Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 29-Jun-2023 | Report No: PIDA35667

Public Disclosure Authorized

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Turkiye	P178274	Green Finance Project	
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
EUROPE AND CENTRAL ASIA	17-Jul-2023	28-Sep-2023	Finance, Competitiveness and Innovation
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Türkiye Sınai Kalkınma Bankası (TSKB)	Türkiye Sınai Kalkınma Bankası (TSKB), Maxis Private Equity Portfolio Management A.Ş.	

Proposed Development Objective(s)

The development objective is to support the greening of firms through equity financing and mobilized private capital, and expand climate financing in Türkiye's capital markets.

Components

Türkiye Green Fund
Project management and implementation support

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	407.00
Total Financing	407.00
of which IBRD/IDA	157.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	157.00

Non-World Bank Group Financing

Commercial Financing	250.00
Unguaranteed Commercial Financing	250.00

Environmental and Social Risk Classification

Substantial

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Türkiye achieved high economic growth in the past decade, however at the expense of elevated macro-financial vulnerabilities.** Average annual gross domestic product (GDP) growth from 2011 to 2020 reached 5.2 percent, higher than in the previous decade (4.0 for 2001–10).[1] Despite the negative impact of COVID-19, economic growth in 2020 reached 1.8 percent, accelerating to 11.4 percent in 2021 and then 5.6 percent in 2022, aided by external and domestic demand.[2] However, growth has been fueled by strong credit expansion and monetary stimulus, which put pressure on the Turkish lira and drove up domestic inflation. The lira has been trading over 18 TRY to US$1 since August 2022 compared to less than 4 TRY to US$1 in 2017, while inflation reached over 80 percent in August 2022, moderating since to 43.7 percent as of April 2023, due largely to the base effect and government actions to decrease inflationary pressures. Currency depreciation has exacerbated Türkiye's persistent current account deficits, which are financed by short-term portfolio flows, and put pressure on external and fiscal buffers given efforts to support the lira and dampen inflation. The Russian invasion of Ukraine is amplifying risks for the economy given strong trade links, and additional inflationary pressure through price increases for food and commodity imports. Rising concerns about macro-financial vulnerability have led to a series of ratings downgrades. The latest downgrade by Fitch ratings in July 2022 revised Türkiye's Issuer's Default Rating (IDR) from B+ to B with a negative outlook, citing spiraling inflation, interventionist policies that raise macro and external risks, and higher financing needs with limited inflows leading to mounting pressure on international reserves. S&P followed with a downgrade in September 2022 from B+ to B and recently revised the outlook to negative.

2. **The impact of this economic volatility is likely to amplify existing income and labour disparities.** High inflation has raised concerns about rising poverty as poor and vulnerable groups allocate a large share of their disposable income to food, energy, and transportation expenditures.[3] The poverty rate rose to an estimated 12.9 percent in 2020, and while expected to decline from this COVID-related peak, current conditions are putting

[1] Turkish Statistical Institute (TURKSTAT), Ministry of Treasury and Finance.
[2] Türkiye Economic Monitor, April 2021; Türkiye Economic Monitor, February 2022.
[3] Türkiye Economic Monitor, February 2022.

pressure on poorer households. During the 2018-2019 economic turmoil, the largest increases in poverty were witnessed by the less developed regions of the country. Furthermore, during the COVID-19 crisis, female employment and labour force participation tended to decrease more than male employment and labour force participation.

3. **On February 6, 2023, earthquakes of 7.8 and 7.5 magnitude, followed by more than 7,500 aftershocks and two additional earthquakes, have resulted in the largest such disaster to hit the country in over 80 years, inflicting significant damage in 11 provinces in southern Türkiye.** These regions have some of the highest poverty rates in Türkiye and also host more than 1.7 million Syrian refugees, which is almost 50 percent of the total Syrian refugee population in Türkiye. The earthquakes caused an estimated US$34.2 billion in direct physical damages, the equivalent of 4 percent of the country's 2021 GDP, according to a World Bank rapid damage assessment report which also acknowledges that recovery and reconstruction costs will be much larger, potentially twice as large. The impact on macro-financial conditions of the February 6 earthquakes is still unfolding, with implications for growth, labour markets and poverty, the financial sector, and fiscal and external balances.

4. **The Global Rapid Post-Disaster Damage Estimation (GRADE) Report, which focuses on the direct physical damages in Türkiye, estimates that 1.25 million people have been rendered temporarily homeless due to moderate to severe damage or complete building collapse.** Direct damages to residential buildings account for 53 percent (US$18 billion) of the total damage, with 28 percent of damage (US$9.7 billion) in non-residential buildings (e.g., health facilities, schools, government buildings, and private sector buildings), and 19 percent of damage (US$6.4 billion) related to infrastructure (e.g., roads, power, water supply). The damage estimates in the report do not include the broader economic impacts and losses for the Turkish economy, or the cost of recovery and reconstruction, which could be significantly higher than the direct damages and require a more in-depth assessment.

5. **Geographic, climatic, and socioeconomic conditions make Türkiye highly vulnerable to the impacts of climate change and other environmental hazards.** Türkiye has high vulnerability on 9 out of 10 climate vulnerability dimensions, compared with a median of 2 out of 10 in other Organization of Economic Co-operation and Development (OECD) countries.[4] Based on the Country Climate and Development Report (CCDR), Türkiye needs to prioritize climate mitigation, adaptation, and resilience to ensure sustainable growth.[5] Investments are particularly urgent in the energy, power, transport, and agriculture sectors given their respective contributions to greenhouse gas (GHG) emissions, carbon intensity, and vulnerability to climate change. Türkiye's transport system is more vulnerable than those of comparator countries, and the country is also experiencing food security issues, increasing water stress and unprecedented disasters, such as the devastating forest fires of 2021. This vulnerability is due to a combination of climate factors, population exposure (for example, the share of the population exposed to floods and forest fires), and socioeconomic factors (such as the share of agriculture in the economy).

6. **Türkiye can benefit from the accelerating global trend of investors seeking green investment opportunities.** Based on the CCDR's outline of a resilient and net zero pathway (RNZP), Türkiye needs to invest $165 bn over 2022–40 in addition to the $482 bn baseline in the power, residential, and transport sectors. Half of these investments are expected to come from the private sector, yet green finance is so far falling short of

[4] Think Hazard, 2023.
[5] Country Climate and Development Report (CCDR), 2022.

what is required. Increasing appetite by international investors for green investments[6] are an opportunity for Türkiye to crowd in private capital for achieving its Updated First Nationally Determined Contribution (NDC) targets, set at a 41 percent reduction in GHG emissions from the Business as Usual (BaU) level by 2030. The European Green Deal (EGD) and specifically the Carbon Border Adjustment Mechanism (CBAM), a climate measure that should prevent the risk of carbon leakage, provide further emphasis on the need for the corporate sector to transition towards green to preserve growth potential. The transition requires macroeconomic stability and well-designed policies to scale up private capital and minimize costs.

7. **Accessible and affordable long-term finance will be needed for sustainable economic growth, the green transition, and job creation.** Long-term finance—frequently defined as all funding for a time frame exceeding one year—contributes to faster growth, greater welfare, shared prosperity, and stability in two important ways: by reducing rollover risks for borrowers, thereby lengthening the horizon of investments and improving performance, and by allowing for longer-term investments, which are needed particularly for the green transition, building climate resilience, and job creation. Long-term finance provides households and firms with options to address their financial needs, such as buying property or making a business investment.[7] However, macro-financial volatility, specifically currency volatility and persistently high inflation, undermine the development of domestic sources of long-term finance in Türkiye.

8. **The proposed project builds upon the findings of the CCDR and directly supports the country's climate change strategies and action plans.** Türkiye's Updated NDCs[8] foresee a 41 percent reduction of GHG emissions by 2030 and the National Adaptation Plan[9] is being updated to address increased vulnerability to climate change. The updated NDCs include priority lists of sectors for climate mitigation and adaptation and mentions the need for significant international financial support to implement its NDC. The CCDR equally emphasized the need to mobilize private capital for the significant investments required to achieve Türkiye's climate ambitions and address climate vulnerability. The financial sector's crucial role in mobilizing private capital was emphasized with a specific reference to the opportunities that lie in capital markets instruments. Given the project's focus on (i) supporting firms' decarbonization and investments in green technologies through establishing a new green fund with an explicit mandate to crowd in private capital and (ii) supporting the broader development of green capital markets, the project is directly linked to the NDCs and the CCDR's recommendations. In addition, the project will focus on supporting firms in the NDC and CCDR priority sectors.[10]

Sectoral and Institutional Context

The financial sector and the green transition

9. **Several of Türkiye's structural development challenges have their roots in an undiversified financial**

[6] In 2020, investors demanding green and sustainable investments represented over a third — more than USD 35 trillion — of total assets under professional management (Global Sustainable Investment Alliance, 2021).
[7] See, e.g., the World Bank's Global Financial Development Report 2015/2016: Long-Term Finance; Demirgüç-Kunt and Maksimovic 1998. *Law, Finance, and Firm Growth.* The Journal of Finance, Volume 53, Issue 6.
[8] https://unfccc.int/sites/default/files/NDC/2023-04/T%C3%9CRK%C4%B0YE_UPDATED%201st%20NDC_EN.pdf
[9] https://webdosya.csb.gov.tr/db/iklim/editordosya/uyum_stratejisi_eylem_plani_EN(2).pdf
[10] The NDC priority sectors include on the mitigation side: (i) energy, (ii) industry, (iii) transport, (iv) agriculture, (v) building, (vi) waste, and (vii) land use, land use change and forestry; and on the adaptation side: (i) agriculture and forestry, (ii) water, (iii) disaster risk management, (iv) urban, (v) rural development, and (vi) public health. The CCDR priority sectors include power and energy, transport, forest landscapes, and agriculture.

system that is exposed to short-term and extremely limited local currency financing. Financial markets[11] as a share of GDP are at 93 percent, below the upper-middle-income (UMI) country average (105 percent). Banks dominate the financial system, constituting 89 percent of financial system assets.[12] An overreliance on external borrowing for financing domestic investments amid persistently high inflation, a volatile exchange rate and depreciation pressure, a low national savings rate, and high corporate leverage have exposed the banking system and the economy to considerable imbalances and risks.[13] The banking sector is exposed to maturity and currency mismatches, and refinancing risk, especially from deposit dollarization. FX deposits as a percentage of total deposits increased from around 30 percent in 2011 to 50 percent as of end-2022.[14, 15] Heterodox policy measures, such as the FX-protected Turkish Lira deposit scheme, slowed the dollarization trend in 2022, however at the cost of fiscal risks, while credit market interventions aimed at stabilizing the lira amid dwindling FX reserves and loose monetary policy undermine transparency and lead to pricing distortions. Having access to more lira-denominated long-term funding would reduce Turkish banks' and corporates' exposures to short-dated and FX-denominated debt, reducing rollover risks and lowering financial stability risks[16].

10. The role of capital markets to channel long-term finance is limited, with high volatility, short tenors, high state presence in the bond market, and limited domestic issuance by corporates. Based on recently completed diagnostic work, including a Technical Note on Long-Term Finance[17], Türkiye lacks important preconditions for the development of domestic sources of long-term finance and capital markets: most importantly, macro-financial stability and a developed institutional investor base. Given high inflation and depreciation pressure, savers and investors prefer short-dated financial products, those that perform well under high inflation, or choose to invest in FX assets, incurring in the latter case FX risk. Macro-financial factors and policy changes have resulted in volatility in the local currency government bond yield curve, negatively impacting policy predictability and investor confidence. The local corporate bond market has grown steadily but remains small, short-dated, and sensitive to external shocks; price formation and yield curve development are challenges. Banks and other financial institutions are the main corporate issuers, primarily abroad. The equity market has seen an uptick in initial public offerings (IPOs) in 2021 and the government is seeking to further expand equity finance via public markets and other channels. Nevertheless, the public stock market remains volatile, with a high turnover ratio and shallow foreign investor presence and is unlikely to be a sizable option to address the demand for long-term finance in the near to medium term, especially for SMEs.

11. An underdeveloped institutional investor base hinders the development of long-term finance. Nonbank institutional investors usually include pension funds, insurance companies (especially life insurance companies), collective investment schemes that pool funds from retail investors (such as mutual funds), and foundations and endowments. However, the insurance and pension funds together accounted for less than 6 percent of total financial assets as of 2021,[18] and the total size of the insurance sector, pension funds, and mutual funds adds up to only 6.5 percent of GDP. The pension and insurance sectors are significantly smaller than in Türkiye's peers. The OECD average for pension assets/ GDP was 63.5 percent in 2020[19] while the ECA average for insurance

[11] Financial markets include private sector credit by deposit money banks, outstanding private securities, and stock market capitalization.
[12] Central Bank of The Republic of Türkiye (CBRT), Financial Accounts, 2022 Q1.
[13] See Türkiye Economic Monitors.
[14] CBRT *Inflation Report 2021-I*, "Economic Outlook," *Factors Affecting Deposit Dollarization*¸ Box 2.1, Chart 1.
[15] Türkiye Economic Monitor, April 2021: Navigating the Waves.
[16] See EFI Macro-Financial Review, Fall 2022.
[17] Selected Capital Markets Options To Promote Long-Term Finance For Türkiye, June 2022.
[18] CBRT Financial Accounts, 2022 Q1.
[19] Source: OECD pension funds in figures (June 2021).

penetration was 3.6 percent.[20]

12. **The financial sector also needs to mobilize capital for the green transition; yet green finance is at an early stage of development in Türkiye.** Green finance[21] in Türkiye comprises mostly short-dated bank lending for renewable energy (TL 200 billion as of September 2021 ($22.6 billion[22]), 5 percent of total loans) while long-term finance is needed to address investment needs. Banks have also been the main issuers of green Eurobonds, but Türkiye overall is lagging behind peer emerging markets in terms of green issuance.[23] Barriers to the growth of green capital market instruments are primarily macro-financial, however challenges also remain regarding knowledge and institutional capability, limited demand for green instruments by domestic institutional investors, and the need to accelerate efforts towards a holistic regulatory and policy framework (such as the adoption of a national taxonomy for green investments, modeled on prevailing taxonomies such as the one in the EU, as well as standardized disclosure standards) – as also emphasized by the CCDR. Neither the public sector nor banks will be able to meet the investment needs for the green transition alone and private capital will need to be mobilized.

Investment and financing needs for the greening of Türkiye's firms

13. **Türkiye's firms need to invest in green technologies to decarbonize, adapt to climate change, contribute to Türkiye's green transition, enhance their growth potential, and create jobs.** The energy sector is the main emitter of CO2 emissions, followed by the manufacturing sector – in particular non-metallic minerals, iron and steel, chemicals, textiles, and food – and agriculture (CCDR, 2022). For Türkiye to reach its intended green objectives, firms need to decarbonize. At the same time, decarbonization will be important for firms to maintain their growth potential, especially in the wake of the EU Green Deal and CBAM. Given that Türkiye's manufacturing sector is more carbon intensive than the EU average, exports of affected sectors to the EU market could drop considerably if decarbonization efforts were delayed. On the upside, early investments in green technologies could give Turkish firms a lead to compete internationally, especially in markets where firms already have a competitive advantage, e.g., solar energy and renewable energy in transportation, adding to their ability to create jobs.

14. **Firms' investments in green technologies are lagging behind for several reasons.** Based on 2019 Enterprise Survey data as presented in the 2022 CCDR, 35 percent of firms surveyed had upgraded machinery, equipment, and other assets in the period 2016-2019, while 20 percent of firms surveyed had made improvements to heating, cooling, and lighting systems, and 13 percent leveraged circular economy practices, such as waste reduction, recycling, and management. Reasons for this slow process include (i) firms not considering green investments as a priority, not recognizing their importance to maintain or expand growth potential, (ii) limited knowledge about the types of investments to prioritize, (iii) lack of financing, and (iv) the high costs of adapting operations to green standards.

15. **Available financing for green investments is not sufficient and too short-term**. Given Türkiye's weakly

[20] Source: Axco Global Statistics database.
[21] Green finance includes all lending and investment contributing to climate mitigation, climate adaptation, resilience, and other environmental objectives. Climate finance refers to local, national, or international financing that is drawn from public, private, and alternative sources to support mitigation and adaptation actions that will address climate change.
[22] The figure is calculated by using the USD/TRY exchange rate as of September 2021.
[23] In 2021, total green bond issuance amounted to US$ 1.2bn in Türkiye, (US: $90bn; China: $72.2bn; Germany: $67.1bn; India: $8bn; Brazil: $2.4bn; Mexico: $0.5bn; South Africa: $0.1bn) according to the Climate Bonds Initiative. https://www.climatebonds.net/market/data/.

diversified financial sector, firms primarily rely on debt (predominately bank loans and short-term liabilities) or their own equity with a high opportunity cost as the main source of capital for any type of investments, inducing investments in green technologies. However, domestic debt financing alone will not be sufficient to support firms' decarbonization and adaptation efforts given that it is short-term in nature[24], focused primarily on renewable energy (see above), less accessible to SMEs, and does not encompass knowledge transfer, one of the key bottlenecks identified. In addition, the focus on debt financing has led to high corporate leverage and elevated financing vulnerabilities, and stymied firm's investment capacity in green transformation and innovation.[25] Access to long-term finance via diversified sources is even more challenging for SMEs and, within that group, women-led or managed firms given that financial institutions perceive them as higher risk. Based on 2019 Enterprise Survey data, firms managed by women are less likely to have a loan or line of credit than those managed by men (25 versus 35 percent), face stricter collateral requirements, and are more likely to have their loan application rejected, including because of bias.[26] Women-managed firms are also significantly more likely to report access to finance as their biggest obstacle (41.6 compared to 28.4 percent). Given the lack of equity-specific data for women-inclusive firms, the access to line of credit data is being used as a proxy to reduce the gender gap.

16. **Private markets for equity finance may present opportunities for firms' green transition.** Private markets for equity finance, namely, private equity (PE) and venture capital (VC) may help address some of the identified challenges. PE/VC funds typically provide longer-term investments compared to loans and short-tenured securities and combine funding with the transfer of expertise (including on governance, business management, and technical knowledge), particularly valuable for firms' greening process[27] – firms' greening process or green transition refers to firm investments that lead to decarbonization, mitigation and adaptation to climate change impacts, physical as well as transitional, and address environmental issues.[28] In addition, the enabling environment for PE/VC is in place, aligned with international market standards, the taxation regime is favorable, and there is strong government support. Lastly, equity finance would contribute to diversifying corporates' funding sources and help deleveraging.

17. **There is growth potential for PE, especially for funds focused on firms in the greening process and SMEs.** Despite a pick-up in activity from the lows of 2019, when macroeconomic turmoil drove a severe depreciation of the lira and investor risk aversion, the number of PE deals remains limited, with just 14 acquisitions and nine exits in 2022, while the deal value decreased by 83 percent from US$2.3 billion in 2021 to US$383 million in 2022. The trending sectors amongst PEs were manufacturing, energy, telecommunications, technology, and financial services. In contrast, VC investment in Türkiye has grown significantly, with 263 VC deals and a total of US$2.3 billion in 2022. Leading international VC funds have invested in Turkish start-ups. Macroeconomic volatility and specifically currency depreciation have limited the development of PE given increased fundraising and exit risks. The small domestic savings pool, underdeveloped institutional investor base, and relatively high transaction costs to originate, evaluate, and execute deals, especially in the SME space, also pose challenges. Nevertheless, there is significant growth potential for PE, especially for funds focused on green and SMEs and blended financing can make these investments more viable by mitigating the higher transaction costs. Several funds in the market claim

[24] 80 percent of domestic debt securities issued by non-financial corporations are short term by remaining maturity, while this number is 85 percent for financial institutions.
[25] Selected Capital Markets Options To Promote Long-Term Finance For Türkiye, June 2022.
[26] See e.g., Alibhai, S. et al. "Gender Bias in SME Lending: Experimental Evidence from Turkey" (2019).
[27] See e.g. De Haas et al (2021). "Managerial and Financial Barriers to the Net-Zero Transition". BOFIT Discussion Paper No. 6/2021.
[28] This may include, among others, investments in energy efficient equipment, use of renewable energy for operations, reuse and recycling of production inputs, and more efficient use of resources, especially water and electricity.

to be focused on green, but no green standards or investment frameworks have been established and adopted[29].

18. In this context, supporting firms' decarbonization as well as diversifying and greening the financial system requires a multi-faceted approach. Considering the nature of firms' investment needs for the green transition, long-term funding will be needed together with knowledge transfer, calling for the development of equity financing in local currency. This would contribute to GHG emission reduction by supported firms and can address challenges with high corporate leverage (especially in FX) and support job creation. Supporting the development of the undersized PE industry through a green fund with a best practice green investment framework would not only have a demonstration effect on the PE industry but also contribute to financial sector diversification and long-term finance development, needed for long-term growth. At the same time, encouraging the further development of the domestic corporate bond market would be a good complement to support diversification on the debt side – support through a potential collaboration with the EU is expected to complement the proposed project and may result in a proposal for Additional Financing in the future in connection with the currently proposed Project. While demonstration transactions on the equity and debt side can be catalytic, such transactions need to go hand-in-hand with creating an enabling environment for green finance to flourish in Türkiye. In particular, a unified taxonomy for green investments and incentives to stimulate the green debt market would support market development; and complementary engagements will support these reforms (see below). The proposed project aims to take a holistic view towards these interrelated development needs, while acknowledging that the lack of a stable macro-financial environment is a significant limitation to the development of all long-term finance solutions and that a holistic and long-term approach will be needed to address identified constraints.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

The development objective is to support the greening of firms through equity financing and mobilized private capital, and expand climate financing in Türkiye's capital markets.

Key Results

The results of the project will be measured through the following proposed PDO indicators:

- CO2 emission avoided through TGF renewable energy investments (tons/year)
- Carbon emission intensity reduction at manufacturing investees through TGF investments (%)
- Amount of investments in green or greening firms (USD million)
- Amount of private capital mobilized at TGF level (USD million)

D. Project Description

19. The project's objective will be achieved through an innovative design. The project aims to simultaneously support (i) firms' decarbonization and investments in green technologies, (ii) development of the PE industry through a demonstration green fund, (iii) financial sector diversification and development of firms' access to diversified sources of long-term finance, (iv) lowering high corporate leverage, and (v) accelerate financing for the green transition and enhanced climate action. The idea is to pioneer green private equity

[29] The PE/VC potential is aided by the flourishing broader start-up ecosystem in Türkiye with the number of accelerators having grown from 6 in 2020 to 69 in the first half of 2021. Over the same period, the number of incubators grew from 8 to 82.

investments, therewith enhancing local green and climate investment capacity and creating markets for private players so that the private sector can take over eventually. By doing so, the project will ultimately support the transition to a low-carbon and climate-resilient economy, contribute to financial sector diversification and support the development of domestic sources of long-term finance, capital markets, and job creation.

Component 1: Capitalization of Türkiye Green Fund (US$150 million)

20. **Under this component, IBRD will lend to TSKB (as borrower) and TSKB (in its capacity as sponsor and Limited Partner) will use the funds to partially capitalize a Türkiye Green Fund (TGF), which will in turn provide equity financing to green and greening companies.** TGF's objective will be to support investments in innovative green or greening firms and promote greening of the private equity industry through establishing a demonstration green fund in Türkiye. The fund will have a double bottom line mandate, with non-concessional returns and sustainable impact maximization. Support for the establishment of TGF should be considered as a pilot aimed at (i) proving commercial viability and crowding in private capital for green private equity investments, (ii) scaling up the private equity industry and therewith contributing to lowering high corporate leverage and diversifying the financial sector, and (iii) creating a market for the private sector to take over eventually. Through this component, the project will also finance the management and success fees associated with standard fund operating costs, including pipeline generation, due diligence, investment management, and exit.

21. **TGF will be established with the IBRD loan to TSKB, Türkiye's private development bank, as the borrower and one of the implementing entities of the Project.** TSKB will be the borrower and one implementing entity for IBRD funds, with a sovereign guarantee, and will use those funds to inject capital as a Limited Partner (LP) into TGF in accordance with CMB regulations. TGF will then use those funds to make eligible investments into green or greening firms. The reason for choosing TSKB as the leading implementing entity for TGF is that the sponsor (founder) of TGF needs to have high credibility in the market, strong green credentials and implementation capacity, and private sector orientation; TSKB meets all these requirements . While using a long-term IBRD loan for equity investments will lead to higher balance sheet risks for TSKB compared to on-lending (returns from equity investment take more time to materialize compared to lending), the financial analysis and modeling for TGF suggests that the risk-reward trade-off is neutral to positive for TSKB, relying on its existing credit and project evaluation expertise.

22. **TGF will be managed by Maxis Private Equity Portfolio Management A.Ş. (Maxis), one of Türkiye's largest asset management companies and an affiliated company with TSKB, as the second implementing entity of the Project and the fund manager.** Maxis is one of the largest domestic professional fund managers based on AuM, established in November 2017 pursuant to the CMB's Communiqué on Principles Regarding Venture Capital Mutual Funds, and holds a valid license by CMB as a fund manager. Maxis is a wholly owned subsidiary of Iş Investment Securities Inc., a subsidiary of İşbank. İşbank is the largest private bank in Türkiye, and also the main shareholder of TSKB with 50.92 percent. Maxis will be the General Partner (GP) and Fund Manager of TGF. Having a fund manager as an affiliated entity of the fund sponsor is not in conflict with the regulatory requirements stipulated by the CMB, as confirmed by an independent legal opinion. In addition to its strong fund management expertise, Maxis has shown high commitment to green, sustainable and impact investments. Maxis will be responsible for establishing TGF in line with the CMB's regulatory framework, including the registration with CMB, set up contractual arrangements on behalf of TGF, including Limited Partnership Agreements (LPA) with LPs. As the fund manager, Maxis will be responsible for investment management from deal sourcing, investment

evaluation and decision (subject to Investment Committee approvals at the execution stage), portfolio company management, and exit.

23. **TSKB will enter into a collaboration agreement with Maxis for jointly implementing the Project and supporting Maxis in deal origination, generating synergies and leveraging on TSKB's targeted investee base and access to investees.** The TSKB-Maxis collaboration will ensure that investments adhere to the green investment mandate and support an adequate pipeline. In line with market practice, Maxis will charge an annual management fee for providing these services based on the committed fund capital. Given the active role of TSKB in deal origination, Maxis will charge a lower than market annual management fee. TSKB will be awarded a one-off origination/ success fee. These fees will be paid from TGF and will be considered eligible expenditures under the Project. While the collaboration between the Fund Manager and main LP is not common internationally, it is an established practice in Türkiye and in line with regulatory requirements, as confirmed by an independent legal opinion.

24. **TGF will create an open platform to mobilize private capital and other sources of funding through co-financing/co-investments**. TGF will facilitate private capital mobilization (PCM) at two levels: ***(1) TGF level (fund level).*** IBRD funding through this component as implemented by TSKB as a sponsor will provide the anchoring capital commitment; other investors can invest in this fund as Limited Partners (LPs). ***(2) Investment deal level (deal level).*** Other investors and financiers can co-invest and/or co-finance with TGF at its investee (firm) level. Such PCM will include other equity investments jointly with TGF into the investee (firm), capital expansion of existing shareholders of the investee motivated by TGF's equity finance, as well as debt financing by financiers (such as banks including TSKB lending via its corporate and commercial banking divisions) enabled by equity expansion.

25. **The initial size of TGF is estimated at US$300 million, with the IBRD loan at half of that.** The additional capital of US$150 million is expected to come primarily from domestic private investors (about US$100 million) and DFIs (about US$50 million), although it should be noted that these are estimates and do not constitute a formal commitment. TGF needs to be sufficiently large to make an impact on the market while needing to be reasonably conservative to deal with potentially slow pipeline creation initially. The proposed fund size is aligned with the expected demand from investee companies and market feedback obtained. Once TGF becomes operational and has a good track record, further funding phases can be considered to scale up the initial size. Limiting IBRD's loan amount to equate to less than half of the total planned fund size also ensures a sufficiently high PCM ratio.

26. **Initial market sounding activities indicate material interest from investors.** Targeted international investors include other development finance institutions (DFIs), sovereign wealth funds (SWFs), international impact or commercial investors. Targeted domestic investors include conglomerates, family offices, non-governmental organizations, portfolio management companies and pension funds, High-Net-Worth Individuals, TSKB clients, quasi-governmental and development agencies. Initial market sounding activities included wide bilateral discussions with interested potential investors, a presentation in the Innovate4Climate Bilbao exhibition in May 2023; a few DFIs are actively considering co-investment at TGF level while co-investment at deal level through other DFI-supported funds is an option as well.

27. **TGF will make equity (and potentially quasi-equity and debt) direct investments in green or greening firms with all exit options.** Direct investments will demonstrate the viability of green investments and create

direct impacts, with a set of green standards applied in the investment process. A feasibility study and evaluation of the potential pipeline by TSKB suggest strong market appetite and the possibility of adequate pipeline investment opportunities to support the fund. While the focus will be on equity investments and there is no intention to include quasi-equity and debt financing at the moment, it will not be excluded ex ante.[30] Exit options should be comprehensive and include: (i) sale to other PE funds; (ii) buyback by the original owners or sale to strategic investors; or (iii) IPOs on the increasingly active Borsa Istanbul or other exchanges.

28. TGF's governance structure is key to ensure its success. TGF will have an Investment Committee (IC) composed of private sector representatives with significant experience in private equity investments. The IC will make direct investment decisions and decide with majority decision. The IC will be composed of Maxis and TSKB representatives, and representatives of major LPs where applicable and/or independent private sector representatives, with details to be elaborated in the Project Operations Manual (POM). While having LPs present on the IC is not common internationally, it is in line with market practice in Türkiye as confirmed by an independent legal opinion. Risk management needs to be separate from procedures with risks evaluated before and on an ongoing basis after the investment is approved. Periodic review of fund performance will help minimize the risks of deviating from the investment mandate.

29. TGF will be established as a local venture capital investment fund (VCIF), and if needed an offshore feeder fund structure can be added to facilitate foreign/international investor investments. Commercial local co-investors, the most likely source of PCM, prefer a local structure, in accordance with the Turkish PE/VC regulation, compared to an international one. Turkish pension funds can invest up to 20 percent of their portfolios in local VCIFs. A Turkish VCIF would be fully CMB compliant, independently audited and easily tracked by local investors, whereas foreign VCIFs are out of most local investors' reach. The taxation regime for a local structure is highly favorable for domestic fund investors, and setting up a VCIF is straightforward. A local VCIF can be set up by a local portfolio management company licensed by CMB, with the prospectus defining all functions. Finally, but importantly, a more developed local fund market would contribute to financial sector diversification and development of domestic capital markets, a clear objective of the engagement, especially when the appetite from private international investors is highly uncertain. If a solely domestic structure becomes a barrier for significant international investment (including from DFIs), an offshore feeder fund structure can be added to the local structure to mitigate foreign investors' concerns.

30. Aligned with market feedback, TGF will be set up as a FX-denominated fund that will make equity investments in local currency. VCIFs are usually denominated in FX in Türkiye, and this continues to be preferred by both domestic and international investors. Since TGF would make equity investments in TRY, it will need to manage the resulting FX risk, for instance by largely targeting companies that earn part of their revenue in FX and hence are naturally hedged (all companies identified for the initial pipeline in Annex 3 earn part or all of their revenue in FX). TGF will also be able to hedge its FX risk on the domestic swap market if needed. Neither TSKB nor the investee firms will be exposed to direct FX risk, but TSKB will be exposed to indirect FX risk through the TGF investment.

31. TGF will prioritize investments in innovative green or greening firms, specifically SMEs and mid-caps[31], in line with a clear Investment Policy Statement (IPS) and Green Investment Framework. Eligible green firms'

[30] Based on the CMB Communiqué regulating local VCIFs, investments in equity and debt are allowed with a requirement of at least 80 percent of the fund portfolio being in private equity investments (including investments in other VCIFs).
[31] SMEs are defined as firms with less than 250 employees and mid-caps are firms with 250-1,500 employees.

activities will primarily include renewable energy, energy efficiency, circular economy adapted products, to be further described in the POM. The proposed focus on SMEs and mid-caps stems from the fact that PE funds active in the market are focusing on ticket sizes of US$20 million and above, leaving a gap for the SME and mid-cap segment for which ticket sizes of US$5-30 million would be more appropriate. The IPS will include an eligibility list which will clearly detail the green sectors in which TGF can invest, in pursuance of the policy mandate - consistent with any future national green taxonomy the authorities are establishing, and priority sectors identified in the NDCs and CCDR. The IPS and eligibility list will be comprehensive and detailed to avoid the risk of "greenwashing". Impact should be measured according to a formal impact management and measurement system (could be modeled on IFC's AIMM) - before investment and regularly after investment. The carbon footprint of the main product or service offering of the firms will be carefully evaluated, carbon emission reduction potential estimated, and then tracked over the course of the investment. TGF would report more broadly than the typical PE fund, including on impact metrics (such as GHG emission reduction), portfolio composition etc. (except for commercially sensitive data).

32. The Project will advance equitable investments by identifying women-inclusive firms with investment potential. This will also tie in well with the broader sustainable and ESG investment trend, which moves beyond green and incorporates social and governance aspects, as well as TSKB's mission and focus on gender finance. Women-led and managed firms have even more challenges to access diversified sources of financing. However, there might also be fewer investment opportunities given that TGF will need to have commercial aspects in mind when implementing its double-bottom line mandate and women-inclusive firms are likely to lag in investment readiness. There is no data on the share of equity financing going to women-inclusive firms, and such information will need to be collected during implementation – the Project will make a key contribution to addressing the gender data gap in equity financing in Türkiye. It is proposed that TGF will put into place a gender strategy to address the pipeline challenge of investment readiness of women-inclusive firms, to avoid gender bias in investment selection, and to identify areas where TGF can support efforts during implementation, either directly or through partnerships. TGF will make dedicated efforts to identify women-inclusive firms as investment targets. The number of women-inclusive firms financed through TGF will be tracked through a dedicated results indicator.

Component 2: Project management/ implementation support (US$7 million)

33. This component will finance technical assistance and implementation support for TSKB. Technical assistance will allow TSKB to provide support to TGF during the establishment and early implementation phases. This will include support for the preparation of TGF's Green Investment Framework (for screening, appraisal, and monitoring) as well as the development of an impact measurement framework. It will also include consulting support for developing an environmental and social risk management system (ESMS) for TGF and support for conducting environmental and social due diligences and environmental and social monitoring at the investee level. Consulting support will also be provided on GHG Measurement and Verification at the investee level. Funds could also be used to support companies in the adoption of green standards and/ or rigorous impact frameworks. Beyond this component, TGF will support investees in their greening process and transfer expertise through the close involvement in the day-to-day management of the company (by taking a Board seat at investees). The precise scope of technical assistance to be financed by IBRD will be determined during appraisal.

Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts

34. **The environmental and social risks are assessed as Substantial.** Overall, the project is expected to have positive environmental and social impacts as it will support equity investments in innovative green or climate friendly, or genuinely decarbonizing firms. The project will specifically target Small and Medium Enterprises (SMEs) and midcaps who traditionally face more barriers in accessing private equity investments. These target companies are not expected to have adverse effects on climate or the environment. The environmental and social risk rating is Substantial; to reflect a potential range of sectors which could benefit from fund equity investments such as renewable energy firms or chemicals sector firms and their associated E&S risks aiming to decarbonize their activities, as well as the potential range of activities over the life of the project. Any firms with activities rated High on environmental and social risks and impacts will not be eligible for TGF investments. The main environmental and social risks associated with the Project are: (i) the capacity of the Fund Manager to develop and implement an Environmental and Social Management System (ESMS) to manage the E&S risks of its SME and midcaps portfolio in line with the World Bank ESS9 requirements for financial intermediaries; (ii) labor and working conditions, and occupational health and safety (OHS) in these investee firms; (iii) perceptions around "green washing"; (iv) social inclusion aspects, i.e. access to investments by women-led or women-managed firms, as they face more obstacles in accessing finance in Türkiye; and (v) dust, noise, water use, energy use and waste management resulting from the business activities to be implemented by the investee companies (beneficiaries). These risks are expected to be site specific, temporary and can be readily addressed through mitigation measures and compliance with national environmental and social laws and the World Bank ESF. It is expected that projects of investee firms will be in operational phase, and it is anticipated that there will be no investments requiring major civil works. Activities with significant impacts on biodiversity and cultural heritage will also not be eligible for financing. Any investee business activities rated as high on environmental and social risk will not be eligible for financing. Sexual exploitation and abuse (SEA) and sexual harassment (SH) risks are assessed as low.

35. **TSKB developed a Stakeholder Engagement Plan (SEP) which will assist the project to strengthen outreach to potential investee firms, including those led by women; and also to prevent any perceptions of "greenwashing".** The SEP includes a grievance mechanism to address and resolve any grievances associated with the E&S impacts of the project. The draft SEP will be disclosed in Turkish and English languages before Project appraisal and consulted upon with stakeholders.

36. **The TGF will establish and implement an environmental and social management system (ESMS) to manage and address environmental and social risks and impacts, including those associated with labor and OHS risks in the investee firms.** The ESMS will include an E&S Policy, Exclusion List, a requirement for compliance with national environmental and social laws, and any applicable ESSs. One of the premises of the ESMS will be Green Fund's senior management commitment and responsibility for satisfactory implementation of the ESMS. TGF will hire qualified environmental and social specialists to advise the Fund Manager on the ESMS implementation including utilizing the services of environmental and social consulting firms to carry out E&S due

diligence and manage the environmental and social risks of the proposed TGF investments. The ESMS will be established and deemed satisfactory by the World Bank before TGF makes any portfolio investments. In addition, the World Bank will provide a no objection for the first three TGF investments and provide no-objection for all projects rated as Substantial for environmental and social risks.

E. Implementation

Institutional and Implementation Arrangements

37. TSKB, Türkiye's private development bank, will be the borrower for IBRD funds, with a sovereign guarantee; TSKB and Maxis Private Equity Portfolio Management A.Ş. (Maxis) will be the Implementing Agencies and share responsibilities for project implementation. The following agreements will be entered into: (i) a Loan Agreement between IBRD and TSKB; (ii) a Guarantee Agreement between IBRD and MoTF; (iii) a Limited Partnership Agreement between TGF (as represented by Maxis) and LPs (including TSKB); (iv) a Collaboration Agreement between TSKB and Maxis; and (v) a Project Agreement between IBRD and Maxis.

38. TSKB is an experienced borrower with high implementation capacity, including in the green finance area. The reason for choosing TSKB as the borrower and main implementing agency for TGF is that the sponsor of TGF needs to have strong credibility in the market. TSKB also has demonstrated strong capacity to design and implement complex, innovative projects. TSKB has a Project Implementation Unit (PIU), staffed with capable and qualified personnel for implementation of the project and carrying out all fiduciary and safeguards requirements of the World Bank. Additional criteria for selecting TSKB include the bank's financial soundness, and its strong performance as the Borrower in the ongoing Inclusive Access to Finance Project (P163225), the completed Innovative Access to Finance Project (P147183) and several other, completed World Bank projects rated as Satisfactory or Highly Satisfactory by IEG.

39. TSKB, the leading implementing agency under the Project, will collaborate with Maxis as the fund manager and second implementing agency under the Project. Maxis holds a valid license from the CMB and will be responsible for establishing TGF in accordance with CMB regulations. After TGF has been legally established, TSKB will invest the IBRD loan as equity capital commitment. While Maxis will carry the responsibility for fund management, TSKB will be actively involved in the investment process and lead the deal origination phase, while Maxis will lead investment, fund management, and exit. Once the fund is formally established, TGF will make equity investments based on the policies and procedures outlined in the Project Operations Manual (POM). TGF's equity investments in firms will be governed by related contractual arrangements between TGF and the firms. TGF will be actively involved in the day-to-day management of investees by holding a Board seat at company level.

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