credit rating.

2. However, in the past few years, economic situation has become more challenging, growth lost some momentum and Türkiye's sovereign credit ratings slid below investment grade. According to rating agencies, both internal and external factors contributed to this deterioration, including increased reliance on short-term stimulus via expansionary fiscal, monetary and credit policies to boost growth, occasional employment of unorthodox policies, declining fiscal buffers, high dependence on external finance (and hence, vulnerability to market sentiment), perceived erosion of institutional checks and balances, as well as rising geopolitical risks.

Selected economic indicators 1/	2018	2019	2020	2021	2022	2023	2024
GDP growth 2/	3.0	0.9	1.8	11.4	5.0	3.0	3.0
Inflation 2/ 5/	16.3	15.2	12.3	19.6	73.1	51.2	24.2
Fiscal balance 3/	-3.8	-4.8	-5.1	-3.9	-4.2	-5.6	-6.0
Gross public debt	30.1	32.6	39.7	41.8	37.5	37.7	39.6
Gross public financing needs	6.5	8.4	10.5	12.1	12.9	13.3	13.5
Current account balance 5/	-2.8	0.7	-4.9	-1.7	-5.7	-3.9	-2.6
Gross external debt 4/	53.5	54.8	60.4	54.8	..	..	..
Gross external financing needs	25.9	22.3	29.4	27.6	25.9	24.2	23.0
Gross FX reserves (USD billion) 4/	93.	105.7	93.6	111.2	114.0	..	..
Exchange rate (TRY/USD) 4/	5.26	5.94	7.34	12.98	18.58	..	..

Sources: IMF World Economic Outlook Oct 2022; Country Report No. 21/110; central bank; central statistical office
Notes: 1/ In percent of GDP, except where noted; figures for 2022-24 are estimates and projections; 2/ Percent change, year-on-year; average; 3/ Nonfinancial public sector, IMF definition (excluding one-off items); 4/ most recent data from the CBRT, TRY=Turkish lira, end-of-period (as of Oct 20th, 2022); 5/ for 2022 onwards: estimates based on authorities' data;

B. Recent Developments

3. In response to the pandemic the authorities implemented a rapid sizeable response, worth over 12 percent of GDP, one of the largest among emerging markets. The result was a remarkable

[58] IMF WEO October 2022
[59] Poverty headcount ratio at $6.85 a day (2017 PPP) (percentage of population)

and swift turnaround—after a slowdown to 1.9 percent in 2020, the economy rebounded by 11.4 percent in 2021. Thanks to spending restraint, the fiscal deficit did not deteriorate.

4. Nonetheless, the past two years have been marked by financial volatility and macroeconomic stress. According to observers, authorities have been pushing for maximum growth despite macro-financial vulnerabilities, with policies perceived by investors as unorthodox.

5. In a typical cycle, expansionary policies (e.g., large credit expansion) or an external shock, or both, would lead to higher current account deficit, higher inflation, and negative real interest rates. This would in turn put pressure on the currency (with occasional sharp depreciations), drain international reserves and lead to market anxiety and potential credit downgrades. This could be followed by a tentative normalization of policies to restore stability, but frequent changes to the economic team have worked to reduce confidence.

6. Most recently, over the past year, the central bank has cut its policy rate several times, by a cumulative 700 bps, despite high and accelerating inflation. Authorities' resolve to persevere with monetary easing have led to capital outflows and a sharp depreciation. Since September 2021, the currency has lost more than 50 percent of its value, while inflation has risen to over 80 percent y-o-y, as of September 2022.

7. Additionally, the geopolitical conflict in Europe is having significant negative spillovers, via higher energy and food prices and higher risk premia. The immediate effect has been through the energy price channel. Despite higher-than-expected tourism receipts and solid export performance, the current account deficit in the first half of 2022 has doubled compared with a year ago, and is on track to reach 5.7 percent of GDP for the whole year. The expected slow-down in key export markets in Europe due to higher interest rates and the energy shock, is likely to result in further worsening of the deficit. This has led to renewed market nervousness.

8. Outlook and Risks. The outlook is characterized by high uncertainty. Key unknowns relate to the deteriorating external liquidity situation (higher deficit, tighter environment), the volatile market sentiment, the impact of the recent large depreciation on economic actors, the future course of economic policies and the impact of geopolitical tensions.

9. According to IMF projections from World Economic Outlook October 2022 report, the economy is expected to slow to 5.0 percent in 2022 and reach medium-term potential growth of 3.0 percent from 2024 onwards. The drivers of growth could shift somewhat, because the large real depreciation should boost export, while inflation is eroding the purchasing power of the population and dampening domestic demand. Fiscal stance has been helped by inflation-related boost in revenues but will soon be challenged by the need to protect the population from high energy price. The path of inflation will depend on the monetary policy and external factors (food and energy prices). In the near term, prices are expected to remain significantly higher than the central bank's medium-term target of 5 percent.

10. Since August 2022, all three major rating agencies have downgraded Türkiye's sovereign credit—to B stable (S&P), B negative (Fitch) and B3 stable (Moody's)—citing high external gross financing needs (including because of the widening current account), rather modest reserves in relation to these needs, unorthodox monetary policies (e.g., lowering rates in the face of high inflation), and government's revealed preference for growth over macro stability—which all combine to reduce confidence, breed uncertainty, expose Türkiye to volatile market sentiment and increase risks to financial stability. In this regard, the ongoing tightening of the global monetary environment presents a risk. Also, the upcoming 2023 elections complicate the prospects for policy normalization, which would have to come at the expense of growth.

11. Additional vulnerabilities relate to private sector balance sheets. Leverage in the corporate sector remains, although it has come down recently. Still, large corporations report sufficient liquidity, positive short-term net open FX positions and significant natural hedges, which limit depreciation's immediate negative impact.

12. Turkish banks are being downgraded in parallel with the sovereign. They may also see some deterioration in their portfolios due to pandemic's impact on the economy, depreciation's impact on balance sheets and the recent credit boom. However, capitalization and liquidity remain adequate, and profitability is reportedly high. Also, despite sector's dependence on wholesale FX funding and short-term FX deposit, domestic banks have been able to continue to tap their robust banking relationships and roll over obligations even amid high market uncertainty.

13. Overall, the private sector has demonstrated resilience and have considerable experience in navigating through the volatile economic environment. Ultimately, the system hinges on residents' confidence and willingness to keep their sizeable dollars deposits in domestic banks, which so far has been sustained.

14. Regarding public debt, government's relatively strong balance sheet and continued access to financial markets allay sustainability concerns. Key strengths anchoring Türkiye's longer-term debt sustainability include moderate levels of public debt, a track record of conservative fiscal policies, as well as a large, diversified economy with young population and entrepreneurial spirit which translate into substantial growth potential. The negative impact of the recent depreciation will be offset by high nominal growth due to inflation. Going forward, according to the IMF, while debt remains below vulnerability benchmarks under the baseline and shock scenarios, it is expected to slowly drift upwards in the medium term. This may necessitate some moderate fiscal adjustment. On the other hand, rating agencies expect debt to peak in 2022 and then either stabilize or start declining gradually already under the baseline scenario.

Türkiye's external debt is expected to remain sustainable over the medium term and should decline along some expected real exchange appreciation.