

ASSESSMENT

13 November 2024



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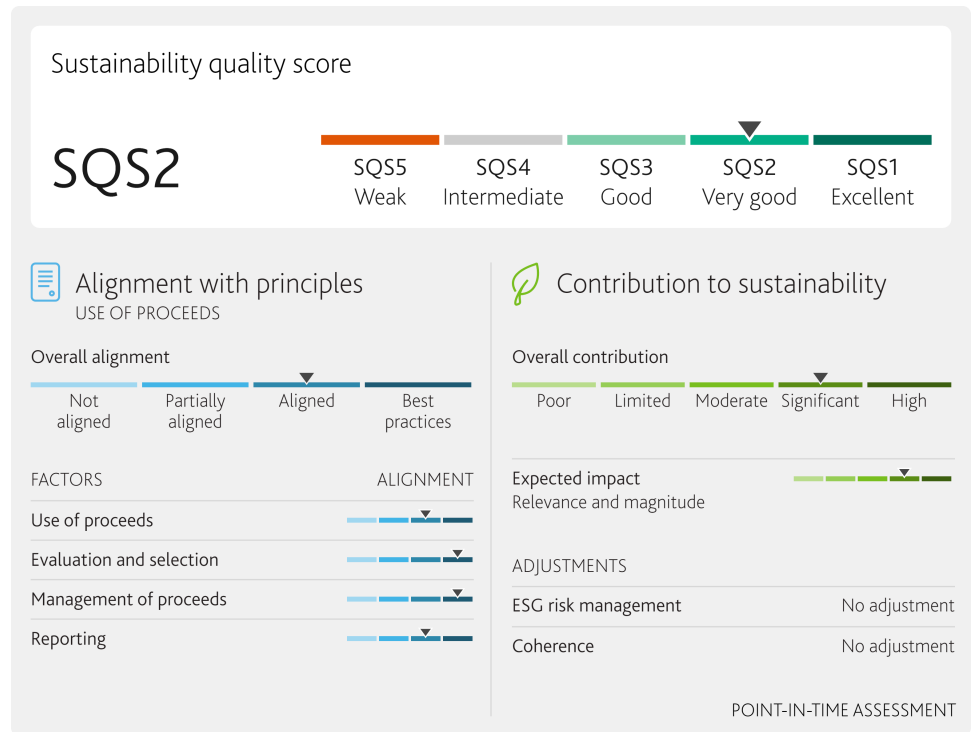
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T. C. Ziraat Bankasi A.S.

Second Party Opinion – Sustainable Finance Framework Assigned SQS2 Sustainability Quality Score

Summary

We have assigned an SQS2 sustainability quality score (very good) to T. C. Ziraat Bankasi A.S.'s (Ziraat) sustainable finance framework dated November 2024. The bank has established its use-of-proceeds framework to finance projects across eight eligible green and three eligible social categories, as detailed in Appendix 1. The framework is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2021 (with June 2022 Appendix 1) and Social Bond Principles (SBP) 2023, and the Green Loan Principles (GLP) 2023 and Social Loan Principles (SLP) 2023 of the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association (LMA/APLMA/LSTA). The framework also demonstrates a significant contribution to sustainability.



This report was republished on 15 November 2024 to add content in the sections on green buildings and clean transportation, and to remove duplicated content in Appendix 1.

Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of Ziraat's sustainable finance framework, including the framework's alignment with the ICMA's GBP 2021 (with June 2022 Appendix 1) and SBP 2023, and the LMA/APLMA/LSTA's GLP 2023 and SLP 2023. Under its framework, Ziraat plans to issue use-of-proceeds green, social and sustainability bonds (including private placements), sukuk, commercial papers and any other debt instrument to finance projects across eight green and three social categories, as outlined in Appendix 1 of this report.

Our assessment is based on the last updated version of the framework received on 12 November 2024, and our opinion reflects our point-in-time assessment¹ of the details contained in this version of the framework, as well as other public and non-public information provided by the company.

We produced this SPO based on our [Framework to Provide Second Party Opinions on Sustainable Debt](#), published in October 2022.

Issuer profile

T.C. Ziraat Bankasi A.S. (Ziraat) is a full-service bank that operates primarily in Türkiye. While Ziraat specializes in agricultural finance, it also provides a range of banking products and services including deposits, loans, derivatives transactions and foreign trade services, as well as investment banking, interbank money market and capital market transactions. Ziraat has moderate exposure to environmental risks, primarily because of its exposure to carbon transition risk. It faces low physical climate risks because of its limited real estate footprint in areas subject to flooding and other climate risks. The bank faces high industrywide social risks related to regulatory and litigation risks, in particular in the area of customer relations. Cyber and personal data risks are mitigated by an adequate IT framework and the bank's focus on digital transformation and cybersecurity.

Strengths

- » Projects will largely address highly relevant environmental and social (E&S) issues in the national context.
- » The project selection and evaluation process, including continued monitoring of the project investments and impact by independent, specialized consultants, is transparent.
- » Most of the environmental eligible categories are aligned with most stringent international standards.

Challenges

- » Inherent negative externalities could be present for some projects.
- » Although eligibility criteria for the social categories cover a highly vulnerable target population, some projects do not exclusively focus on the most vulnerable segment of the population, such as affordable housing.

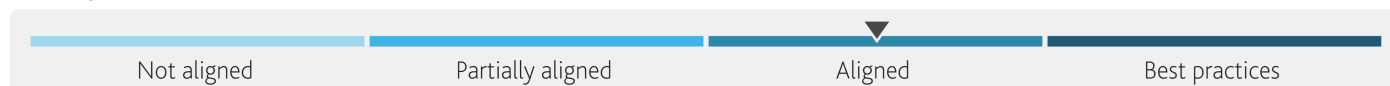
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Alignment with principles

Ziraat's sustainable finance framework is aligned with the four pillars of the ICMA's GBP 2021 (with June 2022 Appendix 1) and SBP 2023, and the LMA/APLMA/LSTA's GLP 2023 and SLP 2023:

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Green Bond Principles (GBP) | <input checked="" type="checkbox"/> Social Bond Principles (SBP) | <input checked="" type="checkbox"/> Green Loan Principles (GLP) |
| <input checked="" type="checkbox"/> Social Loan Principles (SLP) | <input type="checkbox"/> Sustainability-Linked Bond Principles (SLBP) | <input type="checkbox"/> Sustainability Linked Loan Principles (SLLP) |

Use of proceeds



Clarity of the eligible categories – ALIGNED

Ziraat has clearly defined the nature of the expenditures, which may include loans to pure play companies, in line with accepted market standards. All projects will be located in Türkiye. The framework and the bank's internal policy contain an extensive list of exclusions, and eligibility criteria are defined for nearly all project categories. There is limited visibility into the specific thresholds and technologies that will be financed under the wastewater treatment, circular economy and sustainable agriculture eligible categories. As regards loans to pure players, proceeds could be allocated to companies deriving at least 90% of their turnover from assets falling in any of the eligible categories, and the remaining 10% is not derived from controversial activities (for example, greenhouse gas GHG-intensive activities). The allocation to pure play companies will represent a small share of the total proceeds allocated under this framework. However, no specific maximum allocation to pure players has been defined.

Clarity of the environmental or social objectives – BEST PRACTICES

The bank has clearly identified relevant E&S objectives for all the eligible categories, which are coherent with international standards. The framework has set relevant United Nations' (UN) Sustainable Development Goals' (SDGs) targets for each of the eligible category, as detailed in Appendix 2.

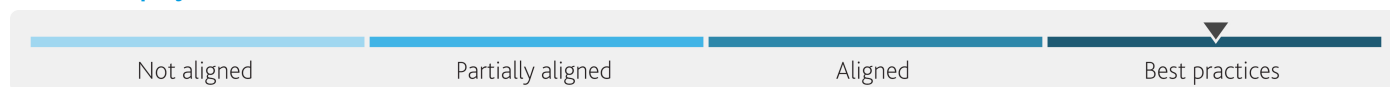
Clarity of expected benefits – BEST PRACTICES

The bank has identified relevant benefits for all the eligible categories. The benefits are measurable and will be quantified in annual reporting until full allocation of proceeds. Ziraat will inform its investors about its projection for the share of refinancing at the bond or loan level before each transaction. The bank has committed to limit the lookback period for refinancing to three years before the date of instrument origination.

Best practices identified - use of proceeds

- » Objectives set are defined, relevant and coherent for all project categories
- » Relevant benefits are identified for all project categories
- » Benefits are measurable and quantified for most projects, either ex-ante with clear baselines or with a commitment to do so in future reporting
- » Commitment to transparently disclose the share of proceeds used for refinancing where feasible
- » Commitment to transparently communicate the associated lookback period(s) where feasible

Process for project evaluation and selection



Transparency and quality of the process for defining eligible projects – BEST PRACTICES

The bank has established a clear decision-making process for determining the eligibility of projects formalized in its framework. Project evaluation and selection is carried out by a sustainable finance working group comprising different internal departments' heads. The roles and responsibilities are clearly defined, and members of the working group have relevant experience. Ziraat's team will review its eligible portfolio on an annual basis until full allocation, and will remove projects that are noncompliant. Minutes of meetings guarantee the traceability of the process.

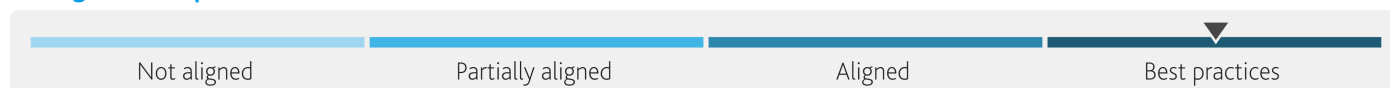
Environmental and social risk mitigation process – BEST PRACTICES

The E&S risk mitigation process is disclosed in the framework, including the monitoring of controversies, and the identification and management of risks. The due diligence process includes corrective and preventive measures. E&S risks are identified for each project through adherence to the International Finance Corporation's standards (for projects above \$50 million), national regulations and internal policies. The bank monitors eligible projects for potential controversies as part of its continued monitoring process.

Best practices identified - process for project evaluation and selection

- » The roles and responsibilities for project evaluation and selection are clearly defined and include relevant expertise
- » There is evidence of continuity in the selection and evaluation process through the life of the financial instrument(s), including compliance verification and procedures to undertake mitigating actions when needed
- » The process for project evaluation and selection is traceable
- » Material environmental and social risks for most project categories are identified
- » Presence of corrective measures to address environmental and social risks across projects
- » ESG controversies are monitored

Management of proceeds



Allocation and tracking of proceeds – BEST PRACTICES

The bank has defined a clear process for the management and allocation of bond proceeds in its publicly available framework. Ziraat manages proceed allocation and tracking on a portfolio basis, and ensures that an amount equal to all net proceeds raised will be allocated to the eligible project portfolio. The balance of the eligible proceeds will be adjusted annually. The bank has disclosed this process in its public framework. The maximum allocation period will be 24 months.

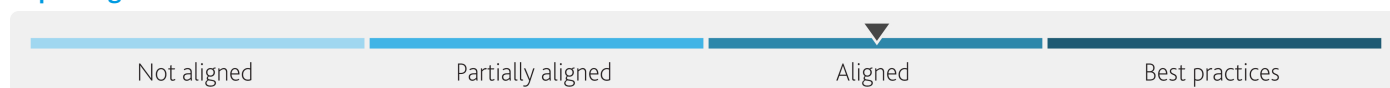
Management of unallocated proceeds – BEST PRACTICES

In case any net proceeds remain unallocated, Ziraat will hold or invest them in its treasury liquidity portfolio, in cash or other short-term and liquid instruments. This process is publicly disclosed in the framework. The bank confirmed that an equivalent amount of sustainable financing instruments issued under the framework will not be invested in GHG-intensive activities. Ziraat has committed to reallocate funds to other eligible projects in case of project postponement, cancellation, divestment or noncompliance with eligibility criteria.

Best practices identified - management of proceeds

- » Broad disclosure of a clearly articulated and comprehensive management of proceeds policy to external stakeholders; bondholders or lenders at a minimum
- » Short allocation period, for example typically less than 24 months
- » Disclosure on temporary placement and presence of exclusion criteria toward environmentally or socially harmful activities
- » Commitment to reallocate proceeds to projects that are compliant with the framework

Reporting



Transparency of reporting – ALIGNED

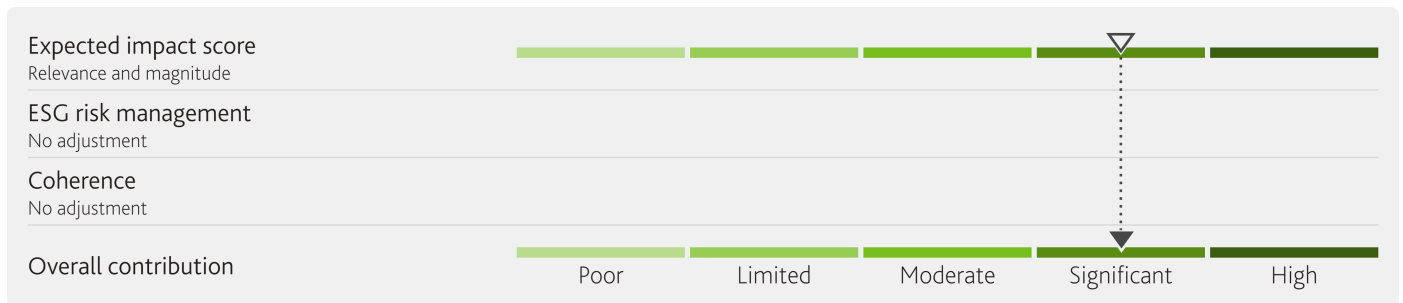
The bank will report annually on the use of proceeds of instruments issued under its framework until full allocation and on a timely basis in case of significant developments. The report will be publicly available on Ziraat's website. On an aggregated basis, it will contain the size of the eligible portfolio; the total amount of proceeds allocated and, if any, the balance of unallocated proceeds; the amount or the percentage of new financing and refinancing; and the geographic location of the assets. The bank intends to align its impact reporting with the portfolio approach described in the ICMA's relevant impact handbooks. Calculation methodologies and assumptions will be publicly disclosed. The bank will have its proceed allocation and E&S impact metrics verified by an independent third party on an annual basis until full allocation.

Best practices identified - reporting

- » Reporting covers material developments and issues related to the projects or assets
- » Reporting on allocation of proceeds and benefits done at least at eligible category level
- » Exhaustive allocation reporting – balance or % of unallocated funds, types of temporary investments (e.g. cash or cash equivalent) and share of financing vs re-financing
- » Clear and relevant indicators to report on the expected environmental/social impact of all the projects, where feasible, or eligible categories
- » Disclosure of reporting methodology and calculation assumptions to bondholders or lenders at a minimum
- » Independent audit of the tracking and allocation of funds at least until full allocation and in case of material changes
- » Independent impact assessment on environmental benefits by a qualified third-party reviewer at least until full allocation and in case of material changes and/or case studies to report on the social impact/benefits

Contribution to sustainability

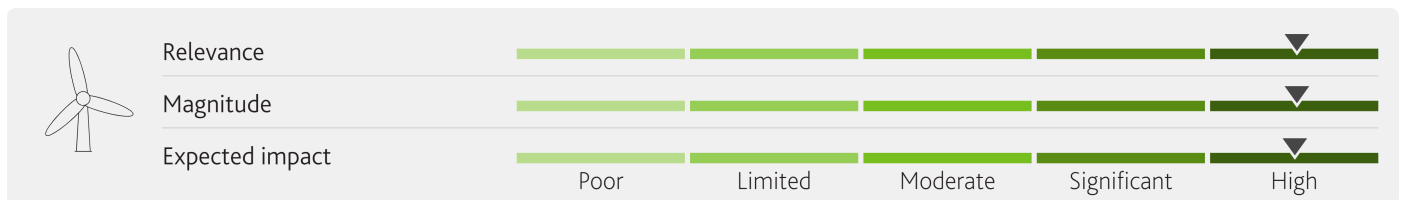
The framework demonstrates a significant overall contribution to sustainability.



Expected impact

The expected impact of the eligible project categories on E&S objectives is significant. To assess the consolidated score for contribution to sustainability, we have weighted the categories according to estimates provided by Ziraat. The bank expects a higher share of the proceeds to be allocated to the green categories. In addition, the two major portfolio exposures of the bank are directly to the agriculture and small and medium-sized enterprise (SME). A detailed assessment by eligible category is provided below.

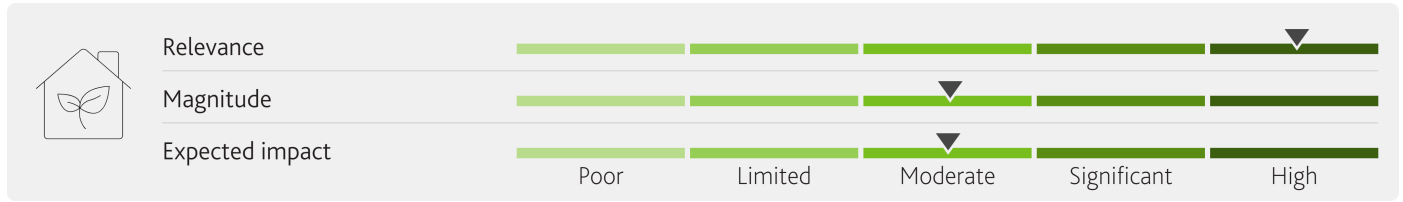
Renewable energy



The eligible projects under this category are considered highly relevant to climate change mitigation. Increasing the share of renewable energy in the energy mix is a key issue in Türkiye, which has a highly carbon-intensive energy mix. According to the International Energy Agency (IEA), 60% of total power generation in Türkiye in 2022 originated from nonrenewable sources². Furthermore, the average carbon intensity is substantial at 436 gCO₂eq/kWh³.

The eligible projects under this category will have a highly positive long-term impact on the objective of climate change mitigation by directly avoiding GHG emissions in electricity production. Solar and wind projects have a low carbon content, in line with the most stringent sector standards. Solar projects mainly include installation of photovoltaic on-roof panels for buildings or already developed land, and therefore there is a low risk related to land use. The bank informed that currently there is no wind offshore projects in its portfolio; however, if needed, it will conduct a biodiversity assessment. Small hydropower facilities (25 MW) with life cycle emissions of less than 100gCO₂/kWh are also eligible under this category, for plants constructed before or after 2020, which is slightly below the most stringent criteria. Ziraat has no investments in enhanced geothermal systems in its portfolio, which is a positive. Investments in the country's electricity grid are limited to assets that aim at increasing the share of renewables. Electricity generation from biogas or biomass should have life cycle emissions less than 100gCO₂/kWh or emit GHGs 80% less than those from fossil fuel alternatives, and should use sustainable feedstock, in line with good market standards. The issuer has stated that forestry residues are in practice excluded, as well as production on arable land, wetlands or protected areas.

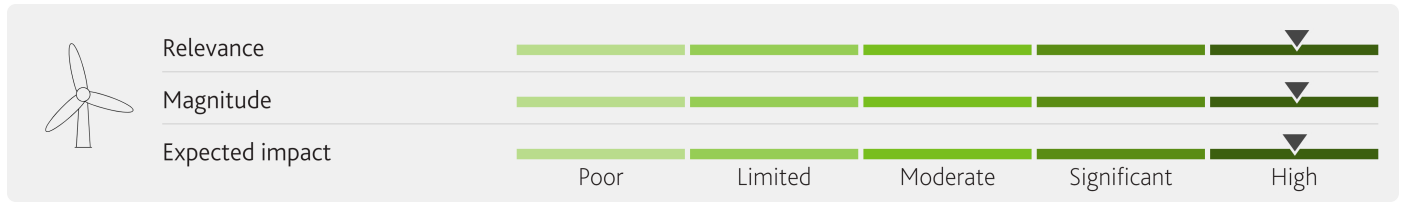
Green buildings



The eligible projects are highly relevant to reducing building-related remissions in Türkiye. The country's building sector's energy demand is growing rapidly, at a rate of 4.4% on average, rendering it the sector with the largest energy consumption among all end-use sectors. In 2019, the building sector represented around one-third of the country's total final energy consumption⁴. Furthermore, around 50% of building fuel is derived from gas in Türkiye, which results in a significant carbon footprint⁵.

The investments to acquire, construct and renovate new and existing buildings will moderately contribute to climate change mitigation. The issuer has defined good eligibility criteria to reduce the negative environmental impact of buildings; however, more stringent standards exist in the market. Acquired and constructed buildings will mitigate the ecological footprint of buildings by obtaining green building certifications, namely LEED "Gold", BREAAAM "Very Good", DNGB "Gold" and ÇEDBİK "Very Good" or above. In addition, Ziraat will finance buildings rated grade B or above in terms of energy performance, as determined via Energy Performance Certificate (EPC) of the Turkish building regulation. Recent construction figures seems to indicate that the B threshold ranks outside of the top 15% of the national building stock⁶. Furthermore, due to the unique EPC calculation methodology in Türkiye, there is limited visibility into the operational efficiency of buildings. This results in significant carbon lock-in risk as the operational stage represents 64% of the overall footprint of buildings in Türkiye⁷. Finally, renovation projects will be in line with common international practices, reducing primary energy demand by at least 30%.

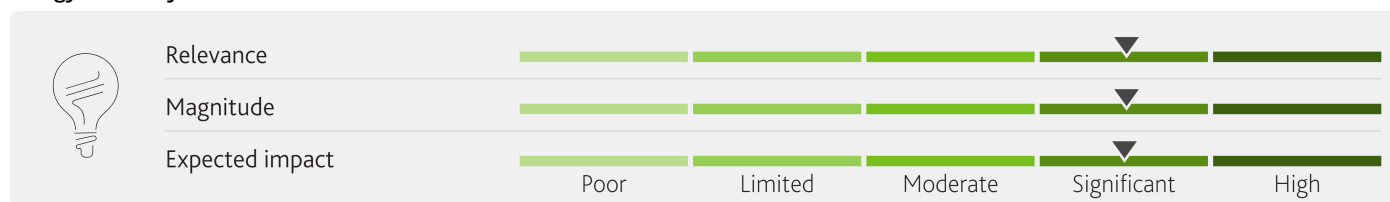
Clean Transportation



Public transportation and zero emission vehicles are of high relevance to the country's transition to a low carbon economy and respond directly to sustainability challenges in Türkiye. In 2021, 98% of the transport sector was reliant on oil, and the sector constituted 22% of overall emissions⁸. There is a clear need to develop the nascent market for electric cars to reduce emissions. In 2023, the proportion of electric car sales stood at 10% of the overall market in Türkiye⁹.

Financing low-carbon vehicles and related infrastructure will have a high and long-term positive impact on the transition of the transport sector. The emissions criteria for low-carbon vehicles are in line with international thresholds, most notably the EU taxonomy, and the infrastructure for mass transit is viewed favorably, such as buses, trains, trams or ferries. We acknowledge that the electrification of railroads is an important transition step for sustainable transport, the overall effect of which is dependent on the energy mix of the local grid.

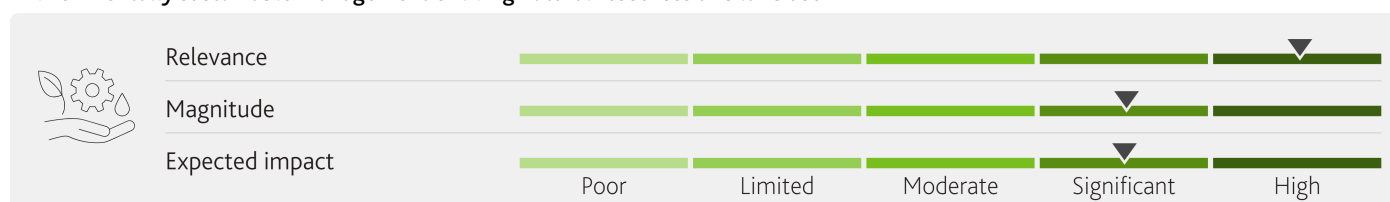
Energy efficiency



Projects under this category are highly relevant to the decarbonization of the country's polluted grid, although some of the projects are restricted to white good appliances, limiting the relevance of the category to significant. Türkiye's grid is highly polluted, with an average carbon intensity of 436 gCO₂eq/kWh, compared with, for example, 108 gCO₂eq/kWh for the central part of Brazil¹⁰.

The eligible projects will have a significant contribution to climate change mitigation. Expenditures related to the national grid will only cover renewable energy capacities, and exclude projects that transport, transmit or use fossil fuels (for example, oil, gas, coal). While investments in technologies aiming for 20% energy efficiency, the sectors eligible for financing are not specified and the threshold is not aligned with the most stringent international criteria. However, as hard-to-abate sectors are excluded, we do not expect lock-in effects. Inherent risks such as leakage of refrigerant gases (which are potent GHGs) should be managed through the bank's E&S lending policy.

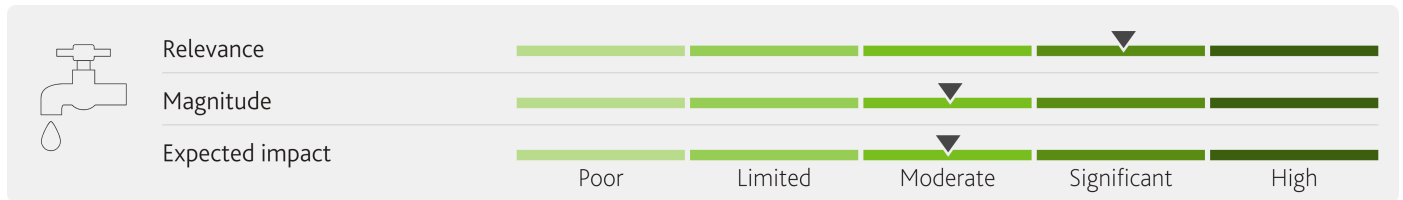
Environmentally sustainable management of living natural resources and land use



The relevance of this category is considered high as the proceeds will help address many key ecological impacts of the sector. In Türkiye, agriculture uses around 85% of the freshwater used by all sectors and accounts for 13.4% of national GHG emissions¹¹. Sustainable agricultural practices are an urgent priority for Türkiye, where 65% of soil is arid and semi-arid and sensitive to erosion¹². Organic agricultural practices can help mitigate this issue and are particularly important given the relative immaturity of the local market. In Türkiye, organic agriculture is nascent, representing only 0.1% of the world's market¹³.

The magnitude of this category is significant as the overall proceeds entail long-lasting positive impacts. We favorably view the proceeds relating to certified agriculture, because the guidelines used in Türkiye comply with relevant ISO standards. In addition, the conservation techniques listed, such as no-till farming and soil recovery, will likely have a positive impact with regard to carbon sequestration and reduce the risk of nitrogen accumulation. Furthermore, urban greening initiatives are viewed favorably due to the associated benefits in terms of adaptation to climate change, and no significant negative externalities are foreseen. Biogas projects are also eligible and should follow stringent standards. In terms of sustainable agriculture, we acknowledge that livestock and poultry are not eligible. However, we estimate that the consolidation of agricultural land will have a limited positive impact in terms of fuel savings and may even exacerbate negative impacts. The sustainable agriculture subcategory should follow "Good Agriculture Practices"¹⁴, which are not clearly defined and could entail negative environmental externalities.

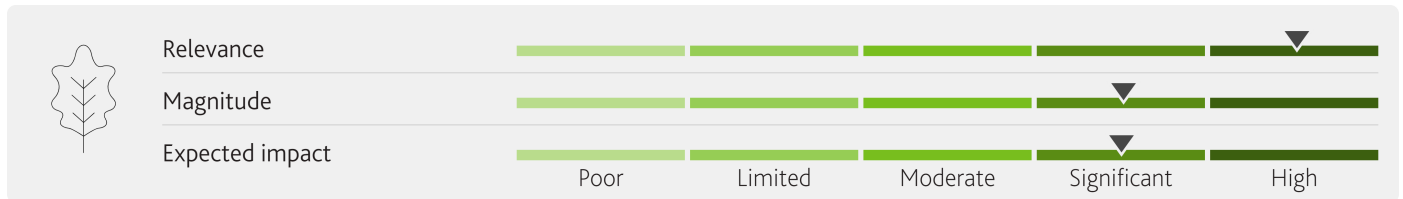
Sustainable water and wastewater management



Projects under this category have significant relevance to the water and wastewater sustainability challenges in the country. Water scarcity in Türkiye is increasing and is above the OECD average¹⁵, highlighting the importance of wastewater treatment and water use efficiency. Average precipitation is likely to decline as a result of climate change, increasing stress on the hydrological system. Nitrogen and phosphorus balances have also been increasing, and the phosphorus balance is well above the OECD average due to intensive livestock production¹⁶

This category is likely to have a moderate positive impact on water and wastewater management, as eligible projects should improve water quality or water-use efficiency. However, limited visibility into specific energy-efficiency thresholds could potentially result in carbon lock-in risks, as the national grid is heavily dependent on both coal (35%) and gas (22%)¹⁷. The issuer informed that the Turkish commitment to reduce water loss rate by 25% in all municipalities and 10% in local administration is not included as eligible criteria.

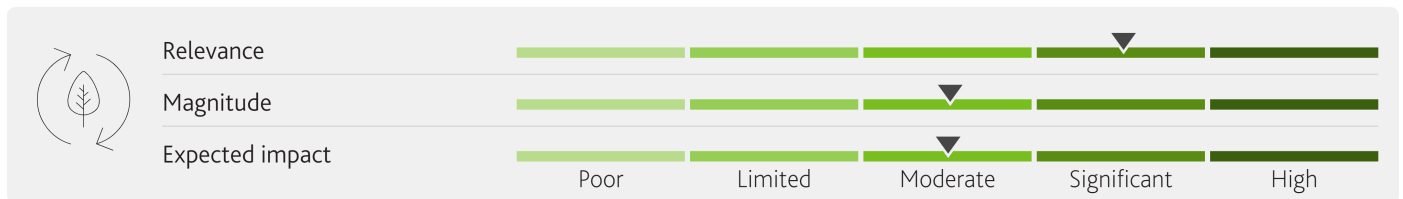
Pollution prevention and control



The relevance of this category is considered high as the eligible waste projects will address relevant environmental issues in the country. Currently, 87% of the Turkish municipal waste is landfilled. Industrial waste recovery (68% in the last two years) is improving faster than municipal waste recovery (30%)¹⁸. Türkiye is in the process of implementing several projects to reduce plastic waste pollution and to increase the waste recovery rate. However, large amounts of plastic waste are also imported in Türkiye, which poses challenges to a successful implementation of the zero waste policy in the country.

Financing projects related to the development, operation and upgrade of recycling plants and recycling activities such as for metals, plastic and paper will significantly contribute to pollution reduction and management. Waste management activities reduce GHG emissions, and the rehabilitation of unlicensed landfills is considered highly positive, although plants will not be run exclusively using renewables. This category does not include financing of trucks, which is a positive. Waste-to-energy plants, although carrying inherent externalities, are eligible and should follow the stringent criteria and exclusions, and incineration is not expected to be financed by the issuer.

Circular economy

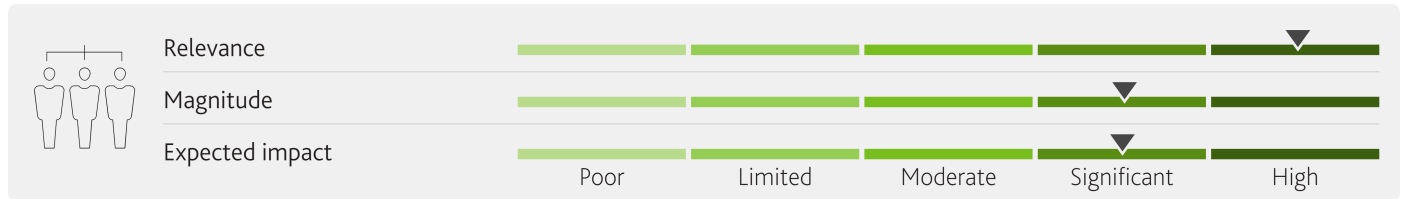


The allocation of proceeds for this category has significant relevance in addressing the country's waste pollution challenges. In Türkiye, the vast majority of municipal waste is landfilled¹⁹, and the eligible projects will likely help achieve the objective of waste reduction and management, which is a key priority for the country.

Eligible projects under this category will have a moderate positive impact on promoting the adoption of a circular economy. We positively view the fact that Ziraat has put in place exclusion criteria pertaining to virgin plastic and virgin raw materials in the case of

recyclable or compostable products. In addition, the issuer has stated that the eligible projects under this category will not be deployed in fossil fuel industries and might be powered by renewables, hereby potentially mitigating GHG emissions lock-in risk. However, the issuer has not defined the sectors or the specific technologies and thresholds that will be financed under this category, reducing the visibility into the overall impact.

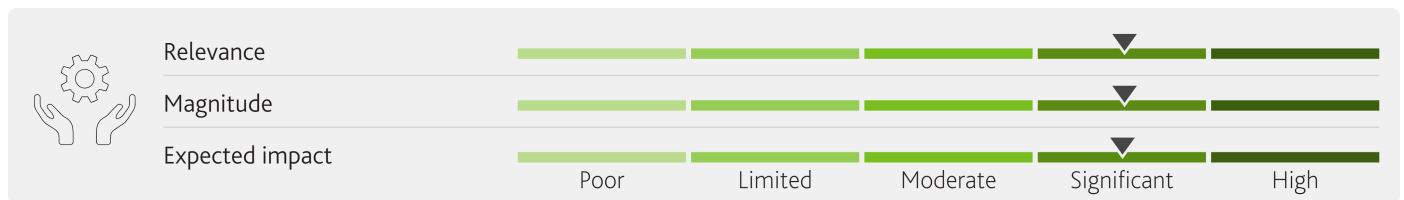
Employment generation



This category addresses a highly relevant social challenge facing the country. Türkiye has an unemployment rate of 8.5% (April 2024)²⁰, which is higher than the European average and reaches the upper end of the OECD distribution, fourth after Spain, Greece and Columbia. SMEs are an important part of the overall picture, as the MSME sector contributes to 74% of employment and 53% of value added (compared with the OECD averages of 68% and 59%, respectively). Youth unemployment rate stands at 15.5%, which is the second highest among all OECD countries, and in 2022, women employment rate stood at 33.2%²¹.

Financing SMEs in areas that have lower GDP than the national average, or that are women-owned, or owned or operated by vulnerable groups will have a significant positive impact in reducing inequalities and in employment generation. In cooperation with other organizations and development institutions, the bank is able to provide loans with discounted interest rates in certain categories such as export finance support, working capital support, employment support and emergency support. However, the bank does not exclusively focus on low-income individuals who are underserved by the banking system, although such a focus would have the largest impact on improving employment generation.

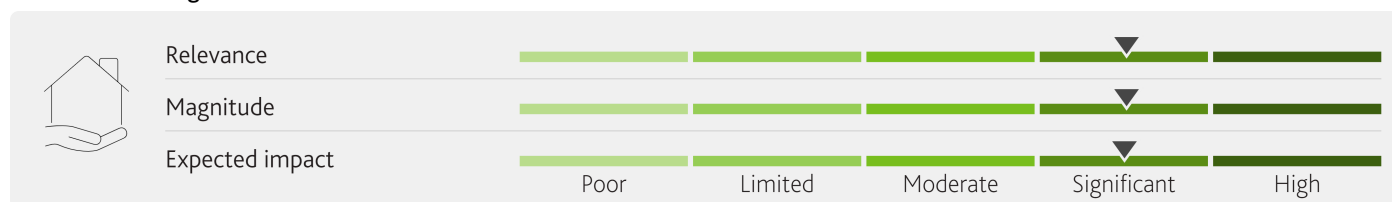
Access to essential services



This category finances public or subsidized healthcare, education and emergency relief for reconstruction of basic infrastructure; therefore its relevance is considered significant as it targets relevant social infrastructure challenges in the local context. Türkiye has universal public health insurance, and all residents registered with its social security institution are entitled to healthcare. However, there are challenges to equitable access, exacerbated, for example, by a nationwide shortage of doctors²². A study by the WHO also showed that Türkiye is broadly in line with European peers in terms of out-of-pocket expenditure as a percentage of total health expenditure²³.

The overall magnitude of all eligible projects will have a significant long-term positive impact in increasing access to essential services. According to national legislation, all residents can benefit from health procedures by paying a modest contribution and the balance is paid by the government, and households whose average monthly per capita income falls below one-third of the minimum wage can benefit from green card and free healthcare. This category excludes aesthetic procedures. In terms of education infrastructure and services, Ziraat may provide financing to public and subsidized schools, universities and vocational training centers, as well as to technologies and programs to improve public education and training. Projects could include the financing of student housing loans in Türkiye, the criteria for which are set by the Ministry of Youth and Sports and include priority selection criteria around disability.

Affordable housing



Eligible projects are considered to have significant relevance to the country as they address local social housing shortage. As in Europe, affordable housing in Türkiye is an increasing concern for low-income citizens and tenants because housing affordability is deteriorating for this income bracket²⁴. This category includes the governmental housing program called TOKI²⁵, which responds directly to this issue through the provision of social housing mortgages to disadvantaged groups.

Financing housing mortgages targeting specific vulnerable populations will significantly contribute to reducing inequalities and achieving universal access to affordable housing. The category will target disadvantaged groups as defined by the Turkish government criteria, such as income level and number of family members, and the TOKI program serves those who are not able to own a house in the current market conditions. However, low and middle-income families constitute the main targeted group, with a 47% allocation of the TOKI program's total finance as of January 2022, of which the lowest income ones received only 14.8%, resulting in a less positive impact for the most vulnerable. Positively, separate quotas are allocated for the handicapped, the disabled and pensioners. This category does not address energy security, which is a particularly important issue that could leave vulnerable households exposed to increased energy prices.

ESG risk management

We have not applied a negative adjustment for ESG management to the expected impact score. Ziraat integrates E&S risk governance principles through its internal policies, according to which projects above a threshold of \$50 million are assessed in accordance with the Performance Standards of the International Finance Corporation (IFC)²⁶, and the investments are monitored at least once a year with a site visit. Regardless of the loan amount, the bank's standards' agreements will also require borrowers to comply with the bank's monitoring plans and national environmental legislation, which requires environmental impact assessment, including biodiversity, for projects with a negative environmental impact assessment decision.

Coherence

We have not applied a negative adjustment for coherence to the expected impact score. Since 2014, the bank has in place a publicly disclosed sustainability policy committing to carry out coordinated financial, operational, environmental and social efforts, which is generally in line with the framework. The bank has integrated some of the Sustainable Development Goals (UN-SDGs) into its strategy, although it has not formalized quantitative sustainability targets. Outside its sustainability strategy, the share of brown category investments in Ziraat's total cash loans as of March 2024 is less than 1.5%, covering sectors such as coal, defense industry, tobacco, fossil fuels and alcohol.

Appendix 1 - Summary of eligible categories in Ziraat's framework

Eligible Green Category	Description	Sustainability Objectives	Main Impact Reporting Metrics
Renewable Energy	Loans aimed at (re)financing the equipment, development, manufacturing (including manufacturing of components), construction, operation and maintenance of energy generation assets from renewable energy sources	Climate Change Mitigation	<ul style="list-style-type: none"> - Installed renewable energy capacity (in MW) - Estimated reduced and / or avoided GHG emissions (in TCO2eq.)
Green Buildings	Loans aimed at (re)financing low-carbon new, existing or refurbished <i>public</i> , <i>commercial</i> and <i>residential</i> buildings in the local context	Climate Change Mitigation	<ul style="list-style-type: none"> - Level of certification, if applicable - Level of Energy Performance Certificate (EPC), if applicable - Estimated annual reduced and / or avoided GHG emissions (in TCO2eq.) - Estimated annual energy consumption (in KWh/m2)
Clean Transportation	Loans aimed at (re)financing production, establishment, acquisition, expansion, upgrades, maintenance and operation of low-carbon vehicles and related private or public infrastructure	Climate Change Mitigation	<ul style="list-style-type: none"> - Estimated annual reduced and / or avoided GHG emissions (in TCO2eq.) - Number of vehicles / vessels financed
Energy Efficiency	Loans aimed at (re)financing the establishment, acquisition, expansion and upgrade of transmission lines and energy storage facilities, smart technologies and / or the associated infrastructure	Climate Change Mitigation	<ul style="list-style-type: none"> - Estimated annual reduced and / or avoided GHG emissions (in TCO2eq.) - Estimated annual energy savings (in KWh/m2)
Environmentally Sustainable Management of Living Natural Resources and Land	Loans aimed at (re)financing environmentally responsible, economically viable and socially beneficial agriculture, land restoration, forest management and urban greening	Protection and restoration of biodiversity and ecosystems	<ul style="list-style-type: none"> - Sustainable agriculture land area (hectares) - Sustainable agriculture / farming certification scheme, if available - Type of crop and its proportion, if available - Conservation agriculture techniques / practices and relative output figure, if available - Land restored (hectares)
Sustainable Water Management	Loans aimed at (re)financing development, construction, operation and maintenance of sustainable water and waste-water management projects and facilities	Sustainable use and protection of water and marine resources	<ul style="list-style-type: none"> - Annual absolute (gross) water savings (in m3 or in %) - Annual absolute (gross) amount of wastewater treated, reused or avoided (in m3 or in %) - Number of people with access to improved sanitation facilities
Pollution Prevention and Control	Loans aimed at (re)financing development, construction, operation and maintenance of sustainable waste management and recycling projects, activities and operations	Pollution Prevention and control	<ul style="list-style-type: none"> - Type and annual amount of recycled waste (tonnes) - Energy generation (MWh per year)
Eco-efficient and/or circular economy adapted products, production technologies and processes	Loans aimed at (re)financing resource use efficiency and circular and / or recyclable products	Pollution Prevention and control	<ul style="list-style-type: none"> - Annual savings of relevant resources (e.g., tonnes raw material/year) - Estimated annual reduced and / or avoided GHG emissions (in TCO2eq.)
Employment generation including microfinance	Loans aimed at (re)financing MSMEs located in economically underperforming regions of Türkiye, and / or operated by women or vulnerable groups and facing the effects of natural disasters and/or health pandemic	Reduced Inequality	<ul style="list-style-type: none"> - Number of MSMEs financed - Number of jobs created / retained - Number of beneficiaries
Access to essential services	Loans aimed at (re)financing developments, construction, maintenance and operation of healthcare, education and vocational training infrastructures and services. Loans aimed at (re)financing access to basic needs, services and infrastructure in the impacted cities or provinces during emergency relief	Reduced Inequality	<ul style="list-style-type: none"> - Number of structures hospitals / healthcare centers financed - Number of beneficiaries, patients - Amount spent on emergency medical supplies - Number of enrolled students - Number of training program graduates successfully employed - Number of loans provided to support persons impacted by the natural disaster - Number of loans provided to reconstruct basic infrastructure due to the natural disaster
Affordable Housing	Loans aimed at (re)financing social housing mortgages to disadvantaged groups	Reduced Inequality	<ul style="list-style-type: none"> - Number of social housing mortgages provided - Number of disadvantaged families housed in social housing

Appendix 2 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The 11 eligible categories included in Ziraat's framework are likely to contribute to 11 of the UN SDGs, namely:

UN SDG Goals	Eligible Category	SDG Targets
GOAL 1: No Poverty	Employment generation	1.2: Reduce at least by half the share of people living in poverty according to national definitions
GOAL 3: Good Health and Well-being	Access to essential Services	3.8: Achieve universal health coverage with access to quality and affordable essential health-care services and medicines for all
GOAL 4: Quality Education	Access to essential Services	4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
GOAL 6: Clean Water and Sanitation	Sustainable water and wastewater management	6.4: Increase water-use efficiency across all sectors and ensure sustainable supply of freshwater to reduce water scarcity
GOAL 7: Affordable and Clean Energy	Renewable Energy	7.2: Increase substantially the share of renewable energy in the global energy mix 7.B: Expand infrastructure and upgrade technology for sustainable energy services to all in emerging markets
GOAL 8: Decent Work and Economic Growth	Employment generation	8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people
GOAL 9: Industry, Innovation and Infrastructure	Employment generation	9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
GOAL 10: Reduced Inequality	Employment generation	10.1: By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average
GOAL 11: Sustainable Cities and Communities	Green Buildings	11.C: Support least developed countries, including through financial and technical assistance, in building sustainable buildings using local materials
	Transport	11.2: Provide access to safe, affordable, accessible and sustainable transport systems for all
	Environmentally Sustainable management of living resources and land use	11.A: Support economic, social and environmental links between urban and rural areas by strengthening development planning
GOAL 12: Responsible Consumption and Production	Pollution prevention and control	11.6: Reduce the adverse per capita environmental impact of cities, with special attention to air quality and waste management
	Affordable Housing	11.1: Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
GOAL 12: Responsible Consumption and Production	Pollution prevention and control	12.5: Substantially reduce waste generation through prevention, reduction, recycling and reuse
	Circular Economy	12.2: Achieve the sustainable management and efficient use of natural resources
GOAL 15: Life on Land	Environmentally Sustainable management of living resources and land use	15.A: Mobilize and increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

The UN SDGs mapping in this SPO considers the eligible project categories (or key performance indicators) and associated sustainability objectives documented in the issuer's financing framework, as well as resources and guidelines from public institutions, such as the ICMA SDG Mapping Guidance and the UN SDG targets and indicators.

Endnotes

- 1 Point-in-time assessment is applicable only on the date of assignment or update.
- 2 [Türkiye](#), IEA, May 2024.
- 3 [TR](#), Electricitymaps, May 2024.
- 4 [Enhancing Turkey's policy framework for energy efficiency of buildings](#), BPIE, 2019
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- 8 [Türkiye 2021: Energy Policy Review](#), IEA, Accessed May 2024
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- 15 [Türkiye: Agricultural Policy Monitoring and Evaluation 2021](#), OECD, Accessed May 2024.
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- 19 [Circular Economy in Türkiye](#), Circular Economy: Recent Trends in Global Perspective, November 2021.
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- 23 [World Health Organization](#), May 2024.
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REPORT NUMBER 1410480