

Second-Party Opinion

Bank of Ayudhya (Krungsri)

Sustainable Finance Framework



Evaluation Summary

Sustainalytics is of the opinion that the Bank of Ayudhya (Krungsri) Sustainable Finance Framework is credible and impactful and aligns with the Sustainability Bond Guidelines 2021, Green Bond Principles 2021, Social Bond Principles 2021, Green Loan Principles 2023 and Social Loan Principles 2023. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds¹ are aligned with those recognized by the Green Bond Principles, Social Bond Principles, Green Loan Principles and Social Loan Principles. Sustainalytics considers that investments in the eligible categories are expected to facilitate the transition to a low-carbon economy and advance socio-economic development in Thailand. Sustainalytics considers that the use of proceeds categories contributes to the advancement of the UN Sustainable Development Goals, specifically SDGs 2, 3, 4, 7, 9, 10, 11, 12, 13, 14, and 15.



PROJECT EVALUATION AND SELECTION The head of each business segment of Krungsri will be responsible for project evaluation and selection in line with the Framework's eligibility criteria. Each business segment and risk management group will assess environmental and social risks associated with the portfolio of eligible assets. The Bank has sustainable lending guidelines in place that considers ESG risk management. Sustainalytics considers these risk management systems to be adequate and the project selection process in line with market practice.



MANAGEMENT OF PROCEEDS The Bank of Ayudhya Public Company Limited's Strategic Assets and Liabilities Management Department will manage the allocation of the proceeds on a quarterly basis. The Bank of Ayudhya Public Company Limited has an internal monitoring system in place to track the use of proceeds. The Bank intends to allocate the proceeds within two years of issuance. Pending full allocation, unallocated proceeds will be invested in accordance with the Krungsri Treasury's existing liquidity management procedures. This is in line with market practice.



REPORTING The Bank of Ayudhya Public Company Limited intends to report on the allocation of proceeds on its website on an annual basis. Allocation reporting will include the amount of funds allocated to the eligible assets, the amount of funds allocated to replace or replenish eligible assets, the amount of unallocated proceeds and share of financing versus refinancing. The Bank of Ayudhya Public Company Limited will report on the qualitative and quantitative impact of the eligible projects where feasible at the category level. Sustainalytics views the reporting commitments to be in line with market practice.

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Issuer Location	Bangkok, Thailand

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¹ Eligible use of proceeds categories: i) Adaptation, ii) Biodiversity, iii) Blue Economy, iv) Circular Economy, v) Clean Transportation, vi) Climate Smart Agriculture, vii) Energy Efficiency, viii) Green Buildings, ix) Pollution Prevention and Control, x) Renewable Energy, xi) Sustainable Forestry, xii) Waste Management and Resource Efficiency, xiii) Access to Essential Services, xiv) Employment Generation, xv) Socio-economic Advancement and Empowerment, and xvi) Affordable Housing.

Introduction

Established in 1945, the Bank of Ayudhya Public Company Limited (“Krungsri” or the “Bank”) is a Thai commercial bank headquartered in Bangkok, Thailand. The Bank provides services in corporate and personal lending, retail and wholesale banking, international trade financing, asset management and investment banking. The Company employs approximately 37,000 people with branches in Hong Kong, Vietnam, Laos and the Cayman Islands.²

Krungsri has developed the Bank of Ayudhya (Krungsri) Sustainable Finance Framework dated July 2023 (the “Framework”), under which it intends to issue green, blue, social and sustainability bonds and loans and use the proceeds to finance and refinance, in whole or in part, existing and future projects that are expected to facilitate the transition to a low-carbon economy and advance socio-economic development in Thailand. Sustainalytics notes that in addition to ICMA and LMA principles, Krungsri intends to align with IFC Guidelines for Blue Finance³ to guide its blue bond. The Framework defines eligibility criteria in twelve green categories and four social categories:

Green eligible Categories:

1. Adaptation
2. Biodiversity
3. Blue Economy
4. Circular Economy
5. Clean Transportation
6. Climate Smart Agriculture
7. Energy Efficiency
8. Green Buildings
9. Pollution Prevention and Control
10. Renewable Energy
11. Sustainable Forestry
12. Waste Management and Resource Efficiency

Social Eligible Categories:

1. Access to Essential Services
2. Employment Generation
3. Socio-economic Advancement and Empowerment
4. Affordable Housing

Krungsri engaged Sustainalytics to review the Bank of Ayudhya (Krungsri) Sustainable Finance Framework and provide a Second-Party Opinion on the Framework’s environmental and social credentials and its alignment with the Sustainability Bond Guidelines 2021 (SBG), Green Bond Principles 2021 (GBP), Social Bond Principles 2021 (SBP),⁴ Green Loan Principles 2023 (GLP)^{5,6} and Social Loan Principles 2023 (SLP).⁷ The Framework will be published in a separate document.⁸ The Framework builds on a previous framework for which Sustainalytics provided a second-party opinion dated October 2019.

² Krungsri, “Sustainability Report 2022”, at: <https://www.krungsri.com/getmedia/e982e590-8248-4dec-998d-f5dc247f3469/sustainability-report-2022-en.pdf.aspx>

³ IFC, “Guidelines for Blue Finance”, (2022), at: <https://www.ifc.org/wps/wcm/connect/4a61d420-82b2-41e9-b2fd-b7fb0af38bba/IFC-Guidelines-for-Blue-Finance.pdf?MOD=AJPERES&CVID=ogvh-4f>

⁴ The Sustainability Bond Guidelines, Green Bond Principles, and Social Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/>

⁵ For future revolving facilities, Krungsri has communicated to Sustainalytics that the Bank will report on the use of proceeds until full allocation or loan maturity date.

⁶ Krungsri has confirmed to Sustainalytics that there may be multi-tranche loan facilities envisaged and the Bank commits to only label tranches of such facilities whose proceeds will be allocated according to the Framework’s eligibility criteria.

⁷ The Green Loan Principles and Social Loan Principles are administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association and are available at: <https://www.lsta.org/content/green-loan-principles/#> and <https://www.lsta.org/content/social-loan-principles-slp/>

⁸ The Bank of Ayudhya (Krungsri) Sustainable Finance Framework is available on Bank of Ayudhya Public Company Limited’s website at: <https://www.krungsri.com/en/investor-relations/sustainable-finance/disclosure-statements>

Scope of work and limitations of Sustainalytics' Second-Party Opinion

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent⁹ opinion on the alignment of the reviewed Framework with current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework's alignment with the Sustainability Bond Guidelines 2021, Green Bond Principles 2021, and Social Bond Principles 2021, as administered by ICMA, and the Green Loan Principles 2023 and Social Loan Principles 2023, as administered by LMA, APLMA, and LSTA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer's sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.13.2, which is informed by market practice and Sustainalytics' expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of Krungsri's management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. Krungsri representatives have confirmed (1) they understand it is the sole responsibility of Krungsri to ensure that the information provided is complete, accurate and up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Krungsri.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond and loan proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner. Upon twenty-four (24) months following the evaluation date set stated herein, Krungsri is encouraged to update the Framework, if necessary, and seek an update to the Second-Party Opinion to ensure ongoing alignment of the Framework with market standards and expectations.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realized allocation of the bond and loan proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Krungsri has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Bank of Ayudhya (Krungsri) Sustainable Finance Framework

Sustainalytics is of the opinion that the Bank of Ayudhya (Krungsri) Sustainable Finance Framework is credible, impactful and aligns with the four core components of the GBP, SBP, GLP and SLP. Sustainalytics highlights the following elements of the Bank of Ayudhya (Krungsri) Sustainability Finance Framework:

⁹ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.

Use of Proceeds:

- The eligible categories are aligned with those recognized by the GBP, SBP, GLP and SLP. Sustainalytics considers that the Bank's investments in eligible projects are expected to facilitate the transition to a low-carbon economy and advance socio-economic development in Thailand.
- Krungsri has defined a look-back period of two years for refinancing activities. Sustainalytics considers this to be in line with market practice.
- Sustainalytics notes that Krungsri has committed to ensuring that no double accounting of financed projects and assets across all allocation and impact reporting commitments made under the Framework.
- Under the Adaptation category, Krungsri may finance or refinance projects that help increase resilience and protection against various risks caused by climate change in accordance with the following criteria:
 - Retrofitting flood defence systems supported by an adaptation plan and vulnerability assessment.
 - Development, purchase or maintenance of climate observation and early warning systems used for long-term research and planning for adaptation, forecasting and monitoring the effects of climate change. Krungsri has confirmed to Sustainalytics to exclude financing devices used for short term meteorological purposes.
 - Activities that increase resilience to draught, such as piping system to transport water to draught prone areas from nearby water bodies. Krungsri has communicated to Sustainalytics that: i) drainage systems dedicated to fossil fuel operations will be excluded; and ii) flood early warning systems and draught adaptation projects will be supported by a vulnerability assessment and adaptation plans to identify and responsibly manage the identified risks.
 - Sustainalytics considers these expenditures to be in line with market practice.
- Under the Biodiversity category, the Bank may finance or refinance expenditures related to the following:
 - Preservation of natural habitats such as high conservation value forests and peatlands.
 - Landscape preservation, conservation or restoration projects such as mangrove conservation, in line with Reducing Emissions from Deforestation and Forest Degradation (REDD).¹⁰
 - Krungsri has communicated to Sustainalytics that such projects will use local and well adapted tree species and that there will be sustainable management plan in place.
 - Sustainalytics considers these expenditures to be in line with market practice.
- Under Blue Economy category, Krungsri may finance or refinance projects that are aimed towards enhancing ocean and coastal preservation and increasing clean water resources according to International Finance Corporation's Guidelines for Blue Finance.¹¹ Krungsri has communicated to Sustainalytics that following activities will be financed under this category as per the below criteria:
 - Within clean water supply, Krungsri intends to invest in research, design, development, and implementation of efficient and clean water supply which includes financing infrastructure related to desalination facility, water supply piping system and drip irrigation. Krungsri has confirmed all the desalination facilities financed under the Framework will have appropriate waste management plan for brine disposal and will adhere to the following criteria: i) will be powered by low-carbon sources, such as renewables; or ii) the average carbon intensity of the electricity that is used is below 100 gCO₂e/kWh. Sustainalytics considers these expenditures to be aligned with market practice.
 - Within water sanitation and treatment solutions, Krungsri intends to invest in the research, design, development, and implementation of water treatment solutions and wastewater treatment facilities. Krungsri has confirmed with Sustainalytics to exclude financing wastewater treatment from fossil fuel and hard-to-abate industry.

¹⁰ UNFCCC, "What is REDD?", at: <https://unfccc.int/topics/land-use/workstreams/redd/what-is-redd>

¹¹ IFC, "Guidelines for Blue Finance", (2022), at: <https://www.ifc.org/wps/wcm/connect/4a61d420-82b2-41e9-b2fd-b7fb0af38bba/IFC-Guidelines-for-Blue-Finance.pdf?MOD=AJPERES&CVID=ogvh-4f>

Sustainalytics considers expenditures in this activity to be aligned with market practice.

- Within ocean-friendly and water-friendly products, Krungsri intends to finance late-stage research and design (R&D), manufacturing, trade, and retail of essential components of the value chain of alternative biodegradable materials such as sawdust powder and agro-based residue. Sustainalytics recognizes potential positive impact of late-stage R&D of alternative biodegradable materials. Sustainalytics notes that using alternative sustainably sourced biodegradable materials for manufacturing, trade and retail of ocean- and water-friendly products may generate credible environmental impacts, however the materials or products that are most likely produced using virgin raw materials and without sustainable sourcing (either recycled or sustainable bio-based) have limited positive environmental impact. Thus, Sustainalytics considers the financing of manufacturing, trade and retail of alternative biodegradable products, to be a deviation under the Framework.
- Within ocean-friendly chemicals and plastics, Krungsri intends to finance research, design, development and implementation of measures to manage, reduce, recycle, and treat plastic pollution in coastal and river basin areas. The expenditures may include:
 - Flood mitigation systems. This is in line with market practice.
 - Urban drainage systems. The Bank has confirmed to exclude financing drainage systems associated with fossil fuel operations, fracking, nuclear or mining operation. Sustainalytics considers the activity to be aligned with market practice.
 - Protection zones along surface watercourses and buffer zones around farms that prevents runoff of agrochemicals into rivers or coastal water basin. Sustainalytics considers the activity to be aligned with market practice.
 - Research, development and procurement of sustainable and biodegradable fertilizers supported by certification schemes including: i) IFOAM certified organic fertilizer;¹² ii) Friends of the Earth certified Sustainable Farming Products;¹³ and iii) International Fertilizer Association certified Protect & Sustain certification.¹⁴ Krungsri has confirmed with Sustainalytics that these certified sustainable fertilizers will be limited to sustainable agricultural farms supported by IFOAM standard¹⁵ or Farm Sustainability Assessment (Silver and above).¹⁶ Sustainalytics views that research, development and procurement of sustainable and biodegradable fertilizers are credible green activity and aligned with market practice.
 - Additionally, the Bank will also finance the manufacturing of organic fertilizers certified with credible certifications as mentioned above. Sustainalytics notes that the organic fertilizers produced will potentially be applied to conventional agriculture. Without targeted or precise application, these fertilizers are associated with downstream negative impacts, including GHG emissions, soil leaching, and run-off into local ecosystems. Nevertheless, Sustainalytics recognizes that the production of organic fertilizers of biological origin is substantially less carbon-intensive than production using fossil fuels counterparts.
 - Plastics collection and recycling facilities including plastic waste collection services or infrastructure such as waste bins. Krungsri has confirmed to Sustainalytics that waste will be segregated at source and exclude chemical recycling of plastic. Sustainalytics considers the activity to be aligned with market practice.

¹² IFOAM, "IFOAM Family of Standards", at: <https://www.ifoam.bio/our-work/how/standards-certification/organic-guarantee-system/ifoam-family-standards>

¹³ Friends of Earth, "Standard and Certifications", at: <https://friendoftheearth.org/standards-and-certifications/>

¹⁴ International Fertilizer Association, "Protect & Sustain Certification", at: <https://www.fertilizer.org/key-priorities/fertilizer-production/protect-sustain-certification/>

¹⁵ IFOAM, "Standards and Certifications", at: <https://www.ifoam.bio/our-work/how/standards-certification>

¹⁶ Farm Sustainability Assessment, at: <https://saipatform.org/fsa/>

- Krungsri has communicated to Sustainalytics that plastic waste will be removed from the rivers or coastal water basins as part of clean-up measures and will be either recycled, reused or repurposed. The recycling of such plastic waste will involve only mechanical recycling. In case of reuse or repurpose of such plastics waste, Krungsri confirmed that such process would result in products being put back to their original use with very minimal or without any further pre-processing required. Sustainalytics considers the activity to be aligned with market practice.
- Manufacturing and procurement of plastics packaging substitutes with sustainable and biodegradable materials such as paper packaging and organic cotton bags. Krungsri has confirmed with Sustainalytics that in case of procurement of biogenic input (biomass), the Bank will use sustainably sourcing of materials certified according to the following standards and schemes: i) Forest Stewardship Council (FSC);¹⁷ ii) Bonsucro;¹⁸ iii) International Sustainability and Carbon Certification (ISCC Plus);¹⁹ iv) Roundtable of Sustainable Biomaterials (RSB);²⁰ and v) Round Table on Responsible Soy (RTRS).²¹ Sustainalytics considers the activity to be aligned with market practice.
- Within sustainable production for fisheries, aquaculture, seafood and seafood value chain, Krungsri intends to finance sustainable production, waste management and reduction measures in seafood value chain. The expenditure includes following activities:
 - Sustainable production projects for fisheries, aquaculture, seafood, and seafood supply chain certified by Marine Stewardship Council (MSC),²² Aquaculture Stewardship Council (ASC)²³ and Best Aquaculture Practices (BAP) two stars and above.²⁴
 - Trade or retail of seafood products with the MSC and ASC label.
 - Financing fishery businesses in obtaining the MSC certification to be registered under Fishery Improvement Project of the International Seafood Sustainability Foundation.²⁵ Krungsri has communicated to Sustainalytics that financing of such projects will be limited to engaging consultants to help obtaining the MSC certification.
 - Financing traceability systems to facilitate operations, facilities and supply chains in the fishing industry to achieve the MSC certification.
 - Sustainalytics considers expenditures in these activities to be aligned with market practice.
- Within marine ecosystem restoration, Krungsri intends to finance active and passive restoration projects including: i) conservation, improvement and restoration of marine and coastal ecosystems; ii) restoration of artificial habitat using biodegradable potato starch and recycled materials; and iii) restoration of seagrass meadows, kelp forests and coral reef. The investments further include financing information systems, technology and instruments dedicated to sustainable fishery and aquaculture management, disaster resilience and new promising marine restoration techniques. Sustainalytics considers expenditures in these activities to be aligned with market practice.
- Within offshore renewable energy, Krungsri intends to finance offshore wind energy projects. Krungsri has confirmed with Sustainalytics to excluded financing projects that harm marine ecosystems or are involved in any controversy.

¹⁷ FSC, at: <https://connect.fsc.org/document-centre>

¹⁸ Bonsucro, at: <https://bonsucro.com/>

¹⁹ ISCC, at: <https://www.iscc-system.org/certification/certificate-database/all-certificates/>

²⁰ RSB, at: <https://rsb.org/why-choose-rsb/#>

²¹ RTS, at: <https://responsiblesoy.org/certificacion?lang=en>

²² Marine Stewardship Council, at: <https://www.msc.org/>

²³ Aquaculture Stewardship Council, at: <https://asc-aqua.org/>

²⁴ Best Aquaculture Practice, at: <https://www.bapcertification.org/>

²⁵ WWF, "What are fishery improvement projects and how do they work?", at: <https://www.worldwildlife.org/pages/what-are-fishery-improvement-projects-and-how-do-they-work>

- Under Circular Economy category, the Bank may finance or refinance expenditures related to the following:
 - Procurement of waste such as agricultural and forestry wastes or municipal solid wastes intended to be used in waste-to-energy projects. The Bank confirmed that it will limit the financing towards procurement of waste and will not extend it to the construction and installation of waste to energy projects. Krungsri has confirmed segregation of recyclable wastes, including plastics and metals. Sustainalytics recognizes that energy from waste could take out of circulation potentially recyclable materials and undermine two of the main objectives of a zero-waste circular economy, i.e., waste prevention and recycling. Additionally, for such projects to have low emissions intensities, the composition of residual waste, particularly fossil carbon content, is an important consideration. However, Sustainalytics also notes that due to constraints on recycling in many parts of the world, energy from waste can offer a better residual waste management option than landfills in many cases. Sustainalytics recommends Krungsri to promote the removal of recyclables, especially plastics and metals, and the monitoring of thermal efficiency of the financed facilities.
 - Collection and transportation of non-hazardous waste such as recycled plastic packaging materials, sludge, paper and paper products, polyethylene terephthalate (PET) bottles, steel scrap, aluminium cans and glass for recycling. The Bank has confirmed: i) waste collection supports source segregation; and ii) waste collection vehicles financed will be required to meet the emissions threshold defined under the Clean Transportation category.
 - Processing or treatment of waste including scrap metals such as steel or aluminium, as well as PET bottles or glass into secondary raw materials. Krungsri has confirmed with Sustainalytics to exclude chemical recycling of plastic.
 - Projects that support circular economy such as: i) industrial symbiosis; ii) methane capture; iii) biogas facilities for agriculture mills; and iv) sustainable packaging. Expenditures under this category may include:
 - Financing of machinery and pipeline equipment to transfer waste steam generated from waste incinerator to an ethanol production plant as a part of industrial symbiosis. Krungsri has confirmed to Sustainalytics that financing of such projects will be limited to ethanol production plants which use sustainably sourced feedstock which are certified according to the following standards and schemes: i) Forest Stewardship Council (FSC);²⁶ ii) Biomass Biofuels voluntary scheme (2BSvs);²⁷ iii) Bonsucro;²⁸ iv) International Sustainability and Carbon Certification (ISCC Plus);²⁹ v) Roundtable of Sustainable Biomaterials (RSB);³⁰ and vi) Round Table on Responsible Soy (RTRS).³¹
 - Waste-to-energy plants to produce methane using agricultural waste, waste from Roundtable on Sustainable Palm Oil (RSPO) certified palm oil³² and sugar bagasse as feedstock. Such activities may also include financing infrastructure for cleaning, pressing of biomass feedstock. The Bank has confirmed to exclude methane capture from fossil fuel and industrial-scale livestock production.
 - Procurement of recycled fibres to be used as primary input in the production of packaging material with an aim to reduce carbon emission intensity for production per unit of packaging.

²⁶ FSC, at: <https://connect.fsc.org/document-centre>

²⁷ European Commission, "Voluntary schemes", at: https://energy.ec.europa.eu/topics/renewable-energy/bioenergy/voluntary-schemes_en. Sustainalytics notes that 2BSvs requires only compliance with EU regulatory thresholds and has not been demonstrated to promote best-in-class performance, which has been critiqued by some observers.

²⁸ Bonsucro, at: <https://bonsucro.com/>

²⁹ ISCC, at: <https://www.iscc-system.org/certification/certificate-database/all-certificates/>

³⁰ RSB, at: <https://rsb.org/why-choose-rsb/#>

³¹ RTS, at: <https://responsiblesoy.org/certificacion?lang=en>

³² RSPO refers to Roundtable on Sustainable Palm Oil, a non-profit organization that has developed a set of environmental and social criteria which companies must comply in order to produce Certified Sustainable Palm Oil (CSPO).

- Sustainalytics considers expenditures in this activity to be aligned with market practice.
- Under the Clean Transportation category, the Bank may finance or refinance projects related to the design, development, manufacture, maintenance and operations of vehicles as well as supporting infrastructure in accordance to the following criteria:
 - Passenger vehicles such as private cars and commercial vehicles with either zero direct tailpipe emissions or with tailpipe emissions intensity below 50 gCO₂e/km based on Worldwide Harmonised Light Vehicle Test Procedure until 2025. Sustainalytics considers this expenditure to be aligned with market practice.
 - Public passenger vehicles such as light rail transit, metro, tram, trolleybus, bus, and rail with zero direct tailpipe emissions or with tailpipe emissions intensity below 50 gCO₂e/passenger-kilometre. Sustainalytics considers this expenditure to be aligned with market practice.
 - Low-carbon commercial vehicles, such as trucks and trains, for freight transportation with an emissions intensity threshold of 25 gCO₂e/tonne-kilometre (tkm). Krungsri has confirmed to Sustainalytics that vehicles used to transport fossil fuels or fossil fuels blended with alternative fuels will be excluded from financing under the Framework.
 - Freight rails with zero direct emissions or with tailpipe emission intensity below 25 gCO₂e/tkm. Krungsri has confirmed to Sustainalytics that it will exclude financing vehicles with a primary purpose to transport fossil fuel freight.³³ Sustainalytics considers this expenditure to be aligned with market practice.
 - Road freight vehicles, such as commercial trucks, with zero direct emissions. Krungsri has confirmed to Sustainalytics that it will exclude financing vehicles used to transport fossil fuels or fossil fuels blended with alternative fuels. Sustainalytics considers this expenditure to be aligned with market practice.
 - Battery powered cargo ships and ships with hybrid electricity transmission systems. Sustainalytics notes that market expectation is to finance low-carbon ships such as fully electric or hydrogen powered ships to ensure positive environmental impact. Thus, Sustainalytics consider the financing of ships with hybrid electricity transmission systems without information on how much the ships are expected to run on electricity and any future commitment to increase the reliance on electricity or low-carbon fuel, to be a deviation from market practice as such investments will create a fossil fuel lock-in and therefore extend the shelf life of such ships. Sustainalytics encourages the Bank to, where feasible, to transition to low carbon ships and report on the positive impacts achieved on such financed projects.
 - Manufacturing, and recycling of rechargeable batteries, fuel cells, charging infrastructure such as electric charging stations³⁴ and hydrogen fuelling stations. Krungsri has confirmed to Sustainalytics that financing development and manufacturing rechargeable batteries will be limited to support electric vehicles. Further the Bank confirmed that the projects for recycling rechargeable batteries and fuel cell will accompany robust waste management processes to mitigate associated risks from e-waste or wastes from electrical and electronic equipment. Sustainalytics considers this expenditure to be aligned with market practice.
 - Consumer loans for electric vehicles. Sustainalytics considers this expenditure to be aligned with market practice.
- Under Climate Smart Agriculture, Krungsri may finance or refinance projects or technologies designed to achieve at least one of the following: i) 20% increase in productivity yield without increase in GHG emissions per unit of product; ii) 20% reduction in GHG emissions per unit of product; or iii) 20% reduction in post-harvest losses. Further, Krungsri intends to finance activities according to IFC's Climate Finance – Climate Smart Agri Framework.³⁵
 - Financing drip irrigation, central pivot irrigation system, solar water pumps, replacing chemical fertilizer with organic fertilizer, and pest management using organic pesticides to reduce crop and pre-harvest losses.

³³ The share of fossil fuel freight transported should not be more than 25% in mass.

³⁴ The Bank has confirmed that parking facilities will not be financed as a part of financing EV charging stations and supporting electric infrastructure.

³⁵ Krungsri has shared the document internally with Sustainalytics. It was noted that the focus area within the document include: i) Animal protein, ii) Land and Crops and iii) Reducing losses. Krungsri has confirmed to finance expenditures within Land and Crops and Reducing losses under the Framework.

- Investments in storage facilities (temperature and moisture control to tackle changing conditions from climate change), warehouses achieving or expected to achieve any of the certifications mentioned under the Green Buildings category, agriculture waste to energy solutions, using damaged crops for biofuel and composting waste to produce organic fertilizer. Krungsri has confirmed to Sustainalytics that i) investments in storage facilities will be supported by vulnerability assessment and adaptation plan to identify and responsibly manage the identified risks; and ii) damaged crops or agricultural waste from non-RSPO certified palm oil operations will be excluded from financing under the Framework.
- Sustainalytics notes that financing will exclude expenditure related to technical assessment or verification by IFC or third-party.
- Krungsri has confirmed with Sustainalytics to exclude financing animal protein related activities under the Framework.
- Sustainalytics considers expenditures under this category to be aligned with market practice.
- Under the Energy Efficiency category, the Bank may finance or refinance projects and technologies that are designed to achieve at least 20% increase in energy efficiency or upgrade of any of the certification levels as mentioned under Green Buildings category in residential, commercial, and industrial buildings. Activities under this category may include:
 - Projects that improve energy efficiency in battery energy storage system connected to renewable energy sources. This may include replacement of old batteries with lithium-ion batteries to reduce energy loss in batteries storage systems. Krungsri has confirmed that the financing will be limited to the batteries connected to renewables.
 - Smart grid technologies including advanced metering and communications infrastructure, demand response management systems, management systems for distributed energy sources, phasor measurement units and distribution automation (DA) systems for monitoring and control of voltage across networks using sensor, processors and communications technologies which has domestic, commercial and industrial applications. Krungsri has confirmed to Sustainalytics that such technologies will be financed in grids integrated with renewable energy sources and exclude installation in grids that are connected or dedicated to fossil fuel power.
 - Energy management systems which include: i) upgrades, modifications, services, and improvements to industrial and manufacturing processes that result in an increase in energy efficiency; and ii) technological upgradation including product design, service, redesign, addition, and modification of features that specifically reduce energy consumption and increase energy efficiency. Sustainalytics notes that Krungsri will exclude financing carbon intensive activities such as oil or gas-fired boilers, cogeneration, and CHP units, but may include financing activities in steel and cement industries, which are considered to come under hard to abate sectors. Krungsri has communicated to Sustainalytics that financing of such activities will be limited to near zero emissions steel and cement production facilities as defined by International Energy Agency (IEA).³⁶ Krungsri has communicated to Sustainalytics that all the proceeds for these industries will be disbursed by 2030. Sustainalytics notes the following:
 - Regarding near zero emissions steel, IEA defines an emissions threshold of 0.4 tCO₂e/t of crude steel, for steel produced with no scrap use and 0.05 tCO₂e/t of steel, for steel produced with 100% scrap use. Sustainalytics notes that such thresholds are lower than Transition Pathway Initiative's (TPI) below 1.5°C scenario benchmark for steel sector which defines an emissions threshold of 0.82 tCO₂e/t of steel in the year 2030.³⁷
 - Regarding near zero emissions cement, IEA defines an emissions threshold of 0.125 tCO₂e/t of cementitious product for cement produced with 100% clinker use and 0.04 tCO₂e/t of cementitious product for cement produced from 100% supplementary cementitious materials. Sustainalytics notes that

³⁶ IEA, "Page 144 of World Energy Outlook 2022", (2022), at: <https://iea.blob.core.windows.net/assets/830fe099-5530-48f2-a7c1-11f35d510983/WorldEnergyOutlook2022.pdf>

³⁷ Transition Pathway Initiative, "Carbon performance assessment of steel makers: note on methodology", (2021), at: <https://transitionpathwayinitiative.org/publications/77.pdf?type=Publication>

such thresholds are lower than TPI's below 1.5°C scenario benchmark for cement sector which defines an emissions threshold of 0.37 tCO₂e/t of cementitious product in the year 2030.³⁸

- Sustainalytics considers such expenditures to be credible given their potential to support near zero emissions cement and steel production and create positive environmental impact.
 - Building technologies such as LED lighting, smart meters for households and replacement of existing boilers with electric boilers.
- Sustainalytics considers expenditures under this category to be aligned with market practice.
- Under the Green buildings category, Krungsri may finance or refinance expenditures related to residential, commercial, and industrial buildings^{39,40} according to the following criteria:
 - Acquisition and construction of buildings that have achieved or are expected to achieve the following certification levels: i) LEED (Gold or above);⁴¹ ii) BREEAM (Excellent or above);⁴² iii) EDGE;⁴³ or iv) any equivalent green building certification recognized within Thailand. While Sustainalytics considers these aforementioned certifications credible and aligned with market practice, Sustainalytics notes that it is a market expectation to specify all schemes and encourages Krungsri to report on any equivalent local green building certification it intends to include.
 - Acquisition and construction of data centers that have achieved or are expected to achieve the following certification levels: i) NABERS (4.5 or above);⁴⁴ ii) SS564 Singapore Green Data Center Standard;⁴⁵ iii) Thai's Rating of Energy and Environmental Sustainability (Gold or above),⁴⁶ or equivalent local or international standard such as LEED (Gold or above). The Framework limits such expenditures to include the data centres that achieve Power Usage Effectiveness below 1.5 which Sustainalytics considers as market practice
 - Renovation of buildings that result or are expected to result in at least a 20% improvement in energy efficiency over the initial performance or achieve or expected to achieve above certification levels. Sustainalytics notes that retrofits resulting in performance improvements of 20% will result in some environmental benefit. However, Sustainalytics considers market practice to ensure that retrofits will achieve emissions or energy performance improvements of at least 30% and encourages the issuer to prioritize investment leading to such quantitative improvement.
- Under the Pollution, Prevention and Control category, Krungsri may finance or refinance air pollution and greenhouse gas mitigation related equipment such as: i) flue gas desulphurization; ii) selective catalytic reduction; iii) fabric filters; and iv) nature-based carbon sequestration projects, including wetlands conservation. The Bank has confirmed to Sustainalytics that flue gas desulphurization and selective catalytic reduction equipment will be limited to pollution resulting from biofuel-powered assets and technologies. The Bank has further confirmed the exclusion of financing of the following: i) research, development and commercial-scale carbon capture, storage and utilization applied to hard-to-abate industrial sectors that are inherently carbon intensive; ii) captured carbon intended to be utilised for enhanced oil recovery; and iii) activities that inherently rely on fossil fuels. Sustainalytics consider these expenditures to be aligned with market practice.
- Under the Renewable Energy category, Krungsri may finance or refinance, projects related to manufacturing of components, installation, construction, and operating of electricity generation facilities in accordance with the following eligible criteria:

³⁸ Transition Pathway Initiative, "Carbon performance assessment of cement producers: note on methodology", (2021), at: <https://www.transitionpathwayinitiative.org/publications/76.pdf?type=Publication>

³⁹ Krungsri has communicated to Sustainalytics that financing of commercial and industrial buildings will be limited to construction, acquisition and renovation of the building envelop and exclude financing industrial production equipment, operations, or technology.

⁴⁰ The Bank has confirmed exclusion of buildings and industrial facilities designed or intended for activities that are carbon intensive.

⁴¹ LEED, "LEED rating system", at: <https://www.usgbc.org/leed>

⁴² BREEAM, "BREEAM Products and Tools", at: <https://bregroup.com/products/>

⁴³ EDGE, at: <https://edgebuildings.com/certify/certification/>

⁴⁴ NABERS, "What is Nabers?", at: <https://www.nabers.gov.au/about/what-nabers>

⁴⁵ Singapore Standards, "SS 564-1:2020", at: <https://www.singaporestandardseshop.sg/Product/SSPdtDetail/ac609aae-e97c-456f-a7a1-5258a2816b45>

⁴⁶ TREES-EB, "Thai's Rating of Energy and Environmental Sustainability", at: https://tgbi.or.th/uploads/trees/2017_03_TREES-EB-Eng.pdf

- Concentrated solar heat and power generation plants and solar thermal plants where 85% or more of the electricity generated is derived from solar energy sources.
- Wind energy projects including on-shore and off-shore wind energy generation. In case balsa wood will be used in the manufacturing of wind turbines, the wood will be certified by the Forest Stewardship Council (FSC)⁴⁷ or Programme for the Endorsement of Forest Certification (PEFC)⁴⁸.
- Hydropower projects with generation capacity of less than 25 MW and which meets one of the following criteria: i) run-of river projects without an artificial reservoir; ii) those with a power density greater than 10 W/m²; or iii) an emissions intensity below 50 gCO₂e/kWh. For all new hydropower projects, the Bank has confirmed that an environmental and social impact assessment will be conducted by a credible body per project to ensure that no significant environmental and social risks, negative impacts, or controversies have been identified.
- Other low-carbon energy sources such as:
 - Geothermal energy projects with a life cycle emissions threshold⁴⁹ of 100 gCO₂/kWh or lower.
 - Biomass projects using both waste and non-waste feedstock. Waste feedstock includes municipal solid waste, wet waste from agricultural activities and non-waste feedstock includes oil crops, sugar and starch crops and bagasse. Krungsri has confirmed to Sustainalytics that biomass projects using non-waste feedstock will adhere to following criteria: i) for electricity generation, the life cycle GHG emissions intensity will be below 100 gCO₂e/kWh; and ii) for biofuels production installations the life cycle emissions thresholds will be at least 65% lower than fossil fuel baseline^{50,51}. The Bank has further confirmed that: i) source segregation of recyclables from municipal solid waste will be carried out, prior to incineration; and ii) non-waste feedstock will exclude biomass derived from sources of high biodiversity, that competes with food sources or depletes carbon pool; and iii) sustainably sourced feedstock which are certified according to the following standards and schemes: i) Forest Stewardship Council (FSC);⁵² ii) Biomass Biofuels voluntary scheme (2BSvs);⁵³ iii) Bonsucro;⁵⁴ iv) International Sustainability and Carbon Certification (ISCC Plus);⁵⁵ v) Roundtable of Sustainable Biomaterials (RSB);⁵⁶ and vi) Round Table on Responsible Soy (RTRS).⁵⁷
 - Hydrogen production powered only by renewable electricity.
 - The Bank has confirmed that the manufacturing of components for onshore solar, wind, hydropower and geothermal, facilities financed will be wholly dedicated to components for renewables.
- Sustainalytics consider these expenditures to be aligned with market practice.
- Under the Sustainable Forestry category, Krungsri may finance or refinance expenditures related to the following:

⁴⁷ Forest Stewardship Council, "What can be FSC certified", at: <https://anz.fsc.org/what-can-be-fsc-certified>

⁴⁸ Programme for the Endorsement of Forest Certification, at: <https://pefc.org/discover-pefc/what-is-pefc>

⁴⁹ Krungsri has communicated to Sustainalytics that, life cycle emissions assessment will be done by Partnership for Carbon Accounting Financials (PCAF), based on disclosures of borrower's environmental and social management plan. PCAF is a global partnership of financial institutions that work together to develop and implement a harmonized approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.

⁵⁰ Baseline as established under the EU Renewable Energy Directive II, the RSB Guidelines and the EU Taxonomy Delegated Act.

⁵¹ European Commission, "Biofuels", at: https://energy.ec.europa.eu/topics/renewable-energy/bioenergy/biofuels_en#sustainability-criteria

⁵² FSC, at: <https://connect.fsc.org/document-centre>

⁵³ European Commission, "Voluntary schemes", at: https://energy.ec.europa.eu/topics/renewable-energy/bioenergy/voluntary-schemes_en.

Sustainalytics notes that 2BSvs requires only compliance with EU regulatory thresholds and has not been demonstrated to promote best-in-class performance, which has been critiqued by some observers.

⁵⁴ Bonsucro, at: <https://bonsucro.com/>

⁵⁵ ISCC, at: <https://www.iscc-system.org/certification/certificate-database/all-certificates/>

⁵⁶ RSB, at: <https://rsb.org/why-choose-rsb/#>

⁵⁷ RTS, at: <https://responsiblesoy.org/certificacion?lang=en>

- Sustainable forestry activities including: i) forest conservation and monitoring through remote sensing and satellite imagery technology; ii) commissioned studies⁵⁸ including auditing and monitoring; iii) afforestation or reforestation; and iv) commercial forestry. The Bank has confirmed that forest conservation, afforestation and commercial forestry projects will be accompanied by a sustainable forest management and that the plant and tree species used will be native or well adapted to local conditions. These projects will be certified to the Forest Stewardship Council (FSC),⁵⁹ the Programme for the Endorsement of Forest Certification (PEFC)⁶⁰ or Sustainable Forestry Initiative (SFI).⁶¹ Sustainalytics views these certification schemes as robust and credible.
 - To promote sustainable forestry and sustainable sourcing, the Bank will be financing: i) construction projects certified by FSC⁶² and PEFC⁶³, which use certified timber, wood and fiber products and ii) certification program expenses for small forest owners that comply with the requirements of sustainable management plan and PEFC.⁶⁴
 - Sustainalytics consider these expenditures to be aligned with market practice.
 - Under the Waste Management and Resource Efficiency category, Krungsri may finance or refinance expenditures related to the following:
 - Waste management projects including collection, processing and recycling of both industrial and municipal non-hazardous solid waste such as scrap metals, used plastic containers/bottles, used or broken glass bottles, packaging waste like paper and cardboard. The Bank has confirmed to Sustainalytics that: i) chemical recycling of plastics will be excluded; ii) recycling activity will exclude e-waste; and iii) source segregation of recyclables from municipal solid waste will be carried out.
 - Waste management projects including, i) collection of non-hazardous waste such as solid waste, mixed residual waste, food waste; and ii) waste treatment facilities, systems and treatment of waste prior to recycling. The Bank has confirmed to Sustainalytics that waste collection will support source segregation of waste and will exclude financing of waste collection vehicles.
 - Treatment of bio-waste to produce compost for agricultural use through composting.
 - Sustainalytics considers expenditures in these activities to be aligned with market practice.
 - Under the Access to Essential Services category, Krungsri may finance or refinance healthcare facilities, education and activities that promote digital inclusion for low-income households,⁶⁵ rural communities,⁶⁶ vulnerable groups,⁶⁷ elderly person with disabilities as well as the general public in Thailand. Activities under this category include:
 - Construction and operation of public and privately owned hospitals and healthcare facilities and supplying medical equipment to these hospitals. Operational expenditures include wages, medical supplies, and maintenance of medical equipment and infrastructure. Sustainalytics notes that while the Framework defines target populations for the category, it does not guarantee access of privately owned hospitals and healthcare facilities to the identified target populations regardless of their ability to pay. Sustainalytics views investments in private healthcare delivery services without guaranteed access to target populations to have no credible social impact as the fees in private hospitals and healthcare facilities continue to rise representing a barrier to the target populations to access these services. This is therefore considered to be a substantial deviation from what Sustainalytics considers to be a good practice for social financing related to the provision of healthcare.

⁵⁸Commissioned studies are conducted towards sustainable forestry with the aim to implement sustainable forestry programs upon confirmation of feasibility.

⁵⁹ Forest Stewardship Council, at: <https://fsc.org/en/about-us>

⁶⁰Programme for the Endorsement of Forest Certification, at: <https://www.pefc.org/>

⁶¹ Sustainable Forestry Initiative, Standards, at: <https://www.scsglobalservices.com/services/sfi-forestry-certification-services>

⁶² See Footnote No 47.

⁶³PEFC, "Certify your construction project", at: <https://pefc.org/for-business/supply-chain-companies/certify-your-construction-project>

⁶⁴ PEFC, "Certification for small forest owners", at: <https://pefc.org/for-business/forest-owners/certification-for-small-forest-owners>

⁶⁵ As per Thailand's National Housing Authority's (NHA), a low-income household is defined as a household whose gross monthly income is under 60 percentile of income distribution bracket based on the National Statistical Office's Housing and Population Census.

⁶⁶ The Framework defines rural communities as population outside of Greater Bangkok Metropolitan Area, Bangkok, Thonburi, Samut Prakan and Nonthaburi.

⁶⁷ The Framework defines vulnerable groups as groups with underlying medical conditions or higher sensitivity to health concerns.

- Construction and operation of public education facilities such as schools, universities, teaching and vocational centers, and student housing and supplying equipment's to above facilities. The Bank has confirmed to Sustainalytics that the aforementioned educational facilities will be accessible to all regardless of ability to pay. Sustainalytics considers such expenditures will enhance educational services and benefit the targeted populations in Thailand.
- Deployment of fiber optic network to promote digital inclusion in rural communities.⁶⁸ These investments are aligned with market practice.
- Under the Employment Generation category, Krungsri may provide loans to Micro, Small and Medium enterprises (MSMEs),^{69,70} and women owned MSMEs.⁷¹ Additionally, the Bank will be providing microfinance to women with lower income.⁷² The Bank will adhere to the responsible lending practices defined by The Thai Bankers' Association⁷³ when providing loans to the targeted population. Sustainalytics considers these investments to be aligned with market practice.
- Under the Socioeconomic Advancement and Empowerment category, Krungsri may finance or refinance the following:
 - Provision of loans to individuals from low-income households⁷⁴ to purchase motorcycles and motor vehicles. The Bank has confirmed to Sustainalytics that the purchased motorcycles and motor vehicles will adhere to the current emission standards under Thailand's Euro 4 emissions standards. Sustainalytics also notes that the Bank will extend financial advantage to the borrowers, with 5% of downpayment in comparison to the average 20% of downpayment for vehicle loans. Additionally, the Bank also has sustainable banking and responsible lending practices⁷⁵ in place to mitigate financial risks to borrowers. Sustainalytics notes that the definition of target population is based on gross monthly income as opposed to the median income. Sustainalytics considers it good practice for issuers to define low-income target population with an upper threshold at or below the annual median income for a municipality or a regional level (with rare exceptions in high-cost markets). Nevertheless, Sustainalytics encourages the Bank to prioritize lending to low-income population below median income, in order to maximize the social benefit and report on the impacts on beneficiaries.
 - The Bank will be providing business loans to: i) women owned MSMEs,^{76,77} ii) women with lower income,⁷⁸ and iii) disadvantaged groups of women. Sustainalytics opinion for these activities is in line with expenditures under Employment Generation. However, Sustainalytics encourages the Bank to disclose and report on all the relevant beneficiaries defined under 'disadvantaged groups of women'.
- Under Affordable Housing category, Krungsri may finance or refinance following:

⁶⁸ See Footnote 66.

⁶⁹ The Office of SMEs Promotion, "Definition of MSMEs", at: <https://www.sme.go.th/en/page.php?modulekey=363>

⁷⁰ The financing will not be extended towards MSMEs that are related to child labour and poor working conditions; exclusionary criteria around negative-impact activities such as tobacco, firearms/weapons, palm oil (in some), fossil fuel operations, etc.

⁷¹ The Framework defines women owned MSMEs as majority-owned or majority-managed/led (at the most senior level) by women (majority means more than 50%) AND meet the following criteria: i) ≥ 20% owned by woman/women; AND ii) has ≥ 1 woman as CEO/COO/President/Vice President; and iii) has ≥ 30% of the board of directors composed of women, where a board exists. This will include loans to individual women purely for business activities and not personal use.

⁷² See Footnote 65.

⁷³ Krungsri, "Sustainable Banking Guidelines, Responsible Lending by The Thai Bankers' Association", (2019), at: <https://www.krungsri.com/en/esg/sustainable-banking/framework-practices>

⁷⁴ See Footnote 65.

⁷⁵ See Footnote 73.

⁷⁶ See Footnote 70.

⁷⁷ See Footnote 71.

⁷⁸ See Footnote 65.

- Loans for purchase or construction of new house or renovation of an existing house to eligible individuals from low-income⁷⁹ and middle-income households⁸⁰ as per definitions of Thailand's National Housing Authority's (NHA). Sustainalytics notes that the target population includes individuals from middle-income households whose gross monthly income is under 80 percentile of income distribution bracket. Nevertheless, in order to ensure a contribution to increasing access to affordable housing, Sustainalytics considers good practice to define a target population with an upper threshold at or below the annual median income at the municipal or regional level. Sustainalytics notes that the Framework follows Thailand's government scheme which includes middle income people with income above the median household income in Thailand. Given the relatively high thresholds used by the Thailand government's affordable housing scheme, Sustainalytics encourages Krungsri to prioritize loans to low-income households that are below the median income in order to maximize the social benefit and report on the positive social impact of its financing, to the extent possible.
 - Development of new or retrofit of existing residential projects by NHA that will be targeted towards eligible individuals from low-income⁸¹ and middle-income households⁸² as per definitions. Retrofitting projects to include repainting, network and electrical infrastructure upgrade in affordable housing projects. These investments are aligned with market practice.
 - The Bank has communicated to Sustainalytics that they will rely on the subsidies provided by NHA that ensures affordability and financial advantages to the target population as following: i) NHA will subsidize THB 80,000 (USD 2,299) from the total cost of THB 470,000 (USD 13,508), which further reduces the selling price to THB 390,000 (USD 11,209), providing subsidy of 2%; ii) no down payment requirement; and iii) application for housing loan which will be collateral free; and iv) for the first 5 years NHA guarantees loan payment. The Bank also has responsible lending practices⁸³ in place to mitigate financial risks borrowers and to avoid predatory lending practices.
 - The Framework includes an exclusionary list of activities excluded from its green, social and sustainability issuances. Sustainalytics views the exclusion of activities that have potential negative environmental or social impacts, to further strengthen the Bank's Framework.
 - Project Evaluation and Selection:
 - The head of each business segment in the Bank will be responsible for project evaluation and selection in line with the Framework's eligibility criteria. The head of each business segment will also be responsible for providing a final approval of the eligible assets. On an annual basis, the Planning Department in each business segment will conduct a periodic review of the eligible assets to ensure compliance with the Framework.
 - Each Business Segment and Risks Management Group will assess environmental and social (E&S) risks associated with the portfolio of eligible assets. The Bank has sustainable lending guidelines in place that takes into account ESG risk management. Sustainalytics considers these environmental and social risk management systems to be adequate and aligned with market expectation. For additional details, refer to Section 2.
 - Based on this established process for project evaluation and selection and the presence of a risk management system, Sustainalytics considers this process to be in line with market practice.
 - Management of Proceeds:
 - The Bank's Strategic Assets and Liabilities Management Department will manage the allocation of the proceeds on a quarterly basis. The Bank has an internal monitoring system in place to track the use of proceeds.

⁷⁹ As per Thailand's National Housing Authority's (NHA), a low-income household is defined as a household whose gross monthly income is under 60 percentile of income distribution bracket based on the National Statistical Office's Housing and Population Census, at: <https://www.nha.co.th/wp-content/uploads/2021/08/1.-Sustainable-Finance-Framework-NHA-Eng-Sustainability-bond-2021-final.pdf>

⁸⁰ As per Thailand's National Housing Authority's (NHA), a middle-income household is defined as a household whose gross monthly income is under 80 percentile of income distribution bracket based on the National Statistical Office's Housing and Population Census.

⁸¹ See Footnote 79.

⁸² See Footnote 80.

⁸³ See Footnote 73.

- The Bank intends to allocate the proceeds within two years of issuance. Pending full allocation, unallocated proceeds will be invested in accordance with Krungsri Treasury's existing liquidity management procedures such as short-term money market investments and government bonds. The Bank has confirmed to exclude temporary allocations towards non-green activities.
- Based on the presence of an internal tracking system and the disclosure of the temporary use of proceeds, Sustainalytics considers this process to be in line with market practice.
- Reporting:
 - Krungsri intends to report on the allocation of proceeds and the corresponding impact on its website on annual basis until full allocation. Allocation reporting will include the amount of funds allocated to the eligible assets, the number of clients that make up the amount of funds allocated, the amount of funds allocated to replace or replenish eligible assets, the amount of unallocated proceeds and the share of financing versus refinancing.
 - The Bank will report on the qualitative and quantitative impact of the eligible projects where feasible at the category level based on ICMA's Harmonised Framework of Impact Reporting guidance.⁸⁴
 - Sustainalytics notes the Bank's commitment to ensuring no double accounting of financed projects and assets across all allocation and impact reporting commitments made under the Framework.
 - Based on the commitment to both allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

Alignment with Sustainability Bond Guidelines 2021

Sustainalytics has determined that the Bank of Ayudhya (Krungsri) Sustainable Finance Framework aligns with the four core components of the GBP, SBP, GLP and SLP. For detailed information, please refer to Appendix 1: Sustainability Bond/Sustainability Bond Programme External Review Form.

Section 2: Sustainability Strategy of Krungsri

Contribution to Krungsri's sustainability strategy

Sustainalytics is of the opinion that Krungsri demonstrates a commitment to sustainability by integrating ESG considerations into its lending portfolio and focusing on responsible investments that aim to contribute to the achievement of the SDGs.⁸⁵ In 2023, the Bank identified the following issues material to their sustainable development that include: i) climate change management, ii) environmental management and resource efficiency, iii) responsible lending, iv) financial inclusion, and v) social engagement.⁸⁶

In 2021, the Bank announced the Krungsri Carbon Neutrality Vision in conformity with the UN Sustainable Development Goal of Climate Action and in alignment with Thailand's National Determined Contributions to advance its sustainability agenda.⁸⁷ To achieve its carbon neutrality vision, the Bank introduced the Race to Net Zero Action Plan in 2022, which include goals to decarbonize emissions from: i) the financial portfolio by 2050, and ii) its own operations by 2030.⁸⁸ This action plan includes commitments to: i) phase out financing coal-fired power plants by 2030, ii) increase the social and sustainable finance portfolio to THB 50 billion to 100 billion (USD 1.4 billion to 2.9 billion) by 2030, and iii) promote the sustainable and green finance market development in Thailand.⁸⁹ To address social issues and environmental imperatives that support Thailand's transition to a low-carbon economy, the Bank focuses on the provision of financial products and services that take into account ESG aspects.⁹⁰ At the end of 2022, the Bank's social and sustainable finance portfolio had grown to THB 44 billion (USD 1.2 billion) against the 2030 target.⁹¹ Additionally, the Bank has extended loans of THB 9.15 billion (USD 266 million) towards renewable energy projects as of 2022 and has helped in avoiding approximately 1,253 tCO₂e of GHG emissions in 2022.⁹² The Bank has adopted the Thailand Greenhouse Gas

⁸⁴ ICMA, "Handbook Harmonised Framework for Impact Reporting June 2021", at: <https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Handbook-Harmonised-Framework-for-Impact-Reporting-June-2021-100621.pdf>

⁸⁵ Krungsri, "Krungsri and SDGs: Sustainability Vision", at: <https://www.krungsri.com/en/esg/sdgs>

⁸⁶ Krungsri, "Sustainability Report 2022", at: <https://www.krungsri.com/getmedia/e982e590-8248-4dec-998d-f5dc247f3469/sustainability-report-2022-en.pdf.aspx>

⁸⁷ Krungsri, "Integrating ESG for Sustainable Banking", at: <https://www.krungsri.com/en/esg/sustainable-banking/esg>

⁸⁸ Krungsri, "Sustainability Report 2022", at: <https://www.krungsri.com/getmedia/e982e590-8248-4dec-998d-f5dc247f3469/sustainability-report-2022-en.pdf.aspx>

⁸⁹ Ibid.

⁹⁰ Ibid.

⁹¹ Ibid.

⁹² Ibid.

Management Organization's Carbon Footprint for Organization⁹³ to manage its own carbon footprint and aid in efforts of reducing its GHG emissions.⁹⁴ On the social front, Krungsri has offered additional credit lines of THB 16.4 billion (USD 477 million) to 4,565 Small and Medium enterprises (SME) impacted by the COVID-19 pandemic to support their liquidity requirement under the Bank of Thailand's soft loan and special rehabilitation loan programmes and the Government Savings Bank's soft loan programme in 2022.⁹⁵

Krungsri is aware that its business operations and economic activities could directly or indirectly impact the environment.⁹⁶ Hence, the Bank has developed partnerships with the public and private sectors and civil society to understand and manage climate issues and integrate them into the Bank's business operations.⁹⁷ In 2021, Krungsri signed the statement of intent to adopt the Principles for Responsible Banking and the Principles for Responsible Banking to advance its implementation of sustainable banking practices across its business transactions.⁹⁸ The Bank joined the Thailand Carbon Neutral Network (TCNN) and was recognized as a Climate Action Leading Organization in 2022 while taking a lead role in the TCNN's Climate Finance sub-committee to promote financing for climate actions. Furthermore, the Bank has become a member of RE100 to advance the Thai industry toward adoption of 100% renewable energy usage.⁹⁹ To promote the carbon credit exchange system in Thailand, the Bank became a founding member of the Carbon Markets Club.¹⁰⁰

Sustainalytics is of the opinion that the Krungsri Sustainable Finance Framework is aligned with the Bank's overall sustainability strategy and initiatives and will further the Bank's action on its key environmental priorities.

Approach to managing environmental and social risks associated with the projects

Sustainalytics recognizes that the use of proceeds issued under the Framework will be directed towards eligible projects that are expected to have a positive environmental and social impact. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks possibly associated with the eligible projects may include issues involving land use and biodiversity issues associated with large-scale infrastructure development, occupational health and safety, stakeholder engagement, business ethics and predatory lending. While the Bank plays a limited role in the development of specific projects, by offering lending and financial services it is exposed to risks associated with the companies or projects that it may finance. Additionally, Sustainalytics considers business ethics and product governance as material issues for financial institutions and highlights the need for strong policies and procedures to ensure that these risks are sufficiently mitigated.

Sustainalytics is of the opinion that Krungsri is able to manage and mitigate potential risks through the implementation of the following:

- Krungsri has adopted the Thai Bankers' Association (TBA) ESG Declaration to strengthen its efforts to improve the resilience of the financial sector with regard to ESG and climate risk mitigation and adaptation. The ESG Declaration guides the Bank to incorporate ESG and climate considerations into its risk management processes, including scenario analysis and stress testing, to assess the impact on the Bank's operations, transactions and portfolios.¹⁰¹
- Krungsri balances its lending portfolio based on the TBA's Sustainable Banking Guidelines – Responsible Lending, which serve as a guide to establish a responsible lending strategy to manage its E&S impact and risks. The Bank assesses and manages ESG risks from its lending activities – such as biodiversity loss and occupational health and safety issues – identify material E&S impact and strive to develop a robust responsible lending strategy.¹⁰² Furthermore, the Bank has established an Environmental Disclosure Statement, which ensures that the Bank complies with applicable legislation and international agreements and responds appropriately when its operations result in environmental risks or negative impact.¹⁰³ Krungsri became signatory to UN Principles for

⁹³ Greenhouse Gas Mitigation Mechanism, "Methodology" at: <https://ghgreduction.tgo.or.th/th/tver-method/tver-methodology.html>

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ Krungsri, "Integrating ESG for Sustainable Banking", at: <https://www.krungsri.com/en/esg/sustainable-banking/esg>

⁹⁷ Ibid

⁹⁸ Krungsri, "Towards Sustainable Banking", at: <https://www.krungsri.com/en/esg/sustainable-banking/toward-sustainable-banking>

⁹⁹ Krungsri, "Sustainability Report 2022", at: <https://www.krungsri.com/getmedia/e982e590-8248-4dec-998d-f5dc247f3469/sustainability-report-2022-en.pdf.aspx>

¹⁰⁰ Krungsri, "Integrating ESG for Sustainable Banking", at: <https://www.krungsri.com/en/esg/sustainable-banking/esg>

¹⁰¹ The Thai Bankers' Association, "TBA's ESG Declaration", (2022), at: <https://www.krungsri.com/getmedia/b67203c0-780f-4821-93c3-0690cab2a540/esg-declaration-en.pdf.aspx>

¹⁰² Krungsri, "Sustainable Banking Guidelines Responsible Lending by The Thai Bankers' Association", (2019), at:

<https://www.krungsri.com/getmedia/456bfe5b-a59d-41c2-b8b3-397a6146ae57/sustainable-banking-guidelines.pdf.aspx>

¹⁰³ Krungsri, "Sustainability Report 2022", at: <https://www.krungsri.com/getmedia/e982e590-8248-4dec-998d-f5dc247f3469/sustainability-report-2022-en.pdf.aspx>

Responsible Investment in 2022 wherein it commits to integrate ESG issues in its investment portfolio.¹⁰⁴

- Regarding stakeholder engagement, Krungsri ensures that the stakeholder analysis and prioritization process take place and considers factors such as the impact of the Bank's operations on stakeholders in terms of the economic, social, environmental and governance dimensions.¹⁰⁵ The Bank engages with stakeholders to determine material ESG risks and assess the potential impact associated with the Bank's lending activities. The Bank is expected to consider the concerns of stakeholders and engage with those affected by the activities that the Bank finances in cases where the negative impact is material and significant.¹⁰⁶ The Bank commits to excluding transactions that result in violations of community relations and community rights.¹⁰⁷
- Krungsri has adopted the TBA's Banking Industry Code of Conduct, which provides guidance on the Bank's activities related to business ethics, and compliance with laws and regulations and ensures that the Bank takes anti-money-laundering and counter-terrorist financing measures.¹⁰⁸ The Bank's Policy and Program for Anti-Bribery and Corruption provides a guideline for operating its business ethically and improving its anti-bribery and anti-corruption mechanisms. Furthermore, the Bank has established a whistleblowing channel to report its employees' violations of a law, policy, procedure or code of conduct.¹⁰⁹
- Regarding predatory lending, the TBA's Banking Industry Code of Conduct mandates Krungsri to provide its customers with clear, accurate, up-to-date product-related information, such as interest rates, service rate, fees and terms and conditions, before extending its products and services.¹¹⁰

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Krungsri has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Section 3: Impact of Use of Proceeds

All 16 use of proceeds categories are aligned with those recognized by the GBP, SBP, GLP and SLP. Sustainalytics has focused on two below where the impact is specifically relevant in the local context.

Importance of financing clean transportation in Thailand

The transport sector is the most dependent on fossil fuels, responsible for 37% of total CO₂ emissions from all the end-use sectors in 2021.¹¹¹ A significant shift to low-emitting modes of transport, such as public transportation, walking, cycling and electrification of transport modes, is required to align with the Paris Agreement.¹¹² The transport sector in Thailand accounted for 29.16% of the total GHG emissions in 2018.¹¹³ Although biofuels blended with diesel and gasoline are mandated in Thailand, the transport sector continues to rely primarily on fossil fuels, such as petrol, diesel, CNG, fuel oil and LPG.¹¹⁴

Thailand has committed to reaching carbon neutrality by 2050 and net zero GHG emissions by 2065, recognizing the importance of urgent global co-operation to address climate change.¹¹⁵ To achieve these targets, Thailand has pledged to enhance its Nationally Determined Contributions to reduce GHG emissions

¹⁰⁴ Krungsri, "Toward Sustainable Banking", at: <https://www.krungsri.com/en/esg/sustainable-banking/toward-sustainable-banking>

¹⁰⁵ Krungsri, "Sustainability Report 2022", at: <https://www.krungsri.com/getmedia/e982e590-8248-4dec-998d-f5dc247f3469/sustainability-report-2022-en.pdf.aspx>

¹⁰⁶ Krungsri, "Sustainable Banking Guidelines Responsible Lending by The Thai Bankers' Association", (2019), at:

<https://www.krungsri.com/getmedia/456bfe5b-a59d-41c2-b8b3-397a6146ae57/sustainable-banking-guidelines.pdf.aspx>

¹⁰⁷ Krungsri, "Integrating ESG for Sustainable Banking: Social", at: <https://www.krungsri.com/en/esg/sustainable-banking/esg>

¹⁰⁸ Krungsri, "Banking Industry Code of Conduct Guideline", at: <https://www.krungsri.com/getmedia/e6477ccc-c140-4277-9981-c10839347321/banking-industry-code-conduct-guideline.pdf.aspx>

¹⁰⁹ Krungsri, "Sustainability Report 2022", at: <https://www.krungsri.com/getmedia/e982e590-8248-4dec-998d-f5dc247f3469/sustainability-report-2022-en.pdf.aspx>

¹¹⁰ Krungsri, "Banking Industry Code of Conduct Guideline", at: <https://www.krungsri.com/getmedia/e6477ccc-c140-4277-9981-c10839347321/banking-industry-code-conduct-guideline.pdf.aspx>

The transportation, industrial, commercial, and residential sectors are called end-use sectors IEA, "Transport – Improving the sustainability of passenger and freight transport", at: <https://www.iea.org/topics/transport>

¹¹² UN Environment Program, "Emissions Gap Report", (2022), at: <https://www.unep.org/resources/emissions-gap-report-2022#:~:text=The%20Emissions%20Gap%20Report%202022,collective%2C%20multilateral%20action%20is%20now>

¹¹³ UNFCC, "Thailand's Long-term Low Greenhouse Gas Emission Development Strategy", (2022),

at: https://unfccc.int/sites/default/files/resource/Thailand%20LT-LEDS%20%28Revised%20Version%29_08Nov2022.pdf

¹¹⁴ Ibid.

¹¹⁵ Ibid.

by 30-40% by 2030 from the previous target of 20-25%.¹¹⁶ Thailand's Long-term Low Greenhouse Gas Development Strategy identifies the transport sector as one of the main GHG emitters and plans to introduce measures to reduce GHG emissions.¹¹⁷ The potential mitigation measures identified in the country's transport sector include travel demand management, transit-oriented development, expansion of the railway network into double track, expansion of mass-rapid transit, high-speed trains, single-rail transfer operation, improved river logistics efficiency, adjustment of excise and annual vehicle tax collection rates according to the amount of CO₂ emissions and promotion of electric and hybrid intercity public buses or minibuses and delivery motorcycle fleet upgrades.¹¹⁸ The Government of Thailand's net zero GHG emission timeline for the transport sector includes the following interim targets: i) phase-down of internal combustion engines by 2030, and ii) shifting from fossil fuel dependent ICE vehicles with biofuels vehicles by 2045.¹¹⁹ Additionally, the government has launched the 30@30 EV policy, which commits to having zero-emission vehicles represent at least 30% of the total domestic vehicle production by 2030.¹²⁰

Based on the above context, Sustainalytics is of the opinion that Krungsri's investment in clean transportation is expected to facilitate low-carbon transportation in Thailand and contribute to the country's climate targets.

Importance of affordable housing in Thailand

Globally, more than a billion people still have no access to quality housing, and it is estimated that approximately 3 billion people will require housing by 2030.¹²¹ Among them, Asia accounted for 600 million people living in slums and informal settlements.¹²² The Asia-Pacific region will need to invest USD 1.7 trillion per year until 2030 in infrastructure, including housing, to maintain the momentum of growth, reduce poverty and respond to climate change.¹²³

Urbanization without proper arrangement of housing required to meet the needs of low-income residents has led to cropping up of slums and squatters, accounting for 84% of slum settlements in Thailand¹²⁴ It is estimated that approximately 20% of the population in the Bangkok lives in slums.¹²⁵ Overall, more than one-fifth of Thailand's urban population lives in slums due to the lack of adequate, affordable housing, which remains a major concern for the country.¹²⁶ In 2021, Thailand's economic growth was expected to reach just 2.2% and household debt to continue increasing, reducing the affordability and simultaneously leading to tighter credit conditions.¹²⁷ Thailand's housing market has thrived amid sustained economic growth, resulting in approximately a 22% increase in housing prices between 2011 and 2019 and a 5% increase between 2019 and 2021.¹²⁸ However, housing costs accounted for more than 15% of living expenses in Thailand.¹²⁹ The Government of Thailand has deployed schemes to address the housing shortage on a long-term, including: i) the National Housing Policy Committee, and ii) the 20-year National Housing Development Strategy (2017-2039).¹³⁰ Additionally, the government has established affordable housing projects for low-income groups, including i) the Baan Mankong Project, which focuses on supporting low-income households acquire housing and land ownership, and ii) the Baan Toog Tua Thai or Affordable Homes project, which provides affordable housing to low-income households earning less than THB 40,000 (USD 1,173) per month.¹³¹ Furthermore,

¹¹⁶ Ibid.

¹¹⁷ UNFCC, "Mid-century, Long-term Low Greenhouse Gas Emission Development Strategy: Thailand", (2021), at: https://unfccc.int/sites/default/files/resource/Thailand_LTS1.pdf

¹¹⁸ UNFCC, "Thailand's Long-term Low Greenhouse Gas Emission Development Strategy", (2022), at: https://unfccc.int/sites/default/files/resource/Thailand%20LT-LEDS%20%28Revised%20Version%29_08Nov2022.pdf

¹¹⁹ Ibid.

¹²⁰ Ibid.

¹²¹ Soo Lee, H. et al. (2022), "Adequate and Affordable Housing Enhancing ABD's Support to Developing Member Countries", Asian Development Bank, at: <https://www.adb.org/sites/default/files/publication/822346/sdwp-082-adequate-affordable-housing-adb-support.pdf>

¹²² Ibid.

¹²³ ADB and ACGF, "Thematic Bonds for Affordable Green Housing in Asia and the Pacific", (2022), at: <https://www.adb.org/sites/default/files/publication/767866/thematic-bonds-green-housing-thailand.pdf>

¹²⁴ Mitchell, N. (2021), "The Program Tackling Poverty Eradication In Thailand", The Borgen Project, at: <https://borgenproject.org/tag/the-baan-mankong-program/>

¹²⁵ Nguyen, T.P.H. et al., (2022), "The Influence of Nationality and Socio-demographic Factors on Urban Slum Dwellers' Threat Appraisal, Awareness, and Protective Practices against COVID-19 in Thailand", The American journal of Tropical Medicine and Hygiene, at: https://www.ajtmh.org/view/journals/tpmd/107/1/article-p169.xml?tab_body=fulltext

¹²⁶ Deb, P. et al. (2022), "Housing Market Stability and Affordability in Asia-Pacific", IMF, at: <https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2022/12/13/Housing-Market-Stability-and-Affordability-in-Asia-Pacific-513882>

¹²⁷ Klinchuan, P. (2021), "Industry Outlook 2021-2023: Housing in BMR", Krungsri, at: <https://www.krungsri.com/en/research/industry/industry-outlook/real-estate/housing-in-bmr/io/io-housing-in-BMR-21>

¹²⁸ Deb, P. et al. (2022), "Housing Market Stability and Affordability in Asia-Pacific", IMF, at: <https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2022/12/13/Housing-Market-Stability-and-Affordability-in-Asia-Pacific-513882>

¹²⁹ Ibid.

¹³⁰ Department of International Organizations, Ministry of Foreign Affairs of Thailand, "Thailand Voluntary National Review on the Implementation of the 2030 Agenda for Sustainable Development", (2021), at: https://sustainabledevelopment.un.org/content/documents/279482021_VNR_Report_Thailand.pdf

¹³¹ Ibid.

Thailand's National Housing Authority plans to raise THB 134 billion (USD 4 billion) to fund 16 projects across the country until 2026 and aims to provide financial assistance to approximately 650,000 households with limited access to housing financing.¹³²

Considering the above, Sustainalytics is of the opinion that Krungsri's investment in affordable housing schemes is expected to cater to Thailand's affordable housing requirements for the low-income population and overall generate a positive social impact.

Contribution to SDGs

The Sustainable Development Goals were adopted in September 2015 by the United Nations General Assembly and form part of an agenda for achieving sustainable development by 2030. The instruments issued under the Bank of Ayudhya (Krungsri) Sustainable Finance Framework are expected to help advance the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Adaptation	13. Climate Action	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
Biodiversity	15. Life on Land	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
Blue Economy	14. Life Below Water	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
Circular Economy	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Clean Transportation	11. Sustainable Cities and Communities	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
Climate Smart Agriculture	2. Zero Hunger	2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
Energy Efficiency	7. Affordable Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency
Green Buildings	9. Industry, Innovation and Infrastructure	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

¹³² ADB and ACGF, "Thematic Bonds for Affordable Green Housing in Asia and the Pacific", (2022), at: <https://www.adb.org/sites/default/files/publication/767866/thematic-bonds-green-housing-thailand.pdf>

		countries taking action in accordance with their respective capabilities
Pollution Prevention and Control	11. Sustainable Cities and Communities	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
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Sustainable Forestry	15. Life on Land	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
Waste Management and Resource Efficiency	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Access to Essential Services	3. Good Health and Wellbeing	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
	4. Quality Education	4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
Employment Generation	9. Industry Innovation and Infrastructure	9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
Socio-economic Advancement and Empowerment	10. Reduced Inequalities	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
Affordable Housing	11. Sustainable Cities and Communities	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

Conclusion

Krungsri has developed the Bank of Ayudhya (Krungsri) Sustainable Finance Framework under which it may issue green, social or sustainability bonds and loans and use the proceeds to finance projects to facilitate the transition to a low-carbon economy and advance socio-economic development in Thailand. Sustainalytics considers that the projects funded with proceeds from bonds and loans issued under the Framework are expected to provide positive environmental and social impact.

The Bank of Ayudhya (Krungsri) Sustainable Finance Framework outlines a process for tracking, allocating and managing proceeds, and makes commitments for the Bank to report on their allocation and impact. Sustainalytics believes that the Bank of Ayudhya (Krungsri) Sustainable Finance Framework is aligned with the overall sustainability strategy of the Bank and that the use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 2, 3, 4, 7, 9, 10, 11, 12, 13, 14 and 15. Additionally, Sustainalytics is of the opinion that the Bank has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects.

Based on the above, Sustainalytics is confident that Krungsri is well-positioned to issue green, social and sustainability bonds and loans and that the Bank of Ayudhya (Krungsri) Sustainable Finance Framework is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021 (GBP), Social Bond Principles 2021 (SBP), Green Loan Principles 2023 (GLP), and Social Loan Principles 2023 (SLP).

Appendix

Appendix 1: Sustainability Bond / Sustainability Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	Bank of Ayudhya Public Company Limited
Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable:	The Bank of Ayudhya (Krungsri) Sustainable Finance Framework
Review provider's name:	Sustainalytics
Completion date of this form:	July 28, 2023
Publication date of review publication: Original publication date <i>[please fill this out for updates]</i>:	Update to 2019 Sustainalytics SPO, published in October 2019.

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP and SBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (*if applicable*):

The eligible categories for the use of proceeds are aligned with those recognized by the Green Bond Principles, Social Bond Principles, Green Loan Principles and Social Loan Principles. Sustainalytics considers that investments in the eligible categories are expected to facilitate the transition to a low-carbon economy and advance socio-economic development in Thailand. Sustainalytics considers that the use of proceeds categories contributes to the advancement of the UN Sustainable Development Goals, specifically SDGs 2, 3, 4, 7, 9, 10, 11, 12, 13, 14 and 15.

Use of proceeds categories as per GBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input checked="" type="checkbox"/> Pollution prevention and control | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input checked="" type="checkbox"/> Clean transportation |
| <input type="checkbox"/> Sustainable water and wastewater management | <input checked="" type="checkbox"/> Adaptation |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input checked="" type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input checked="" type="checkbox"/> Other (please specify): Biodiversity; Blue economy; Circular economy; Climate smart agriculture; Sustainable forestry; and Waste management and resource efficiency. |

If applicable please specify the environmental taxonomy, if other than GBPs:

Use of proceeds categories as per SBP:

- | | |
|---|--|
| <input type="checkbox"/> Affordable basic infrastructure | <input checked="" type="checkbox"/> Access to essential services |
| <input checked="" type="checkbox"/> Affordable housing | <input checked="" type="checkbox"/> Employment generation (through SME financing and microfinance) |
| <input type="checkbox"/> Food security | <input checked="" type="checkbox"/> Socioeconomic advancement and empowerment |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBP | <input type="checkbox"/> Other (please specify): |

If applicable please specify the social taxonomy, if other than SBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

The head of each business segment of Krungsri will be responsible for project evaluation and selection in line with the Framework's eligibility criteria. Each business segment and risk management group will assess environmental and social risks associated with the portfolio of eligible assets. The Bank has sustainable lending guidelines in place that considers ESG risk management. Sustainalytics considers these risk management systems to be adequate and the project selection process in line with market practice.

Evaluation and selection

- | | |
|---|---|
| <input checked="" type="checkbox"/> Credentials on the issuer's social and green objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Sustainability Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (please specify): |

Information on Responsibilities and Accountability

- | | |
|---|---|
| <input type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input checked="" type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (please specify): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

The Bank of Ayudhya Public Company Limited's Strategic Assets and Liabilities Management Department will manage the allocation of the proceeds on a quarterly basis. The Bank of Ayudhya Public Company Limited has an internal monitoring system in place to track the use of proceeds. The Bank intends to allocate the proceeds within two years of issuance. Pending full allocation, unallocated proceeds will be invested in accordance with the Krungsri Treasury's existing liquidity management procedures. This is in line with market practice.

Tracking of proceeds:

- | |
|---|
| <input checked="" type="checkbox"/> Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input checked="" type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (please specify): |

Additional disclosure:

- | | |
|---|---|
| <input type="checkbox"/> Allocations to future investments only | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
|---|---|

- | | |
|--|--|
| <input type="checkbox"/> Allocation to individual disbursements | <input checked="" type="checkbox"/> Allocation to a portfolio of disbursements |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (please specify): |

4. REPORTING

Overall comment on section (if applicable):

The Bank of Ayudhya Public Company Limited intends to report on the allocation of proceeds on its website on an annual basis. Allocation reporting will include the amount of funds allocated to the eligible assets, the number of clients that make up the amount of funds allocated, the amount of funds allocated to replace or replenish eligible assets, the amount of unallocated proceeds and share of financing versus refinancing. The Bank of Ayudhya Public Company Limited will report on the qualitative and quantitative impact of the eligible projects where feasible at the category level. Sustainalytics views the Bank of Ayudhya Public Company Limited's allocation and impact reporting as aligned with market practice.

Use of proceeds reporting:

- | | |
|--|--|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify): |

Information reported:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Allocated amounts | <input type="checkbox"/> Sustainability Bond financed share of total investment |
| <input checked="" type="checkbox"/> Other (please specify):
Aggregate number of clients comprising the amount of funds allocated to the eligible assets; amount of funds allocated to replace or replenish eligible assets; the amount of unallocated proceeds and share of financing versus refinancing. | |

Frequency:

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

Impact reporting:

- | | |
|--|--|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify): |

Information reported (expected or ex-post):

- | | |
|--|--|
| <input type="checkbox"/> GHG Emissions / Savings | <input type="checkbox"/> Energy Savings |
| <input type="checkbox"/> Decrease in water use | <input type="checkbox"/> Number of beneficiaries |

Target populations

Other ESG indicators (please specify): Qualitative and quantitative impact of the eligible projects where feasible at the category level based on ICMA's Harmonised Framework of Impact Reporting guidance.

Frequency:

Annual

Semi-annual

Other (please specify):

Means of Disclosure

Information published in financial report

Information published in sustainability report

Information published in ad hoc documents

Other (please specify): a report published on the website

Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

Consultancy (incl. 2nd opinion)

Certification

Verification / Audit

Rating

Other (please specify):

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP AND THE SBP

- i. Second-Party Opinion: An institution with sustainability expertise that is independent from the issuer may provide a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Sustainability Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy, and/or processes relating to sustainability and an evaluation of the environmental and social features of the type of Projects intended for the Use of Proceeds.

-
- ii. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or sustainability criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally or socially sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Sustainability Bond proceeds, statement of environmental or social impact or alignment of reporting with the Principles may also be termed verification.
 - iii. **Certification:** An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against a recognised external sustainability standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
 - iv. **Green, Social and Sustainability Bond Scoring/Rating:** An issuer can have its Sustainability Bond, associated Sustainability Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental and/or social performance data, process relative to the Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material sustainability risks.

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The issuer is fully responsible for certifying and ensuring the compliance with its commitments, for their implementation and monitoring.

In case of discrepancies between the English language and translated versions, the English language version shall prevail.

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For more information, visit www.sustainalytics.com

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