Pakistan

Second-Party Opinion – Sustainable Financing Framework

Excellent | Good | Aligned | Not Aligned

Pillar	Alignment	Key Drivers
Use of Proceeds	Good	• The green use of proceeds (UoP) categories describe activities with clear environmental benefits. Some activities are fully aligned with the screening criteria in international taxonomies, such as those in renewable energy and zero-emissions vehicles. • The social UoP categories describe activities with social benefits, with most benefiting target populations, such as the low-income, under-served and vulnerable groups identified through its national multidimensional poverty index (MPI).
Use of Proceeds – Other Information	Excellent	• The framework includes information on the expected share of new financing and a three-year lookback period for refinancing expenditures. • The framework outlines a comprehensive and clearly defined set of exclusion criteria for activities.
Evaluation and Selection	Excellent	• The framework clearly defines the evaluation and selection process, which is a multi-layered process that involves representatives from multiple ministries.
Management of Proceeds	Good	• The government of Pakistan manages proceeds using a virtual register. It intends to review and replace ineligible projects, ensuring the proceeds are used in alignment with the objectives set out in the framework. • Unallocated proceeds will be temporarily deployed in cash, cash-equivalent or other liquid investments.
Reporting and Transparency	Excellent	• Allocation and impact reporting will be provided annually until full allocation. • Allocation and impact reporting will be at the UoP category level, with the issuer providing project-level information where feasible. Impact metrics outlined in the framework effectively measure environmental and social impacts.

Relevant UN Sustainable Development Goals

Framework Type	Sustainability	
Alignment	✓	Green Bond Principles 2025 (ICMA)
	✓	Social Bond Principles 2025 (ICMA)
	✓	Sustainability Bond Guidelines 2021 (ICMA)
	✓	Green Loan Principles 2025 (LMA/LSTA/APLMA)
	✓	Social Loan Principles 2025 (LMA/LSTA/APLMA)
Date assigned	22 September 2025	

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Use of Proceeds Summary

Green	Renewable energy Energy efficiency Pollution prevention and control Environmentally sustainable management of living natural resources and land use Terrestrial and aquatic biodiversity conservation Clean transportation Sustainable water and wastewater management Climate change adaptation Green buildings
Social	Affordable basic infrastructure Access to essential services Affordable housing Employment generation Food security and sustainable food systems Socioeconomic advancement and empowerment

Source: Pakistan sustainable financing framework (May 2025)

Framework Highlights

Sustainable Fitch considers transactions under Pakistan's sustainable financing framework to be aligned with the Green Bond Principles (GBP), Social Bond Principles (SBP) and Sustainability Bond Guidelines by the ICMA, and with the Green Loan Principles (GLP) and Social Loan Principles (SLP) by the LMA, LSTA and APLMA. The framework includes the relevant pillars from the principles, including information on the UoP, process for project evaluation and selection, management of proceeds, and reporting.

Proceeds from transactions under the framework can be allocated to nine green UoP categories (renewable energy, green buildings, energy efficiency, pollution prevention and control, environmentally sustainable management of living natural resources and land use, terrestrial and aquatic biodiversity conservation, clean transportation, sustainable water and wastewater management, and climate change adaptation) and six social UoP categories (affordable basic infrastructure, access to essential services, affordable housing, employment generation, food security and sustainable food systems, and socioeconomic advancement and empowerment).

These UoP categories are aligned with the project categories recommended by the ICMA principles.

In addition, five of the nine green UoP categories describe projects that are included in internationally recognised blue financing guidelines, including the Guidelines for Blue Finance by the International Finance Corporation (IFC) and the Practitioner's Guide for Bonds to Finance the Sustainable Blue Economy by the Asian Development Bank (ADB), ICMA, IFC, UN Environment Programme – Finance Initiative and UN Global Compact.

The renewable energy, energy efficiency, clean transportation and green buildings UoP categories describe projects that will directly support Pakistan's nationally determined contribution (NDC) to achieve a 50% reduction in GHG emissions by 2030, and its goal to shift to 60% renewables and 30% electric vehicles by 2030.

The climate adaptation UoP category describes projects that will support Pakistan's national adaptation plan to enhance climate resilience against natural disasters. The sustainable management of natural resources and land use and the terrestrial and aquatic biodiversity conservation UoP categories will contribute to the country's reforestation initiatives and efforts to mitigate biodiversity loss.

Additionally, the pollution prevention and control UoP category aims to address issues of environmental pollution stemming from inadequate waste management and support more advanced waste management infrastructure. The sustainable water and wastewater management UoP category aims to promote water-use efficiency and develop wastewater treatment infrastructure.

We expect projects under the six social UoP categories to create social benefits by providing critical infrastructure and services. Pakistan's national MPI estimates 48% of its population to be multi-dimensionally poor in 2024, which it defines as people deprived in at least one-third of socioeconomic indicators across the three dimensions of education, health and standard of living. The overall MPI captures the incidence and intensity of deprivation across districts, allowing targeted interventions that support specific needs of the under-served and vulnerable.

The framework sets out a clearly defined list of excluded activities to exclude the financing of environmentally and socially controversial activities, such as those related to fossil fuels, nuclear, gambling, tobacco and alcohol.

The ICMA recommends that eligible projects are clearly described in the legal documentation for transactions. We have only reviewed the sustainable financing framework for this Second-Party Opinion and have not reviewed any transaction legal documents or marketing materials.

Source: Sustainable Fitch, Pakistan sustainable financing framework (May 2025)

Entity Highlights

Pakistan is the third largest economy in South Asia, with a population of 236 million people as of end-2024. Its GDP reached USD338 billion with a real GDP growth of 2.52% in the fiscal year to end-June 2024 (FY24). The economy is mainly driven by services (54%), followed by agriculture, forestry and fishing (25%), and industrial activities (21%).

Pakistan has experienced significant inflation in recent years, particularly in food and energy costs, since the Covid-19 outbreak in 2020. The country's national consumer price index peaked at 29.2% in FY23 but moderated to 23.4% in FY24. This inflation is largely attributable to external and internal factors such as the Russia-Ukraine conflict, which has strained global food and energy supply chains; the depletion of foreign exchange reserves; and the catastrophic floods in 2022.

The World Bank labels Pakistan as a lower-middle income country, with 40.5% of its population living below the poverty line of USD3.65 per day in FY24. The country's UN Human Development Index score of 0.54, which ranks the country as 164 out of 193 countries, highlights the socioeconomic challenges it faces in improving health, education and living standards.

To address these challenges, the Pakistani government has initiated Ehsaas, an umbrella social protection initiative, aiming to reduce inequality and improve human capital development. The umbrella initiative comprises over 288 programmes.

For example, the "Ehsaas School Stipends" programme provides financial assistance to families to support their children's education, helping to increase enrolment and reduce dropout rates; and the "Ehsaas Kafaalat Programme" aims to empower women economically by providing financial support, thereby addressing gender disparities and promoting social inclusion.

Environmentally, Pakistan was responsible for around 1% of the world's total GHG emissions in 2021. The energy and agriculture sectors contribute significantly to the country's GHG emissions, with the energy sector accounting for 51% and the agriculture sector contributing 39%, according to the latest national data.

One of the primary impacts of climate change in Pakistan is extreme weather events, which directly affect the agriculture sector and vulnerable segments of the population. In 2022, extreme flooding inundated one-third of Pakistan, impacting 33 million people and severely affecting its agriculture sector, along with causing biodiversity loss through changes in natural habitats.

Pakistan is a signatory to the Paris Agreement and has set an NDC target to achieve an unconditional emissions reduction of 15% by 2030 relative to the 2015 baseline, with an additional 35% reduction contingent upon international financial support. To support these goals, Pakistan plans to expand its protected land coverage from 12% to 15%, transition its energy mix towards 60% renewable and alternative sources, and boost the number of electric vehicles by 30% by 2030.

In addition, Pakistan has several ecosystem restoration initiatives to facilitate the transition towards environmental resilience. One such project, the "Living Indus Initiative" launched in 2021, aims to protect and restore the natural habitat of the Indus River Basin, which is home to 90% of Pakistan's population and provides irrigation for 80% of its farmland.

Source: Sustainable Fitch, UN Development Programme, UNICEF, ClimateWatch, NDC partnership, UN Environment Programme, World Bank, Pakistan Bureau of Statistics, issuer material

Use of Proceeds – Eligible Projects	Alignment: Good
Company Material	**Sustainable Fitch's View**
Green Eligible Projects	
Renewable energy	
• This UoP covers the financing of the construction, development, acquisition, maintenance and operation of renewable projects. • Eligible projects include wind, solar, hydropower, bioenergy, green hydrogen, transmission and distribution (T&D) infrastructure, and renewable energy storage infrastructure. • Solar power projects include both PV and concentrated solar power. For concentrated solar power, at least 85% of the electricity generated will be derived from solar energy resources. • Hydropower plants with generation capacity more than 25MW has to adhere to at least one of the following criteria: – be a run-of-river plant without an artificial reservoir; – for hydropower facilities in operation before 2020: a power density of no more than 5W/sqm, or life-cycle GHG emissions of less than 100gCO_2e/kWh, verified by an independent third party; and – for hydropower facilities in operation in 2020 or after: power density above 10W/sqm or life-cycle GHG emissions below 50gCO_2e/kWh. • Bioenergy will be sourced from non-waste and waste materials. • For non-waste materials, the biomass, biogas or biofuels must be produced from 100% certified eligible feedstock. • For waste materials, they must be created from: – biomass or second-generation biofuels (in particular forestry or agricultural residues from certified eligible feedstock or animal manure); or – municipal solid waste, where waste has been separated, removing reusable or recyclable items before conversion. • Green hydrogen has to be produced from renewable energy sources with direct life-cycle emissions of less than 100gCO_2e/kWh. • Marine and offshore renewable energy and renewable energy projects that support other sustainable blue economy sectors while preserving the marine environment. • T&D infrastructure project must be dedicated to connecting renewables to the power grid, defined as supporting or integrating at least 90% renewable electricity. • If less than 90% of the electricity transmitted on the infrastructure is from renewables, a pro rata approach will be used to determine the green allocation to grid development. • T&D infrastructure projects also include technologies and solutions that support more efficient transmission and grid integration of renewable energy, including smart grid technologies and software solutions for distributed generation. • Apart from on-site renewable energy projects, this UoP also includes power purchase agreements (PPAs), virtual PPAs and any other investments that provide for the procurement of renewable energy through a long-term contract of at least 10 years.	• We expect the renewable energy projects to be aligned with the renewable energy category of the ICMA GBP and the LMA, LSTA and APLMA GLP. • Projects related to marine renewable energy are also aligned with the offshore renewable energy facilities category of the IFC Guidelines for Blue Finance as well as the marine renewable energy category of the Practitioner's Guide for Bonds to Finance the Sustainable Blue Economy by the ADB. • Such projects overlap with other renewable energy projects included in this UoP, such as solar and wind energy, and will be required to fulfil the specific eligibility criteria set for those types of renewable energy. • Investments in renewable energy contribute to UN Sustainable Development Goal (SDG) 7 (affordable and clean energy), particularly in Pakistan where coal and oil still represent 32% of the electricity grid, according to the International Energy Agency (IEA). This is despite renewable energy accounting for around 24% of the energy mix, with hydro at 20%, wind at 3%, and biofuel and solar energy together at 1%. • We expect the renewable energy projects to contribute to the country's aim of having 60% of its electricity generation from renewable sources by 2030. • The construction, acquisition, maintenance and operation of wind and solar energy projects as well as the associated infrastructure will automatically align with the EU taxonomy substantial contribution criteria (SCC) for climate change mitigation. • The eligibility criteria for concentrated solar power systems aligns with the Climate Bonds Initiative (CBI) taxonomy's criteria; however, we view the 15% provision for deriving energy from non-solar sources as potentially reducing the contribution to climate change mitigation, as the backup power could be generated from fossil fuels or other sources of energy that are not green. • Hydropower is crucial for Pakistan due to its substantial potential for sustainable energy generation. The Private Power and Infrastructure Board, of the Pakistan Ministry of Energy, estimated that Pakistan's extensive river systems have 60,000MW of untapped hydropower capacity. • The eligibility criteria for hydro projects stipulate specific requirements, covering eg the power density, life-cycle GHG emissions and restrictions on artificial reservoirs, which help to mitigate some of the environmental risks associated with hydroelectric power. This approach aligns with the EU taxonomy SCC. • Non-run-of-river plants built in 2020 or later, while adopting stricter thresholds, do not fully align with the SCC due to the lack of a hard commitment to third-party verification of the life-cycle GHG emissions; however, we recognise that they will contribute to increasing the supply of clean energy in Pakistan. • Biomass energy is energy produced from organic materials such as plants, trees, agricultural and forestry residues as well as organic waste. The sustainability of harvested biomass is a key factor in determining its renewability. • We understand from the issuer that the waste and non-waste materials for making biofuels will be sourced from crops certified by schemes, such as the Roundtable on Sustainable

	Biomaterials, International Sustainability and Carbon Certification Plus, Bonsucro (for sugarcane) and Round Table on Responsible Soy (for soy). These certifications provide assurance that the crops are produced using sustainable agriculture practices. • However, the risks of insufficient GHG emissions reduction following direct land-use changes and competition with food supply associated with biomass together mean the EU taxonomy stipulates that the GHG emissions savings from the manufacture of biofuels and biogas for use in transport should be at least 65% compared to the relative fossil fuel comparator; and that food and feed crops should be excluded. • Biofuels and biogas sourced from soy and sugarcane, which are included as possible sources in the framework, would therefore not meet the EU taxonomy SCC. • Bioenergy faces similar risks to biofuels and biogas for use in transport, given the risk of insufficient GHG emissions reduction, so the EU taxonomy has a set of requirements regarding GHG emissions savings compared to fossil fuel comparator, agricultural biomass, carbon capture and storage technology, and energy-efficiency level based on the total rated thermal input of electricity generation installations. • We recognise the positive environmental impact of the eligibility criteria in ensuring that bioenergy is sourced from 100% certified eligible feedstock and waste material. • Further information regarding GHG emissions savings, carbon capture and storage technology, and energy-efficiency level, would provide additional assurance to address potential risks related to insufficient GHG emissions reduction. • Green hydrogen refers to hydrogen produced from the electrolysis of water using electricity from renewable energy sources. Hydrogen produced using renewable energy can still have life-cycle emissions from being transported, so the EU taxonomy SCC require a 73.4% GHG emissions saving compared to a fossil fuel benchmark of 94gCO_2e/MJ, which is equivalent to 3tCO_2e/tH_2. • The framework's eligibility criteria specify that hydrogen should be sourced from renewable energy with life-cycle GHG emissions below 100gCO_2e/kWh. • According to the World Economic Forum, a minimum of 39.4kWh of electricity is needed to produce 1kg of hydrogen under optimal conditions, where high quality of feedstock water is used and advanced technology minimises energy loss. Assuming the renewable energy source delivers electricity at 100gCO_2e/kWh, this results in emissions of 3.94tCO_2e/tH_2 for hydrogen production. • Nonetheless, we recognise that such projects will facilitate the development of green hydrogen in Pakistan, contributing to the diversification of the country's clean energy mix in the long run. • Electricity T&D is a vital part of energy infrastructure, which plays a significant role in climate change mitigation by integrating and balancing the flow of intermittent generation of renewable energy, and by meeting the additional demand from electrification during the clean energy transition. • The EU taxonomy requires that the T&D system has either an average system grid emissions factor that is below the generation threshold of 100gCO_2e/kWh measured on a life-cycle basis over a rolling five-year period, or more than 67% of newly enabled generation capacity in the system is below

	the generation threshold value of 100gCO_2e/kWh measured on a life-cycle basis over a rolling five-year period. • We consider the first sub-criterion regarding the average system grid emissions factor as unlikely to be met by the country due to current technology constraints. • Setting the threshold for connecting to 90% renewable electricity will aid the clean energy transition; however, the threshold is not directly comparable to the second sub-criterion of EU taxonomy SCC, which focuses on the newly enabled generation capacity. • Pakistan will adopt a pro rata approach if less than 90% of the electricity transmitted through the infrastructure is from renewables. Using this approach to finance grid-related activities implies that the emissions factor will be higher than it would be if the 90% threshold was achieved. • We understand from the issuer that the renewable energy storage infrastructure projects refer to secondary batteries, hydrogen batteries and pumped hydro storage. We positively consider that such projects can store excess electricity during periods of high generation for later use, enabling the increased integration of renewable energy. • The construction and operation of secondary batteries and pumped hydro storage facilities are automatically aligned with the EU taxonomy. • The construction of hydrogen storage facilities is also automatically aligned with the EU taxonomy, although the operation will depend on whether the hydrogen source meets the energy savings threshold compared to the fossil fuel benchmark. • We understand that the issuer has set an emissions threshold for hydrogen manufacturing that ensures the hydrogen will be sourced from renewable energy with life-cycle emissions lower than 100gCO_2e/kWh. • This threshold does not meet the EU taxonomy SCC mentioned earlier and, therefore, the operation of hydrogen storage facilities financed under this UoP does not align with the EU taxonomy SCC. However, we expect the issuer's initiatives to represent a significant step forward in supporting clean energy development in the region. • Apart from on-site renewable energy projects and PPAs, we understand from the issuer that it also intends to finance renewable energy projects by virtual PPAs. • Unlike traditional PPAs, where there is a direct, physical delivery of electricity from the renewable energy project to the buyer, virtual PPAs do not involve such physical transfers. Instead, virtual PPAs are financial contracts between a renewable energy developer and a buyer, where the electricity is sold on the open market. • We recognise the positive impact of virtual PPAs, as they provide a pathway for the country to play a role in the transition to renewable energy without the logistical challenges of direct energy procurement. However, there is the potential lack of additionality, as the projects might have been developed without the virtual PPA, which may reduce the actual impact on increasing renewable energy capacity.
Energy efficiency	
• This UoP covers financing related to investments in energy and resource efficiency. • This includes energy-efficiency improvement projects in various sectors, such as refurbishments of buildings to include energy-saving retrofit of heating systems, refrigeration systems and lighting equipment.	• We expect the investments in energy-efficiency projects to be aligned with the energy efficiency category of the ICMA GBP and the LMA, LSTA and APLMA GLP. • Investments in energy-efficiency projects contribute to SDGs 7 and 9 (industry, innovation and infrastructure), as they reduce energy consumption, supporting reductions in the resulting GHG emissions. 

• The minimum energy-efficiency improvement should result in between 20% and 30% of energy saving for the buildings. • This UoP also includes smart grids, including smart grid integration with renewable energy.	• This UoP extends over a broad scope of energy-efficiency improvement projects for industrial and commercial buildings, with an aim to decrease the environmental footprint of the buildings. • We consider the minimum requirement for refurbishment projects to achieve at least 20% improvement in the energy efficiency of buildings to make a meaningful contribution to climate change mitigation in the context of Pakistan. International taxonomies, such as the EU taxonomy, have a higher requirement of 30% improvement. • Smart grids feature advanced metering infrastructure that enables real-time energy data monitoring. This capability allows utility providers to optimise energy distribution and minimise waste, thereby enhancing overall energy efficiency of the electricity grid in Pakistan. • In addition, smart grids facilitate the integration of distributed energy resources by allowing individual users to contribute their excess renewable energy back to the grid. Such feature promotes decentralised energy production and has the potential to reshape the energy landscape, supporting the transition to a low-carbon economy. • However, the construction of smart grids is not an eligible activity in the EU taxonomy, as the activity is considered as an enabling technology, not a direct contributor to carbon emissions reduction. The effectiveness of these grids in reducing carbon emissions largely depends on how end users use the technology.	
Pollution prevention and control		
• This UoP covers the financing related to investments in technology and associated services to create a sustainable environment through the reduction of environmental pollution, including: – removing or significantly mitigating environmental pollutants in water, air and soil using biological, physical and chemical methods for soil remediation and also emissions control; and – waste prevention, waste reduction and waste recycling, including: ♦ material recovery facilities; ♦ sustainable solid waste management within 50km of the coast or a river that drains into the ocean; and ♦ sustainable management of non-point source pollution within 200km of the coast or within 50km of rivers (and their tributaries) that flow into the ocean.	• We expect this UoP to be aligned with the pollution prevention and control category of the ICMA GBP, and the LMA, LSTA and APLMA GLP. • Projects related to solid waste management and the management of non-point source pollution are also aligned with the marine pollution category of the Practitioner's Guide for Bonds to Finance the Sustainable Blue Economy by the ADB. • Rapid urbanisation, mismanagement of wastewater and inadequate waste handling are key drivers of environmental pollution in Pakistan. The World Bank estimates that environmental pollution costs the country about 10% of its GDP every year in terms of human health impacts and economic losses. • Air quality in Pakistan is generally poor, particularly in urban areas, as a result of vehicle emissions, industrial activities and open burning practices. • The inadequate management of industrial waste, agriculture runoff and the discharge of untreated sewage are the main sources of water pollution in the country. Studies have also indicated the presence of arsenic contamination in the Indus River Basin area, posing risks to groundwater resources. • Pakistan's waste collection and management infrastructure is largely underdeveloped. Waste collection is inconsistent, with only about 50% of generated waste being collected. The collected waste is often disposed of through open dumping or burning, as managed landfill sites are rare. This results in downstream contamination of air, water and soil pollution resources. • The financing of activities to remediate contaminated sites, including abandoned waste dumps, contributes to pollution prevention and control, cleaning up existing pollution, and renewing contaminated water and land resources for future use. These activities also support SDGs 3 (good health and well-being), 6 (clean water and sanitation), 11 (sustainable	

	cities and communities), 14 (life below water) and 15 (life on land). • International taxonomies such as the EU taxonomy have screening criteria for remediation efforts and long-term monitoring plans, which are not present in the current framework. Nevertheless, we recognise that the issuer is financing remediation activities supporting the environmental benefits mentioned above. • During internal engagement, the issuer has clarified that the decontamination and remediation of nuclear plants and sites will also be eligible under this UoP. Pakistan currently operates six nuclear power plants, which contribute to about 16% of electricity generation. • Brownfield site remediation is an important environmental service that mitigates the impacts of pollution. International taxonomies, such as the EU taxonomy, do not include remediation activities for nuclear sites as eligible green activities. Radioactive cleanup is more complex and potentially hazardous, due to the long-term persistence of radioactive substances in the environment. • Financing projects in all aspects of the waste management and recovery value chain is critical in addressing Pakistan's severe waste management challenges. • During internal engagement, the issuer has clarified that the country currently lacks integrated solid waste management facilities that support advanced practices such as recycling, and materials recovery and composting. • Waste-to-energy facilities are not eligible for financing under this UoP. Therefore, we expect the financed projects to primarily focus on supporting waste collection, transportation and responsible disposal through sanitary landfills, facilities for composting and materials recovery, as well as waste prevention campaigns. • These initiatives will, at a minimum, prevent pollution and lay the groundwork for improved sorting and materials recovery, thus supporting a circular economy approach and SDG 12 (responsible consumption and production). • Waste management, including the collection, transport, sorting and materials recovery aspects, are eligible under international taxonomies, such as the EU taxonomy, to contribute to the circular economy. • These taxonomies, implemented in more developed waste management landscapes compared to that in Pakistan, have more stringent SCC for alignment, particularly for segregation at source and recycling.	
Environmentally sustainable management of living natural resources and land use		
• This UoP cover the financing of a wide range of agricultural products and services, including investments in the acquisition, maintenance and sustainable management of natural resources, such as: – wood production from forests certified under schemes such as the Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC) or equivalent; – environmentally sustainable forestry practices in certified forests, including afforestation or reforestation, and preservation or restoration of natural landscapes, with a comprehensive management plan and third-party verification for all financed forestry activities to align with EU taxonomy SCC requirements where feasible; – sustainable agriculture practices and climate smart farming, such as climate-resilient seeds varieties, technology adoption, better production technology of crops, climate suitability of crops and zero tillage; and	• We expect this UoP to be aligned with the environmentally sustainable management of living natural resources and land use category of the ICMA GBP and the LMA, LSTA and APLMA GLP. • Projects under this UoP contribute to SDGs 13 (climate action) and 15 by promoting sustainable management of forests, mitigating climate change and preserving biodiversity. • Forestry initiatives, afforestation, reforestation and preservation or restoration of natural landscapes could potentially yield environmental benefits, especially when accompanied by a comprehensive and proper forestry management plan. • The EU taxonomy SCC have a set of requirements for such projects, such as an afforestation plan and subsequent forest management plan; climate benefit analysis; guarantee of permanence; audit; and group analysis.	 

– practices that help to alleviate the environmental impact of animal husbandry, such as intensive silvopastoral systems, organic and green manures, manure and effluent utilisation, improved breeds, and use of sustainable livestock production certifications or labels.	• The issuer has communicated that eligible projects will have to meet these requirements whenever possible, which provides assurance to investors that the forest projects will be managed sustainably over the long term, supporting carbon sequestration and biodiversity preservation. • For forestry-related projects where alignment with the EU taxonomy SCC requirements is not feasible, the issuer will require these projects to obtain sustainable forestry certification, such as FSC and PEFC. • The EU taxonomy SCC have more stringent requirements for ensuring forests are managed sustainably over the long term, though we still recognise that these certifications emphasise responsible forest management practices that protect biodiversity and uphold human rights. • We view wood production from these sustainably managed sites as environmentally neutral because the adherence to certification standards ensures that wood harvesting does not compromise ecosystem health, thus maintaining ecological balance without providing additional carbon sequestration benefits compared to afforestation or reforestation efforts. • Sustainable agriculture practices and climate-smart farming are essential for improving resilience to climate change and preventing water pollution in farmlands. Utilising climate-resilient seed varieties and advanced technologies means these methods enhance crop production efficiency and resilience. • Sustainable agriculture practices such as zero tillage help to preserve soil structure, reduce erosion, maintain soil moisture and decrease water pollution from eroded soil. • In addition to the description on how climate risks can be addressed by the intervention, international taxonomies such as the CBI taxonomy impose additional requirements for activities aimed at enabling climate adaptation and resilience in third-party agricultural production units. • This is done by necessitating an assessment to ensure the risk reduction enabled by the intervention does not lock in conditions that could result in maladaptation and do not pose significant risk of harm to others' natural, social or financial assets. • We recognise the positive impact the eligible activities can have on promoting sustainable agriculture and climate resilience, although there is limited information to assess whether the eligible activities will align with all requirements mentioned above. • We expect the environmentally sustainable husbandry projects financed under this UoP to mitigate adverse environmental impacts associated with traditional husbandry practices. These projects aim to enhance sustainability through a range of innovative and practical measures. • Specifically, silvopastoral systems integrate trees and shrubs into pastureland to create a more diverse and resilient ecosystem. We expect such methods to enhance biodiversity and also improve soil health and provide shade and shelter for livestock, supporting improved animal welfare and productivity. • Manure and effluent utilisation involve converting waste into useful resources. Efficient management and repurposing of manure reduce nutrient runoff and minimise pollution, turning potential environmental liabilities into assets for soil fertility and crop growth. We expect this practice to alleviate adverse environmental impacts by promoting a closed-loop system that enhances resource efficiency.

	• The issuer describes improved livestock breeds as genomic-based cattle enhancements aimed at increasing productivity and resilience while reducing GHG emissions. These breeds are resistant to heat and water stress, making them more adaptable to local conditions. • By focusing on such advancements, we expect the projects to enhance the resilience and sustainability of livestock farming. • Similar to sustainable agriculture, the CBI taxonomy includes additional requirements for green interventions for husbandry activities. There is limited information to assess full alignment, though we recognise the positive impact these activities can have on alleviating environmental concerns arisen from husbandry activities.	
Terrestrial and aquatic biodiversity conservation		
• This UoP covers financing projects related to the conservation of terrestrial and aquatic biodiversity and ecosystems, including: – sustainable aquaculture and fisheries initiatives certified by the Aquaculture Stewardship Council (ASC), the Marine Stewardship Council (MSC) or similar organisations; – implementing traceability systems to ensure sustainable practices in operations, facilities and supply chains within the fishing sector; – regulating harvesting, and ending overfishing and illegal or harmful fishing methods; – expanding and maintaining terrestrial or aquatic protected areas vital for biodiversity and the protection of endangered terrestrial or aquatic species; and – conserving and restoring coastal and marine ecosystems that are carried out in the marine environment or within 100km of the coast.	• We expect this UoP to align with the environmentally sustainable management of living natural resources and land use and the terrestrial and aquatic biodiversity categories of the ICMA GBP and the LMA, LSTA and APLMA GLP. • We expect projects related to sustainable fisheries and aquaculture, including supply chain aspects, to align with the seafood value chain category of the IFC Guidelines for Blue Finance and the sustainable marine value chains category of the Practitioner's Guide for Bonds to Finance the Sustainable Blue Economy by the ADB. • Additionally, we expect projects focusing on expanding and maintaining aquatic areas and protecting endangered aquatic species to align with the marine ecosystem restoration category of the Guidelines for Blue Finance and the marine ecosystem management, conservation and restoration category of the Practitioner's Guide for Bonds to Finance the Sustainable Blue Economy. • We understand from the issuer that projects regulating harvesting and overfishing may include activities related to establishing marine protected areas that limit fishing activities in critical habitats, promoting sustainable fishing practices through community-based education programmes, enforcing fishing quotas, and developing alternative livelihoods for fishing communities. • Furthermore, projects related to expanding and maintaining terrestrial and aquatic areas may focus on the Indus River Delta, the Himalayan Mountain ranges, mangrove forests along the Sindh coast, and the wetlands of the Punjab region. These initiatives may also aim to protect Indus River dolphins and various migratory bird species that rely on these habitats. • We understand from the issuer that biodiversity conservation activities include ex-situ conservation, such as breeding programmes in zoos and aquariums, as well as seed banks. • In Pakistan, the primary fishing areas are located along the coast of Sindh and Balochistan, with the Karachi Fish Harbour managing most of the marine catch and exports. Inland fisheries are concentrated around the Indus River and its tributaries, while aquaculture primarily takes place in Punjab, Sindh and Khyber Pakhtunkhwa. • These regions are densely populated, which contributes to substantial industrial and domestic waste pollution. The Indus River Delta, in particular, faces severe water pollution issues that destroy vital marine habitats, such as mangroves and coral reefs, thereby negatively affecting biodiversity. • This pollution, coupled with overfishing and illegal fishing practices, poses a significant threat to the sustainability of Pakistan's fisheries and aquaculture by reducing fish populations.	 

	• Furthermore, in the Himalayan Mountain range, environmental challenges caused by air pollution and logging activities, such as glacier melting and soil erosion, adversely affect the region's climate and ecosystems. • We expect investments in this UoP to contribute to the protection and restoration of biodiversity and resilience to climate change in general, supporting SDGs 14 and 15. • Specifically, third-party certifications, such as ASC or MSC, can enhance transparency in fisheries and aquaculture practices. We expect these certifications to support sustainable practices in the fishing industry and help reduce negative environmental impacts on the aquatic environment. • We expect investments in regulating harvesting and overfishing can protect critical habitats and ensure the long-term sustainability of fish populations. • We expect projects related to protecting terrestrial and aquatic areas, such as the Indus River, the Himalayan Mountain range, mangrove forests and wetlands, along with conserving endangered species in these regions, to play a key role in maintaining ecological balance and to benefit both wildlife and local communities by fostering a healthier environment and supporting biodiversity. • In-situ conservation is eligible under international taxonomies, such as the EU taxonomy, to contribute to biodiversity conservation outcomes. • The EU taxonomy also specifies SCC, including providing a detailed description of the area's initial ecological conditions, having a thorough management plan with concrete conservation objectives and monitoring, and a guarantee of permanence. • However, we are unable to assess if the financed activities are aligned with the taxonomy, as such information has not been specified by the issuer. • Ex-situ conservation activities are not eligible under the EU taxonomy for contribution to biodiversity outcomes. However, we expect ex-situ conservation to be valuable in terms of its educational value and conservation, particularly as a complementary process in cases where the species is extinct or severely threatened in the wild.	
Clean transportation		
• This UoP covers financing for zero- and low-carbon transport assets and related infrastructure, as well as projects aimed at improving the sustainability of maritime transport and port infrastructure that is not dedicated to transport or storage of fossil fuels. • Zero-carbon transport investments focus on passenger and freight vehicles with no tailpipe emissions, such as electric cars, hydrogen cars and trains. • Low-carbon transport investments refer to passenger vehicles with tailpipe emissions up to 50gCO_2/km until 2025, with only vehicles producing 0gCO_2/km being eligible from 2026 onwards. • The funding also supports infrastructure that facilitates the use of zero- and low-carbon vehicles along with public transport initiatives, including the expansion of train, metro and bus networks; capacity enhancements; and station modernisation.	• We expect the zero- and low-carbon transport-related projects under this UoP to align with the clean transportation category of the ICMA GBP and the LMA, LSTA and APLMA GLP. • We also expect projects related to the sustainability of maritime transport and port infrastructure to align with the sustainable shipping and port logistics category of the Guidelines for Blue Finance and the sustainable ports category of the Practitioner's Guide for Bonds to Finance the Sustainable Blue Economy by the ADB. • We understand from the issuer that investments in low-carbon vehicles may include electric vehicles and energy-efficient buses, and that infrastructure investments may include electric vehicle charging stations, dedicated lanes for electric buses and bicycles, modernised electrified rail networks, and smart systems to optimise traffic flow and reduce emissions. • According to the National Energy Efficiency and Conservation Authority of the Power Division of the Ministry of Energy in Pakistan, the transportation sector accounts for about 30% of the country's GHG emissions. A significant part of these emissions arises from the heavy use of road transport, which relies on fossil fuels.	

	• Train usage is less prevalent than road transport in Pakistan; however, the predominance of diesel locomotives still contributes significantly to its transport sector's GHG emissions. To alleviate this issue, the country has implemented several initiatives to increase adoption of electric vehicles, electrify public transport systems and develop the necessary infrastructure. • Investments in zero and low tailpipe emissions transportation and its related infrastructure contribute to a low-carbon economy and enhance urban resilience by reducing GHG emissions and decreasing reliance on fossil fuels. These investments support SDG 11. • Financing zero tailpipe emissions vehicles and the construction of electric vehicle charging stations and lanes for bicycles aligns with the SCC for climate change mitigation under international and science-based taxonomies, such as the EU taxonomy. • The low-carbon transport investments aim to reduce emissions by focusing on passenger vehicles with tailpipe emissions up to 50gCO_2/km until 2025, moving towards emissions of 0gCO_2/km from 2026 onwards. These initiatives align with global sustainability goals and contribute to emissions reduction. • We expect financing public transportation infrastructure, such as constructing lanes for electric buses, expanding public bus or rail networks, upgrading rail systems through electrification, and modernising stations, to encourage the use of mass transit over personal vehicles, thereby contributing to reducing GHG emissions. • We understand from the issuer that rail infrastructure is not dedicated to the transport or storage of fossil fuels, which provides assurance on its environmental contribution and is also aligned with the EU taxonomy SCC. • Through our internal engagement with the issuer, we understand that sustainability projects in maritime transport and port infrastructure may involve green port initiatives, such as using electric or hybrid models for cargo handling equipment, upgrading waste management systems, implementing shore power systems and optimising logistics and supply chains. • We expect that these projects can help reduce emissions by decreasing fuel consumption and improving the efficiency of logistics and supply chains, while also contributing to minimising pollution and protecting marine ecosystems. These investments support SDGs 6 and 14.	
Sustainable water and wastewater management		
• This UoP covers the financing related to the development, construction, acquisition, installation, operation and upgrades of sustainable water management projects. • This includes investments in technologies to reduce overall water demand in stressed areas, sustainable infrastructure for clean water, wastewater treatment and other water related projects such as freshwater infrastructure and wastewater infrastructure. These projects also include desalination projects that are powered by renewable energy.	• We expect this UoP to be aligned with the sustainable water and wastewater management category of the ICMA GBP, and the LMA, LSTA and APLMA GLP. • The UoP is also aligned with the water supply and water sanitation categories of the IFC Guidelines for Blue Finance. Wastewater treatment projects are aligned with the marine pollution category of the Practitioner's Guide for Bonds to Finance the Sustainable Blue Economy by the ADB. • Pakistan faces severe water stress, driven by rapid population growth and urbanisation. The country expects climate change to pose significant threats to the availability of water resources in the Indus Basin, which supports over 90% of its agriculture industry. • We understand from the issuer that a range of projects to develop new water resources and improve water resource management may be financed under this UoP. Examples include projects to upgrade existing networks, construct new treatment plants, implement smart metering systems,	

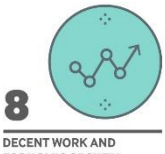
	harvest rainwater, and develop sustainable urban drainage systems. • We expect such activities to contribute to the sustainable use of water resources, as well as to support SDG 6. The issuer clarified during internal engagement that it expects water infrastructure projects to generally maintain or reduce leakage rates; however, there are no quantitative thresholds set as part of the eligibility criteria. • There are more stringent screening criteria included in international taxonomies such as the EU taxonomy to ensure the resource-use efficiency and longevity of water infrastructure projects. • Investments in desalination infrastructure diversify water sources, increasing the resilience of clean water supply and supporting SDGs 6 and 13. The infrastructure is also a key part of Pakistan's national water policy to address water scarcity. However, desalination activities are energy intensive and may contribute to marine pollution if inadequately managed. • Desalination plants powered by renewable energy are likely to meet emissions criteria outlined in international taxonomies, such as the CBI taxonomy, which require such plants to maintain a carbon intensity of 100gCO_2e/kWh or less throughout their operational lifespan. • The issuer has clarified that the financed projects are required to meet environmental criteria to prevent pollution; however, quantitative pollution control requirements are not specified as part of the eligibility criteria. • Over 92% of municipal wastewater in Pakistan is discharged without any treatment, making urban areas a major source of water pollution. • We expect wastewater treatment projects financed under this UoP to support SDG 6 and contribute to the sustainable use and protection of water resources. • These projects are crucial because they remove pollutants from wastewater, significantly reducing the risks of contaminating groundwater resources and surface waterbodies. Treated wastewater can also be safely reused and returned to the environment, preserving freshwater resources. • From internal engagement with the issuer, we understand that wastewater treatment projects under this UoP are required to have collection systems and secondary treatment, partially aligning with international taxonomies such as the EU taxonomy for substantial contribution to water. • However, the framework lacks size-specific requirements on discharge quality to ensure that the implemented projects are tailored to the population served.	
Climate change adaptation		
• This UoP covers financing related to making infrastructure more resilient to the impacts of climate change (including flood prevention, flood defence or stormwater management), as well as information support systems such as climate monitoring and early warning systems. • Transport sector investments can cover: – the physical resilience of transportation infrastructure to extreme weather events such as improving road drainage; – the restoration of transportation infrastructure after extreme events, considering climate vulnerability; and – updating building standards, maintenance practices and other elements. • Construction sector investments can cover:	• We expect this UoP to be aligned with the climate change adaptation category of the ICMA GBP, and the LMA, LSTA and APLMA GLP. • We also expect projects related to promoting community resilience and adaptation within 50km of the coast or within the marine environment to be aligned with the coastal climate adaptation and resilience category of the Practitioner's Guide for Bonds to Finance the Sustainable Blue Economy by the ADB. • The 2022 Pakistan floods, the most recent major flooding disaster in the country, inundated one-third of the nation and affected 33 million people. This catastrophe was estimated to have caused USD30 billion in losses and damages. It also necessitated an additional USD16 billion for rehabilitation	 

– the design and construction of bioclimate buildings and urban-scale interventions that adapt to the effects of climate change, such as floods, extreme temperatures and droughts; – reinforcement and increasing stability of buildings to withstand hurricanes and severe storms; and – expanding green spaces to reduce heat accumulation, rainwater harvesting and surface runoff. • This UoP also includes financing related to projects within 50km of the coast or in the marine environment that support ecological and community resilience and adaptation to climate change, including using nature-based solutions, such as: – ecosystem improvement projects in water catchment areas (mainly in the Indus River Basin); – stormwater management; – nature-based systems for prevention and protection against drought or flooding; – wetland restoration; – sustainable urban drainage systems; – coastal protection reinforcement through construction solutions and through relocation of coastal settlements, port infrastructure and routes compromised by coastal erosion or sea-level rise, complemented by nature-based solutions (mangrove reforestation); – construction of wave barriers, dikes or floodgates that demonstrate resilience using physical risk assessments; and – building sea walls in low-lying islands to stop coastal erosion.	needs, particularly in the transport, communications, agriculture and food, and housing sectors. • We expect increased climate variability to make extreme weather events such as floods and droughts more frequent and more intense. We expect sea-level rise to directly impact coastal settlements in low-lying areas such as Karachi, while also reducing the availability of freshwater and arable land for agriculture in the Indus River Delta region due to saltwater intrusion. • Projects such as those proposed under this UoP that are aimed at engineering climate-adaptive solutions, whether through man-made or nature-based methods, support SDGs 1 (no poverty) and 13 while contributing to climate change adaptation outcomes. • These projects include infrastructure resilience projects in the transportation and construction sectors, as well as coastal adaptation measures, including flood prevention measures (ie stormwater management, sustainable urban drainage systems and construction of flood prevention barriers) and coastal reinforcements against sea-level rise. • During internal engagement, the issuer clarified that climate risk assessments will be conducted before initiating infrastructure projects in the transport and construction sectors. This approach aims to identify climate vulnerabilities and ensure that projects achieve climate resilience outcomes rather than merely upgrading the infrastructure. • We consider this positively as such practices are also included in the SCC for climate change adaptation in international taxonomies such as the EU taxonomy. Additionally, local communities may be consulted to identify stakeholder needs and priorities, which can potentially enhance the effectiveness of the adaptation measures. • However, we are unable to determine if the climate risk assessments are fully aligned with best practices as detailed in international taxonomies such as the EU taxonomy, which set out additional requirements for climate models to integrate forward-looking scenarios and be aligned with latest climate science. • Conservation of wetlands and other riverine and coastal ecosystems also contributes to climate change adaptation. These projects include wetland restoration and ecosystem improvements in water catchment areas. • From internal engagement with the issuer, examples of projects that may be financed include reforestation, invasive species management and the promotion of sustainable land use through local community collaborations. These projects may be located in areas such as coastal mangroves in Sindh province, freshwater marshes in the Punjab region and Ramsar-listed wetlands in the Indus River Delta. • Wetland ecosystems serve as natural buffers against flooding and storm surges while offering economic benefits through sustainable livelihoods. This enhances community resilience to climate change impacts and supports SDGs 1 and 13. • We are unable to determine if the restoration projects are aligned with the best practices detailed in the SCC of international taxonomies, such as the EU taxonomy, which expect such projects to carry out climate risk and vulnerability assessments to be fully aligned with climate adaptation outcomes. • The relocation of coastal settlements, while helping to mitigate the negative impacts of climate change and forced displacement, may result in other unexpected social consequences if mismanaged.

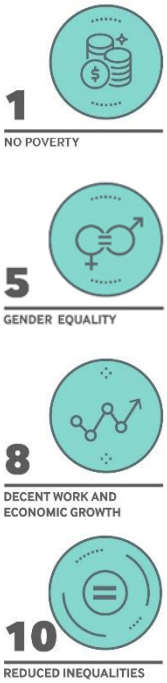
	• During internal engagement, the issuer clarified that measures such as social impact assessments and community engagement will be carried out to identify affected communities and their specific needs. Compensation plans will be provided to address livelihood loss, and resettled communities may also benefit from infrastructure developments, reducing the risks of social and economic disruption.	
Green buildings		
• This UoP covers the financing related to the construction and acquisition of energy-efficient buildings that fulfil one of the following requirements. – The building has obtained a minimum certification such as BREEAM Excellent, LEED Gold or a similar recognised standards (such as EDGE, HQE). – The building has a primary energy demand at least 10% lower than the one resulting from the local nearly zero-energy buildings (NZEBs) for buildings built after 31 December 2020. In the absence of a NZEB standard, a 10% reduction will be determined by using existing performance benchmarks established by local authorities or other relevant institutions. • This UoP also covers investments and expenditures relating to the renovation of buildings that leads to a reduction of primary energy demand of at least 30%.	• We expect this UoP to be aligned with the green buildings category of the ICMA GBP, and the LMA, LSTA and APLMA GLP. • The building sector accounts for 23% of the country's total energy consumption. Rapid urbanisation is driving more new developments in Pakistan, but the adoption of green building practices is still in the early stages. This makes financing energy-efficient building assets crucial for reducing GHG emissions and supporting SDGs 7, 11 and 13. • Buildings with recognised green certifications such as LEED and BREEAM have met specific environmental criteria, promoting sustainable practices in the real estate sectors across areas such as energy performance, water use and waste reduction. • Science-based taxonomies, such as the EU taxonomy, require even more ambitious benchmarks for energy performance such as superior performance compared to NZEBs standards, which are not yet met by these certifications. • Financing building renovations that lead to 30% or more reductions in primary energy demand are aligned with the SCC of science-based taxonomies such as the EU taxonomy towards climate change mitigation. • Financing the construction of new buildings constructed after 31 December 2020 that have 10% lower primary energy demand than the NZEB standard is aligned with international taxonomies such as the EU taxonomy. • However, Pakistan does not currently have such a regulatory standard; hence, we are unable to assess the precise environmental impact of buildings selected under this eligibility criteria.	
Social Eligible Projects		
Affordable basic infrastructure		
• This UoP covers the financing of projects that provide and promote clean drinking water, sewerage, sanitation, transportation, energy, internet connectivity, road infrastructure, and adaptation infrastructure. • This UoP targets low-income and under-served individuals.	• We expect this UoP to be aligned with the affordable basic infrastructure category of the ICMA SBP and the LMA, LSTA and APLMA SLP. • We expect the investments in water and sewerage infrastructure to contribute to SDG 6. Such projects will support the provision of clean drinking water for the general public, which is an internationally recognised human right. • We expect the investments in sanitation projects, such as integrated solid waste management, to also support SDG 6 by promoting improved hygiene and health conditions for residents in Pakistan. • We expect the investments in transport infrastructure to support SDG 11 by improving the mobility of residents to help them access economic or educational opportunities. • We expect the investments in energy infrastructure to support SDG 7 by supporting the supply of affordable energy to residents in Pakistan. • We expect the investments in telecommunications infrastructure to support SDG 9 by facilitating better communication for the residents in Pakistan, thereby broadening their access to a range of opportunities and services.	

	• We expect the investments in infrastructure with climate change resilience to support SDG 13 by enhancing the ability of communities to adapt to climate-related hazards. • We understand from the issuer that the infrastructure services financed under this UoP will be provided as public utilities, which we expect to be affordably accessed by low-income individuals and residents in under-served areas. • The issuer defines low-income individuals as those whose household income fall below the national poverty line. • The framework has a brief description of the under-served groups; it refers to marginalised groups that lack adequate access to basic infrastructure. • According to the issuer, the MPI will be used to determine under-served areas for eligible projects. The MPI's living standard dimension includes indicators such as access to water, sanitation, electricity and cooking fuel, along with the ownership of assets and the quality of a house's wall materials, which indicates deprivation if the walls are made from unimproved materials such as mud or bamboo. • According to data from the ADB, 21.9% of the population lived below the national poverty line in 2018. In rural areas, where Pakistan defines the poverty line as PKR3,769, this figure rose to 28.2%. • These areas are characterised by unplanned settlements of low- and medium-income households with unserviced plots and a lack of basic infrastructure, such as running water, sewage systems, reliable electricity and climate resilience measures. • Providing affordable basic infrastructure to these communities can directly improve the residents' health by enhancing living conditions with access to clean water, reliable energy supply, communication services, transportation and climate resilience. • These improvements can thereby elevate the overall quality of life for under-served communities, facilitating greater social inclusion and access to a variety of services and opportunities.	
Access to essential services		
• This UoP covers financing related to projects that provide and/or promote healthcare, education, vocational training and financial services. • This includes financing related to projects that provide and/or promote access to these services in the context of health emergencies (such as pandemics), environmental disasters and extreme weather events. • This UoP targets vulnerable groups, such as the under-educated, under-served and female entrepreneurs.	• We expect this UoP to be aligned with the access to essential services category of the ICMA SBP. • The framework specifies that the UoP is expected to benefit the vulnerable, under-educated and under-served. We expect these social segments to be similar to those stated in the affordable basic infrastructure UoP. We also expect projects relating to financial services allocated under this UoP to benefit women entrepreneurs. • In our assessment of this UoP, we considered Pakistan's population demographics and the use of MPI data to understand the social benefits of each type of project financed under this UoP. • Access to healthcare in Pakistan is heavily limited by an individual's socioeconomic status, as most healthcare expenses are paid directly out-of-pocket, with only 38% being supported by government spending, according to the World Health Organization. • Financing the public healthcare system supports SDG 3 by reducing the financial burden of healthcare for the population, improving accessibility and achieving better health outcomes. • According to the issuer, the MPI will be used to determine under-served areas for eligible projects. The MPI's healthcare dimension includes access to basic healthcare	

	facilities, childhood immunisation, ante-natal care and assisted delivery. • Youth literacy rates in Pakistan are among the lowest in the world, ranking 154 out of 176 countries according to UN data, indicating a significant need to improve educational outcomes. Increased financing in the public education system directly supports SDG 4 (quality education), improving access to education especially in under-served areas. • Examples of projects that may be financed to promote access to education include educational programmes, scholarships, and the development of schools and community outreach programmes to raise awareness about the importance of education for children. This information was obtained from our engagement with the issuer. • Pakistan's Human Capital Index is 0.41, below the global average of 0.56; this score measures productivity losses due to gaps in education and healthcare, the lower the score the greater the losses. In Pakistan, access to skills development is often limited by a person's income, leading to poverty entrenchment. • Increased financing in skills development directly supports SDGs 1 and 4 by promoting lifelong learning opportunities that improve productivity and earning potential. • According to the issuer, the MPI will be used to determine under-served areas for eligible projects. The MPI's education dimension includes number of schooling years, elementary school attendance and quality of schools. • Pakistan faces significant challenges in financial inclusion, with state bank data showing that 88% of its population lack access to formal banking services, and 56% are completely excluded from any form of banking services. • Expanding access to financing, such as subsidised loans for women entrepreneurs and microfinancing, can create a more inclusive financial landscape and stimulate economic growth, supporting SDG 8 (decent work and economic growth). Targeting women entrepreneurs can contribute to empowerment and gender equality outcomes, which are crucial aspects of sustainable development. • Pakistan ranks 20th globally on the country-level Inform Risk Index due to its high-risk exposure to earthquakes, riverine flooding, epidemics and human-related conflict. Health emergencies, including the recent Covid-19 pandemic, have highlighted the need for robust financial services to support the affected in times of need. • Ensuring access to essential financial services during disasters and emergencies alleviates economic and social disruptions caused by such environmental and social shocks, which is crucial for recovery and resilience-building efforts. • Microfinancing is regulated by the State Bank of Pakistan and Securities and Exchange Commission of Pakistan. We expect the financial institutions offering such products to implement responsible lending practices to address microborrower risks such as over-indebtedness. • Investment in emergency services and other disaster management measures enhances the country's response capabilities, and alleviates economic costs and social disruptions caused by such environmental and social shocks. Such activities support SDGs 1 and 13.

Affordable housing		
• This UoP covers financing related to the construction, rehabilitation and preservation of quality affordable housing. • This UoP targets low-income individuals and vulnerable groups.	• We expect this UoP to be aligned with the affordable housing category of the ICMA SBP and the LMA, LSTA and APLMA SLP. • Investments in affordable housing support housing and financial security for socioeconomically disadvantaged households and individuals, thereby contributing to SDG 11. • We expect this UoP to benefit low-income and other vulnerable groups. • Based on internal engagement with the issuer, we expect the low-income group to be similar to that in the affordable basic infrastructure UoP, where it has been defined as individuals with income below the national poverty line. • For vulnerable groups, the issuer uses the aggregated MPI to reflect the multidimensional nature of deprivation, covering dimensions such as health, education and living standards. It includes assessing aspects such as overcrowding to help identify the most vulnerable individuals in need of housing. • According to the statistics from the seventh population and housing census published by the Pakistan Bureau of Statistics in 2024, over 20% Pakistan residents were living in Kacha housing nationally. • These temporary or makeshift dwellings, often made from mud or other natural materials, highlight the lack of utilities such as water and energy. The situation is more pronounced in the rural area, where the percentage went up to 29%. • We expect the provision of quality affordable housing to low-income individuals and vulnerable groups living in under-served areas to lead to improved living conditions with better access to utilities, and a more sanitary environment. • We understand from the issuer that these affordable housing projects will be subject to Pakistan rent subsidies and easing schemes to provide financial assistance to low-income families through direct cash transfers, housing vouchers or subsidised rent programmes.	
Employment generation		
• This UoP covers the financing for programmes aimed at preventing and/or reducing unemployment caused by socioeconomic crises, including through the potential impact of SME financing and microfinance. • Examples include microloans for start-ups and SMEs, and vocational programmes that lead to business growth. • This UoP targets the unemployed, low-income individuals and the under-served.	• We expect this UoP to align with the employment generation and programmes designed to prevent or alleviate unemployment category of the ICMA SBP and the LMA, LSTA and APLMA SLP. • This UoP includes a variety of projects, such as microfinancing for start-ups and SMEs, and vocational training programmes, which will provide or sustain employment opportunities. The framework specifies that the UoP is expected to benefit the unemployed, low-income individuals and the under-served. • The issuer defines low-income individuals as those whose household income fall below the national poverty line. • We understand from the issuer that under-served populations are groups that do not have sufficient access to essential services such as education, healthcare and housing. The issuer will use the MPI to determine under-served areas for eligible projects. • According to the International Labour Organization, Pakistan's employment-to-population ratio was 47.6% in 2023, below the global average of 58%. This low employment ratio is attributed to economic uncertainties, including inflation and natural disasters, which exert financial pressure on companies, making it challenging for them to hire new employees. • In Pakistan, SMEs accounted for 98.6% of total enterprises in 2020, according to the ADB. Therefore, we expect funding for SMEs to foster business growth and thereby create and	  

	sustain jobs, contributing to local economic and employment growth. This funding supports SDG 8. • We understand from the issuer that microfinance projects are aimed at low-income individuals and marginalised groups, specifically targeting those with household incomes below the national poverty line. • We expect that funding for microfinance projects can provide opportunities for these individuals to engage in economic activities, such as starting and managing their own businesses, thereby generating income and promoting economic self-sufficiency. These projects support SDGs 1 and 8. • Microfinancing is regulated by the State Bank of Pakistan and Securities and Exchange Commission of Pakistan. We expect the financial institutions offering such products to implement responsible lending practices to address microborrower risks such as over-indebtedness. • We understand from the issuer that the vocational programmes are focused on marginalised groups, which the issuer defines as people living in rural areas, informal settlements or regions impacted by conflict or natural disasters. • These groups often lack sufficient educational opportunities, preventing them from learning the skills and qualifications demanded by the job market. • We expect that vocational programmes can offer participants the chance to learn new skills, enhancing their employability and enabling them to access better job opportunities and achieve economic independence. These programmes support SDG 4.	
Food security and sustainable food systems		
• This UoP cover the financing of a wide range of agricultural products and services, including investments in: – projects that provide, promote physical, social and economic access to safe, nutritious and sufficient food that meets dietary needs and requirements; – resilient agricultural practices, such as climate-resilient seeds varieties, technology adoption, better production technology of crops, climate suitability of crops and zero tillage; and – affordable access to nutrition-specific health services and nutrition-sensitive services. • This UoP targets vulnerable groups, under-served groups, low-income individuals and smallholder farmers. Smallholder farmers are defined as owning less than 12.5 acres (5 hectares) of land.	• We expect this UoP to be aligned with the food security and sustainable food systems category of the ICMA SBP and the LMA, LSTA and APLMA SLP. • We consider projects with the aim to enhance food security, climate resiliency and productivity to contribute to SDGs 2 (zero hunger) and 13. • These projects can collectively ensure a stable food supply, support sustainable farming that is resilient to climate change, and minimise waste and resource use. In turn, they support the proper functioning of food commodity markets and the productivity of small-scale producers. • In addition to enhancing the access to food for the general public, this UoP also specifically targets smallholder farmers, who, according to the UN, make up over 90% of Pakistan's farmers, to provide them with advanced agrotechnologies that could improve their productivity. • The framework specifies that vulnerable groups, including the under-served and low-income people, particularly smallholder farmers, are expected to benefit from this UoP. • The issuer uses the aggregated MPI to reflect the multidimensional nature of deprivation, covering aspects such as health, education and living standards to help identify the most vulnerable individuals. • We consider smallholder farmers to have a high level of financial vulnerability, as their incomes are sensitive to weather conditions and are generally lower than the national average. This targeted support aims to increase their agricultural productivity and stability, which in turn can result in to higher income and improved living standards.	 

Socioeconomic advancement and empowerment		
• This UoP focuses on financing locally driven initiatives that positively and equitably impact the society, the environment and businesses. • Examples include microcredit initiatives for supporting financial literacy, women's economic participation and community development projects to reduce inequality and enhance the financial resilience in vulnerable groups. • This UoP targets the under-served and under-educated populations.	• We expect this UoP to align with the socioeconomic advancement and empowerment category of the ICMA SBP and the LMA, LSTA and APLMA SLP. • The framework specifies that the UoP is expected to benefit the under-served and under-educated. • During our engagement with the issuer, we understand that under-served populations are groups that do not have sufficient access to essential services such as education, healthcare and housing. • The issuer also specifies that under-educated individuals may be part of the under-served populations due to limited access to educational and economic opportunities. • According to the issuer, MPI will be used to determine under-served areas for eligible projects. • According to the ADB, 21.9% of the population lived below the national poverty line in 2018. Furthermore, the State Bank of Pakistan reports that 53% of the country's adults are financially excluded due to insufficient financial management skills and a lack of awareness of financial products. • We expect microcredit to contribute to SDGs 1, 8 and 10 by enabling individuals to start or expand small businesses, which enhances economic opportunities and reduces poverty. • We also expect microcredit to introduce individuals to formal financial services, thereby increasing their familiarity with financial products and enhancing the inclusivity of the formal financial system. • The World Bank reported that the labour force participation rate of women was 30.4% relative to that of men in 2021. • We expect microcredit for women to contribute to SDGs 1, 5 (gender equality) and 8 by reducing inequality and boosting their economic opportunities. • Microfinancing is regulated by the State Bank of Pakistan and Securities and Exchange Commission of Pakistan. We expect the financial institutions offering such products to implement responsible lending practices to address microborrower risks such as over-indebtedness.	
Source: Pakistan sustainable financing framework (May 2025)	Source: Sustainable Fitch, based on Asia Small and Medium-Sized Enterprise Monitor 2024, IEA, International Labour Organization website, Pakistan Bureau of Statistics, World Economic Forum, UN Climate Technology and Network technical assistance reports, World Resources Institute, UN Development Programme, Pakistan Council of Research in Water Resources, World Bank, UN Development Programme, World Nuclear Association, Pakistan national adaptation plan 2023, Pakistan economic surveys (FY19, FY23), National Energy Efficiency and Conservation Authority website, Food and Agriculture Food Organization website, Agence française de développement, company material	

Use of Proceeds – Other Information	Alignment: Excellent
Company Material	**Sustainable Fitch's View**
• Net proceeds from the sustainable financing instruments will be used to finance or refinance, in part or in full, government expenditures that meet the framework's eligibility criteria. The government intends to allocate a minimum of 50% of the total proceeds to new financing. • Eligible expenditures are limited to government spending that occurred within three budget years before the issuance, during the budget year of issuance, and up to three budget years after the issuance. • Eligible expenditures will exclude any government disbursements to local agencies or authorities that participate in capital markets to raise financing, for example, through the issuance of sustainable financing instruments. • The sustainable financing instruments will not fund the following activities: oil and gas operations (upstream, midstream or downstream), thermal coal mining and coal-fired power generation, nuclear energy, gambling, tobacco, alcohol, weapons, child and forced labour, adult entertainment, and palm oil.	• The framework specifies the expected ratio of new financing, which aligns with the recommendations of the principles of the ICMA and the LMA. We positively view the issuer's commitment of a minimum ratio of 50% for new financing, as it represents a significant level of new financing. • The issuer has disclosed its intended lookback period for expenditures related to refinancing, which is in line with the principles of the ICMA and the LMA. The lookback period of three years is in line with market practice; however, a shorter lookback period would enhance the additionality of the sustainable financing instruments. • The framework establishes a comprehensive and clearly defined set of exclusion criteria for activities. This aligns with best practice by ensuring that funds will not be allocated to activities that negatively impact the environment and society.
Source: Pakistan sustainable financing framework (May 2025)	Source: Sustainable Fitch

Evaluation and Selection	Alignment: Excellent
Company Material	**Sustainable Fitch's View**
• The sovereign sustainable finance committee which is chaired by the secretary of the ministry of finance (MOF), oversees the project evaluation and selection process. It includes representatives from the debt office and budget wing of the MOF; the ministry of planning, development and special initiatives (MOPDSI); the ministry of climate change and environmental coordination; the economic affairs division of the ministry of economic affairs; and the State Bank of Pakistan. • The sovereign sustainable finance committee identifies projects and budget programmes that meet the framework's eligibility criteria and establishes processes to manage environmental and social risks in projects, programmes, assets and investments. • The government has implemented a robust sustainability and risk management framework to mitigate environmental and social risks, and ensure compliance with environmental and social standards and regulations. • With regard to project identification, relevant agencies will identify projects in consultation with the MOF and the MOPDSI during the first phase. The project will then be presented to the sovereign sustainable finance committee in the second phase.	• The framework adequately describes the project evaluation and selection process, in line with the principles of the ICMA and the LMA. • We view positively the composition of the sovereign sustainable finance committee, which includes representatives from multiple ministries, such as the ministry of climate change and the MOF, as it provides a range of expertise to the project selection discussion. • We view positively that there is a multi-layered evaluation and selection process, where agencies first propose potential projects that are then assessed and approved by the sovereign sustainable finance committee, as this provides checks and balances through a separation of proposal and approval responsibilities.
Source: Pakistan sustainable financing framework (May 2025)	Source: Sustainable Fitch

Management of Proceeds	Alignment: Good
Company Material	**Sustainable Fitch's View**
• The net proceeds from the sustainable financing instruments will contribute to Pakistan's overall government funding. The MOF will manage these proceeds on a bond-by-bond basis, using a virtual sustainable financing register that is reviewed annually. • If any allocated eligible expenditures are removed from the register, the government will aim to replace them with new eligible expenditures within two years. Any new or replacement eligible green or social expenditures will require approval from the working group before allocation. • Unallocated proceeds from outstanding sustainable financing instruments will be temporarily invested in cash, cash equivalents or other liquid investments, following Pakistan's treasury management policies, until fully allocated.	• The use of a virtual register to monitor the allocation of proceeds aligns with the requirements of the ICMA and the LMA to track proceeds in an appropriate manner. Further segregation of proceeds, for instance, by using a dedicated bank account, would provide greater assurance that the proceeds will be used according to the framework and not be commingled with other general-purpose funds. • During our engagement with the issuer, we understand that when borrowing loans under this framework, the issuer will manage the proceeds on a loan-by-loan basis. • The issuer intends to regularly review allocated projects and replace ineligible ones with eligible expenditures. This ensures that proceeds are used in accordance with the framework's objectives. • The framework outlines how unallocated proceeds will be invested, aligning with the principles of the ICMA and the LMA. Investing any unallocated funds in investments that are consistent with the

Management of Proceeds	Alignment: Good
Company Material	**Sustainable Fitch's View**
	environmental and social goals of the framework would enhance the positive impact.
Source: Pakistan sustainable financing framework (May 2025)	Source: Sustainable Fitch

Reporting and Transparency	Alignment: Excellent
Company Material	**Sustainable Fitch's View**
• The government will annually publish an allocation and impact report, beginning one year after the issuance of a sustainable financing instrument. Reporting will continue until full allocation, or when any material changes occur, up to the maturity date. • The allocation reporting will include the net proceeds from outstanding sustainable financing instruments, the amount of net proceeds allocated to eligible expenditures as defined in the framework's UoP section, a project list (considering confidentiality), allocation shares for refinancing versus new expenditures, a breakdown of the types of eligible green or social expenditures, and the amount of unallocated proceeds. • The government intends to provide impact reporting in alignment with the ICMA Handbook – Harmonised Framework for Impact Reporting. The reporting will be conducted at the eligible green and social expenditure category level, supplemented by project-level case studies where applicable. At least one indicator per eligibility category will be provided, with impacts potentially measured on an aggregated basis rather than directly linked to specific projects. • The government will annually obtain an assurance report from an external reviewer on the allocation of sustainable financing instrument proceeds, starting one year after issuance and continuing until full allocation.	• We view positively the issuer's commitment to annually publish information on the allocation and impact of net proceeds for sustainable financing instruments until full allocation, aligning with the ICMA and the LMA principles. The issuer has also committed to additional reporting in the event of material changes, which will provide transparency throughout the life of each transaction. • The issuer has committed to reporting the allocation of proceeds at the bond level and, where possible, to providing a breakdown by projects, taking confidentiality into account. This approach aligns with the ICMA and the LMA principles, enhancing transparency for investors regarding individual issuances. • The impact reporting metrics outlined in the framework effectively quantify the environmental and social impacts of eligible projects, which we consider as good practice for impact reporting. • The issuer has committed to engaging an external reviewer to provide assurance on the post-issuance allocation of proceeds on an annual basis, which will provide assurance on the accuracy of the data reported. Including verification of environmental or social impact would further enhance confidence in the reporting.
Source: Pakistan sustainable financing framework (May 2025)	Source: Sustainable Fitch

Relevant UN Sustainable Development Goals

- **1.4:** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.
- **1.5:** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

- **2.1:** By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

- **3.8:** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
- **3.9:** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

- **4.2:** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.
- **4.3:** By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.
- **4.4:** By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.
- **4.5:** By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.

- **5.a**: Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.

- **6.1:** By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
- **6.3:** By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
- **6.4:** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

- **7.1:** By 2030, ensure universal access to affordable, reliable and modern energy services.
- **7.2:** By 2030, increase substantially the share of renewable energy in the global energy mix.
- **7.3:** By 2030, double the global rate of improvement in energy efficiency.

Relevant UN Sustainable Development Goals

- **8.3:** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro-, small- and medium-sized enterprises, including through access to financial services.
- **8.10:** Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

- **9.1:** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
- **9.4:** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

- **10.2:** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

- **11.1:** By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.
- **11.2:** By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- **11.3:** By 2030, enhance inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.
- **11.6:** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

- **12.5:** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

- **13.1:** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- **13.2:** Integrate climate change measures into national policies, strategies and planning.

- **14.1:** By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.
- **14.2:** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.
- **14.4:** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

Relevant UN Sustainable Development Goals

- **15.2:** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.
- **15.3:** By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.
- **15.4:** By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.

Source: Sustainable Fitch, UN

Appendix A: Principles and Guidelines

Type of Instrument: Sustainability

Four Pillars	
1) Use of Proceeds (UoP)	Yes
2) Project Evaluation & Selection	Yes
3) Management of Proceeds	Yes
4) Reporting	Yes

Independent External Review Provider	
Second-party opinion	Yes
Verification	Yes
Certification	No
Scoring/Rating	No
Other	n.a.

1) Use of Proceeds (UoP)	
UoP as per Green Bond Principles (GBP)	
Renewable energy	Yes
Energy efficiency	Yes
Pollution prevention and control	Yes
Environmentally sustainable management of living natural resources and land use	Yes
Terrestrial and aquatic biodiversity conservation	Yes
Clean transportation	Yes
Sustainable water and wastewater management	Yes
Climate change adaptation	Yes
Certified eco-efficient and/or circular economy adapted products, production technologies and processes	No
Green buildings	Yes
Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP	No
Other	n.a.
UoP as per Social Bond Principles (SBP)	
Affordable basic infrastructure	Yes
Access to essential services	Yes
Affordable housing	Yes
Employment generation (through SME financing and microfinancing)	Yes
Food security	Yes
Socioeconomic advancement and empowerment	Yes
Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBP	n.a.

Target Populations	
Living below the poverty line	Yes
Excluded and/or marginalised populations and/or communities	Yes
People with disabilities	No
Migrants and/or displaced persons	No
Under-educated	Yes
Under-served, owing to a lack of quality access to essential goods and services	Yes
Unemployed and/or workers affected by climate transition	Yes
Women and/or sexual and gender minorities	No
Aging populations and vulnerable youth	Yes
Other vulnerable groups, including as a result of natural disasters, climate change, and/or climate transition projects that cause or exacerbate socioeconomic inequity	Yes

Type of Instrument: Sustainability	
Other	n.a.

2) Project Evaluation and Selection	
Evaluation and Selection	
Credentials on the issuer's social and green objectives	Yes
Documented process to determine that projects fit within defined categories	Yes
Defined and transparent criteria for projects eligible for sustainability bond proceeds	Yes
Documented process to identify and manage potential ESG risks associated with the project	Yes
Summary criteria for project evaluation and selection publicly available	Yes
Other	n.a.
Evaluation and Selection, Responsibility and Accountability	
Evaluation and selection criteria subject to external advice or verification	No
In-house assessment	Yes
Other	n.a.

3) Management of Proceeds	
Tracking of Proceeds	
Sustainability bond proceeds segregated or tracked by the issuer in an appropriate manner	Yes
Disclosure of intended types of temporary investment instruments for unallocated proceeds	Yes
Other	n.a.
Additional Disclosure	
Allocations to future investments only	No
Allocations to both existing and future investments	Yes
Allocation to individual disbursements	No
Allocation to a portfolio of disbursements	Yes
Disclosure of portfolio balance of unallocated proceeds	Yes
Other	n.a.

4) Reporting	
UoP Reporting	
Project-by-project	No
On a project portfolio basis	Yes
Linkage to individual bond(s)	No
Other	n.a.
UoP Reporting/Information Reported	
Allocated amounts	Yes
Sustainability bond-financed share of total investment	No
Other	n.a.
UoP Reporting/Frequency	
Annual	Yes
Semi-annual	No
Other	n.a.
Impact Reporting	
Project-by-project	No
On a project portfolio basis	Yes

Type of Instrument: Sustainability	
Linkage to individual bond(s)	No
Other	n.a.

Impact Reporting/Information Reported (exp. ex-post)	
GHG emissions/savings	No
Energy savings	No
Decrease in water use	No
Other ESG indicators	Number of green buildings, kWh of electricity generated from renewable energy, number of water treatment services, etc.

Impact Reporting/Frequency	
Annual	Yes
Semi-annual	No
Other	n.a.

Means of Disclosure	
Information published in financial report	No
Information published in ad hoc documents	Yes
Information published in sustainability report	No
Reporting reviewed	Yes
Other	n.a.

Note: n.a. – not applicable.
Source: Sustainable Fitch, ICMA

Appendix B: Definitions

Term	Definition
Debt types	
Green	Proceeds will be used for green projects and/or environmental-related activities as identified in the instrument documents. The instrument may be aligned with ICMA Green Bond Principles or other principles, guidelines or taxonomies.
Social	Proceeds will be used for social projects and/or social-related activities as identified in the instrument documents. The instrument may be aligned with ICMA Social Bond Principles or other principles, guidelines or taxonomies.
Sustainability	Proceeds will be used for a mix of green and social projects and/or environmental and social-related activities as identified in the instrument documents. The instrument may be aligned with ICMA Sustainability Bond Guidelines or other principles, guidelines, taxonomies.
Sustainability-linked	Financial and/or structural features are linked to the achievement of pre-defined sustainability objectives. Such features may be aligned with ICMA Sustainability-linked Bond Principles or other principles, guidelines or taxonomies. The instrument is often referred to as an SLB (sustainability-linked bond) or SLL (sustainability-linked loan).
Conventional	Proceeds are not destined for any green, social or sustainability project or activity, and the financial or structural features are not linked to any sustainability objective.
Other	Any other type of financing instrument or a combination of the above instruments.
Standards	
ICMA	International Capital Market Association. In the Second-Party Opinion we refer to alignment with ICMA's Bond Principles: a series of principles and guidelines for green, social, sustainability and sustainability-linked bonds.
LMA, LSTA and APLMA	Loan Market Association (LMA), Loan Syndications and Trading Association (LSTA) and Asia Pacific Loan Market Association (APLMA). In the Second-Party Opinion we refer to alignment with Sustainable Finance Loan Principles: a series of principles and guidelines for green, social and sustainability-linked loans.
EU Green Bond Standard	A set of voluntary standards created by the EU to "enhance the effectiveness, transparency, accountability, comparability and credibility of the green bond market".

Source: Sustainable Fitch, ICMA, UN, EU Technical Expert Group

Appendix C: Second-Party Opinion Methodology

Second-Party Opinion

Second-Party Opinions (SPO) are a way for issuers to obtain an independent external review on their green, social, sustainability and sustainability-linked instruments.

As per the ICMA Guidelines for External Reviewers, an SPO entails an assessment of the alignment of the issuer's green, social, sustainability or sustainability-linked bond or loan issuance, framework or programme with the relevant principles. For these purposes, "alignment" should refer to all core components of the relevant principles.

Sustainable Fitch analysts vary the analysis based on the type of instruments, to consider whether there are defined uses of proceeds or KPIs and sustainability performance targets. The analysis is done on a standalone basis, separate to the entity.

Analytical Process

The analysis considers all available relevant information (ESG and financial). The reports transparently display the sources of information analysed for each section and provide a line-by-line commentary on the sub-factors analysed. The ESG analysts working on an SPO will also engage directly with the issuer to acquire any additional relevant information not already in the public domain or in instrument-related documentation.

An important part of the analysis is the assessment of the E and S aspects of the use of proceeds. In addition to the alignment with ICMA Principle and Guidelines, the analysis may also refer to major taxonomies (eg the EU taxonomy for E aspects, and the UN Sustainable Development Goals for S aspects).

Once the analyst has completed the analysis, with commentary for the related SPO, it is submitted to the approval committee, which reviews it for accuracy and consistency. Based on issuer preference and mandate, an SPO can be monitored (annually or more frequently, if new information becomes available) or on a point-in-time basis.

Scale and Definitions

	ESG Framework
Excellent	Sustainable finance framework and/or debt instrument structure is fully aligned to all relevant core international principles and guidelines. Practices inherent to the structure meet excellent levels of rigour and transparency in all respects and are well in excess of the standards commonly followed by the market.
Good	Sustainable finance framework and/or debt instrument structure is fully aligned to all relevant core international principles and guidelines. Practices inherent to the structure meet good levels of rigour and transparency; in some instances, they go beyond the standards commonly followed by the market.
Aligned	Sustainable finance framework and/or debt instrument structure is aligned to all relevant core international principles and guidelines. Practices inherent to the structure meet the minimum standards in terms of rigour and transparency commonly followed by the market.
Not Aligned	Sustainable finance framework and/or debt instrument structure is not aligned to relevant core international principles and guidelines. Practices inherent to the structure fall short of common market practice.

Source: Sustainable Fitch

SOLICITATION STATUS

The Second-Party Opinion was solicited and assigned or maintained by Sustainable Fitch at the request of the entity.