

ASSESSMENT

27 September 2024



Contacts

Lena Gillich
Associate Lead Analyst-Sustainable Finance
lena.gillich@moodys.com

Alice Presotto
Sustainable Finance Associate
alice.presotto@moodys.com

Adriana Cruz Felix
VP-Sustainable Finance
adriana.cruzfelix@moodys.com

CLIENT SERVICES

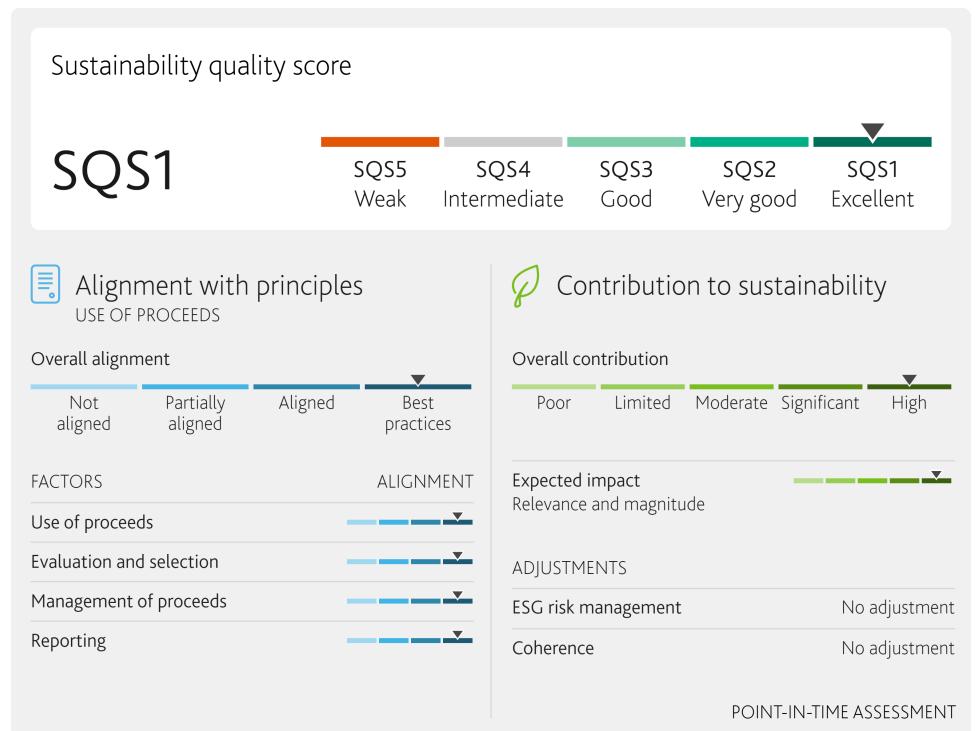
Americas 1-212-553-1653
Asia Pacific 852-3551-3077
Japan 81-3-5408-4100
EMEA 44-20-7772-5454

KOOR ESG SICAV a.s.

Second Party Opinion – Green Finance Framework Assigned SQS1 Sustainability Quality Score

Summary

We have assigned an SQS1 Sustainability Quality Score (excellent) to KOOR ESG SICAV a.s.'s (KOOR ESG SICAV) green finance framework dated September 2024. KOOR ESG SICAV has set up this framework to finance three eligible green categories — renewable energy, energy efficiency and climate change adaptation. The framework is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2021 (including the June 2022 Appendix 1), and the Loan Market Association, the Asia Pacific Loan Market Association, and the Loan Syndications and Trading Association's (LMA/APLMA/LSTA) Green Loan Principles (GLP) 2023. The company has also incorporated all Moody's Ratings identified best practices for all four components. The framework further demonstrates a high contribution to sustainability.



Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of KOOR ESG SICAV's green finance framework, including the framework's alignment with the ICMA's GBP 2021 (including the June 2022 Appendix 1) and the LMA/APLMA/LSTA's GLP 2023. Under its framework, KOOR ESG SICAV plans to issue green financial instruments to finance projects under three green categories — renewable energy, energy efficiency and climate change adaptation (as outlined in Appendix 2 of this report).

Our assessment is based on the last updated version of the framework received on 24 September 2024, and our opinion reflects our point-in-time assessment¹ of the details contained in this version of the framework, as well as other public and non-public information provided by the issuer.

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

Issuer profile

The KOOR ESG SICAV a.s. (KOOR ESG SICAV) fund is an investment vehicle created by the owners of KOOR, s.r.o. in 2022. KOOR, s.r.o., founded in 2010, is the leading local Slovak group specializing in energy services. The company provides a wide range of energy services aimed at improving the efficiency of heating equipment and reducing the energy consumption of buildings. Its portfolio spans a variety of services, including heat production and distribution, building insulation, LED lighting, renewable energy solutions such as solar panels and battery storage, and energy management consultancy.

The establishment of the KOOR ESG SICAV fund aims to support the financing of KOOR, s.r.o.'s operations by providing a platform for raising funds from both small and large investors. The fund prioritizes investment in projects spearheaded by KOOR, s.r.o. within the Slovak Republic, the Czech Republic and Hungary. KOOR ESG SICAV has developed a network of thematic sub-funds to direct resources toward projects aiming at enhancing energy efficiency and conserving energy, all while upholding environmental, social and governance (ESG) principles. Specifically, the KOOR ESG sub-fund is designed to finance green projects deemed eligible by KOOR, s.r.o.

Strengths

- » Eligible projects target key sustainability challenges for the buildings sector by addressing improvements in energy efficiency and the avoidance and reduction of greenhouse gas (GHG) emissions.
- » The eligibility criteria for the financed assets follow selected substantial contribution criteria for several economic activities, as enshrined in the EU Taxonomy.
- » The environmental objectives of climate change mitigation and adaptation are clearly defined and relevant.

Challenges

- » Despite following established international standards, the energy efficiency category does not meet the best-in-class benchmarks for reductions in primary energy demand and energy efficiency gains.
- » The climate change adaptation category lacks specific minimum thresholds for the resulting GHG emission reductions and energy improvements, creating uncertainty around the climate benefits.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

Alignment with principles

KOOR ESG SICAV's green finance framework is aligned with the four components of the ICMA's GBP 2021 (including the June 2022 Appendix 1), the LMA/APLMA/LSTA's GLP 2023 and all Moody's Ratings identified best practices:

- Green Bond Principles (GBP)
- Social Bond Principles (SBP)
- Green Loan Principles (GLP)
- Social Loan Principles (SLP)
- Sustainability-Linked Bond Principles (SLBP)
- Sustainability Linked Loan Principles (SLLP)

Use of proceeds



Clarity of the eligible categories – BEST PRACTICES

KOOR ESG SICAV has clearly and comprehensively communicated the nature of expenditures, and the eligibility criteria for the three eligible green categories. The issuer has specified that the eligible projects will be located within the Slovak Republic and the Czech Republic. It has scheduled the commencement of activities in the Czech Republic for 2024-25. KOOR ESG SICAV has provided granular descriptions of the eligible projects that could be financed with each issuance. The definition of eligible categories follows the substantial contribution criteria contained in the EU Taxonomy Climate Delegated Act for Climate Change Mitigation and Climate Change Adaptation, thus incorporating internationally recognized technical thresholds.

Clarity of the environmental or social objectives – BEST PRACTICES

The issuer has clearly outlined climate change mitigation and climate change adaptation as the relevant environmental objectives associated with its eligible categories. KOOR ESG SICAV has referenced the United Nations' (UN) Sustainable Development Goals (SDGs) and the EU Taxonomy Climate Delegated Act for sustainable activities, which are considered coherent with the choice of eligible categories.

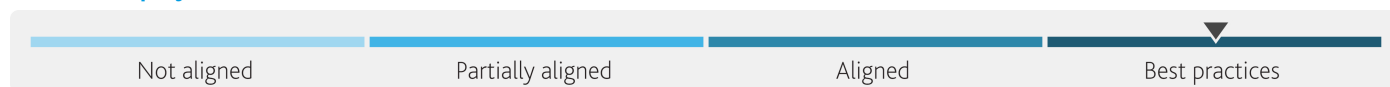
Clarity of the expected benefits – BEST PRACTICES

KOOR ESG SICAV has identified improvements in energy efficiency and the avoidance and reduction of GHG emissions as relevant benefits for the eligible green categories. The benefits are clear, measurable and will be quantified in the ongoing reporting. KOOR ESG SICAV expects to have no share of refinancing, which makes the definition of an associated look-back period obsolete.

Best practices identified - use of proceeds

- » Eligibility criteria are clearly defined for all project categories
- » Objectives set are defined, relevant and coherent for all project categories
- » Relevant benefits are identified for all project categories
- » Benefits are measurable and quantified for most projects, either ex-ante with clear baselines or with a commitment to do so in future reporting

Process for project evaluation and selection



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

KOOR ESG SICAV has established a clear process for evaluating, selecting and monitoring eligible projects, formalized in its publicly available framework. The roles and responsibilities for project evaluation and selection are clearly defined according to the issuer's green commission directive, and include relevant expertise. According to the directive, the head of sales ensures the selection of projects that meet the conditions set for green projects. The list of selected projects is submitted by the head of sales to the green commission on a quarterly basis or as needed. The projects financed under this framework refer to eight EU Taxonomy economic activities. While the "Do no significant harm" nor the "Minimum safeguards" criteria are included in the eligibility criteria outlined in the framework, the issuer has additionally committed to align its projects with these criteria. KOOR ESG SICAV also commits to removing projects from its eligible portfolio that no longer meet the eligibility criteria and reallocating funds to an alternative eligible project.

The traceability of the decision-making process at the project level is ensured through an internal business management system throughout the entire life cycle. This system maintains records of eligible projects and documentation related to the green commission decision-making.

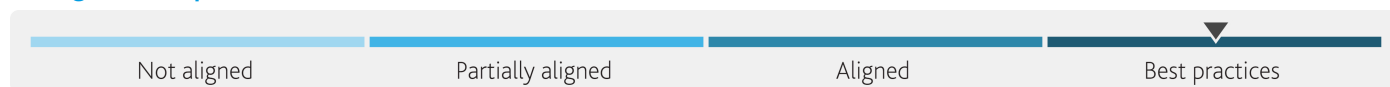
Environmental and social risk mitigation process – BEST PRACTICES

The environmental and social (E&S) risk mitigation processes are included in the internal directive "Risk Identification and Assessment". KOOR ESG SICAV commits to implementing measures related to the management of material ESG risks by combining passive, corrective and preventive risk management measures. Mitigation and adaptation solutions with corresponding measures intended to reduce the most critical physical risks, such as temperature-related risks, are applied to all projects. The issuer specifies that projects facing controversies may be withdrawn from the list of eligible assets and replaced by other eligible projects.

Best practices identified - process for project evaluation and selection

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

Management of proceeds



Allocation and tracking of proceeds – BEST PRACTICES

KOOR ESG SICAV has defined a clear process for the management and allocation of proceeds, as detailed in its green finance framework, which will be publicly available on the issuer's website. The net proceeds raised via the green finance framework will be held in a dedicated separate account and only used for the eligible projects. As long as the green financing instruments are outstanding, the balance of the tracked net proceeds will be annually adjusted to match the allocations to eligible projects made during that period. The issuer has committed to allocate net proceeds within 24 months.

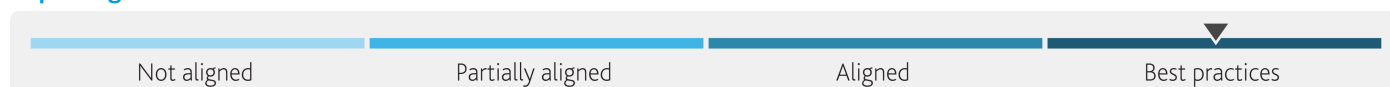
Management of unallocated proceeds – BEST PRACTICES

Unallocated funds may be temporarily used for other cash management purposes or other treasury securities. Formal exclusion criteria for temporary permitted investments relate to GHG-intensive activities. In addition, the issuer will hold unallocated proceeds in its bank partner's current accounts, using only highly liquid instruments. This approach complies with EU legislation standards, including the Corporate Sustainability Reporting Directive (CSRD) and the Capital Requirements Regulation (CRR) III/Capital Requirements Directive (CRD) IV. In case of project divestment or postponement, the divested proceeds will be reallocated to projects that comply with the green finance framework as soon as reasonably practicable.

Best practices identified - management of proceeds

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

Reporting



Transparency of reporting – BEST PRACTICES

KOOR ESG SICAV will report annually on the use of proceeds issued under the framework, and in the event of material developments until bond maturity and loan payback. The allocation report will cover relevant information on the allocation of proceeds, encompassing a list and description of projects financed, the total amount of proceeds allocated to the project categories and the outstanding amount of unallocated net proceeds. In addition, the issuer will provide an impact report on the sustainability benefits of its green projects until maturity of the instruments, which will also include information on material developments, issues or controversies related to the projects. Both, the allocation and the impact reports will be made available to investors.

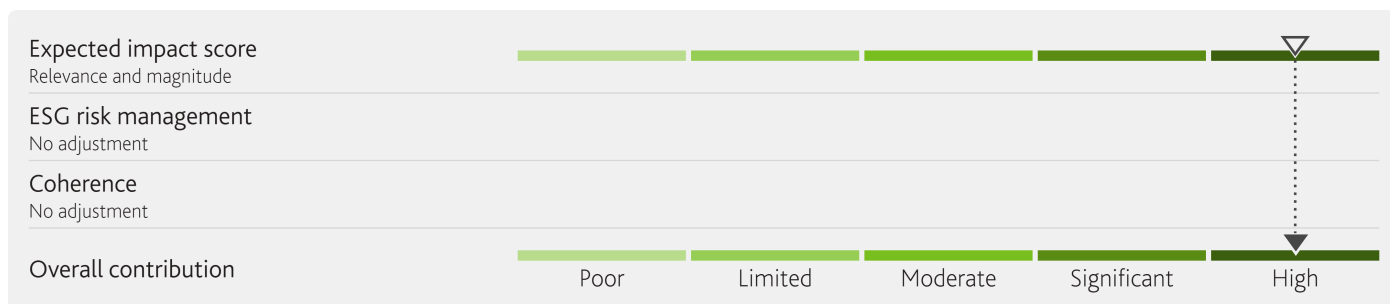
The calculation methodologies and assumptions used to report on the environmental impact of the eligible projects are publicly available in the green finance framework. KOOR ESG SICAV will annually obtain an independent third-party review on the proceeds allocation and the reported environmental benefits until the proceeds' full allocation and in the event of material changes.

Best practices identified - reporting

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

Contribution to sustainability

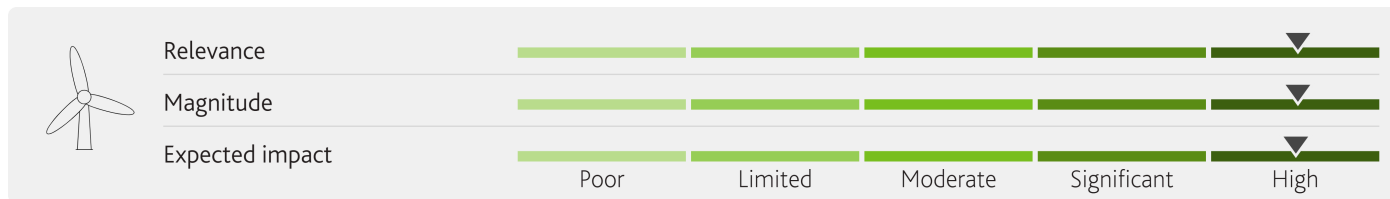
The framework demonstrates a high overall contribution to sustainability.



Expected impact

The expected impact of the three eligible categories on the environmental objectives is high. Based on the information provided by the issuer, we expect most of the proceeds from forthcoming green instruments to be allocated to the renewable energy and energy efficiency categories. A detailed assessment by eligible category is provided below.

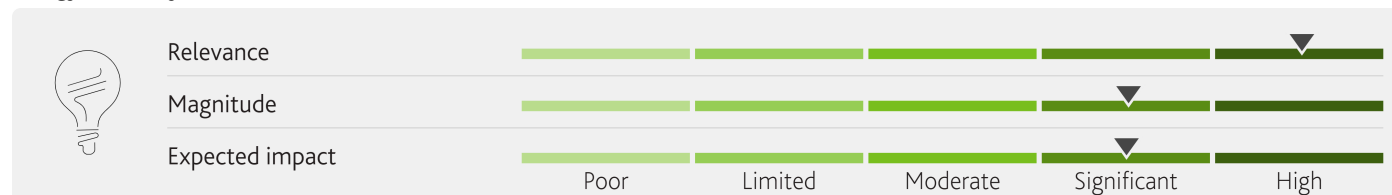
Renewable energy



Financing renewable energy projects — such as the installation, maintenance and repair of renewable energy technologies, and their application in renovated buildings — is highly relevant for increasing renewable energy production capacity and advancing the energy transition. These projects will be located in both the Slovak Republic and the Czech Republic — regions not yet saturated with renewable energy projects and where electricity production still heavily depends on fossil fuels.

The eligible projects under the renewable energy category will have a high, positive, long-term impact on climate change mitigation by directly reducing and avoiding GHG emissions in electricity consumption. The eligibility criteria of the category align with the substantial contribution criteria of the EU Taxonomy economic activity 7.6 — Installation, maintenance and repair of renewable energy technologies, thus adhering to recognized international standards. In addition, KOOR ESG SICAV's selection criteria for the solar power, electric heat pumps and battery storage systems align with the best-in-class technology standards. We do not expect any carbon lock-in effects or any E&S externalities for all projects.

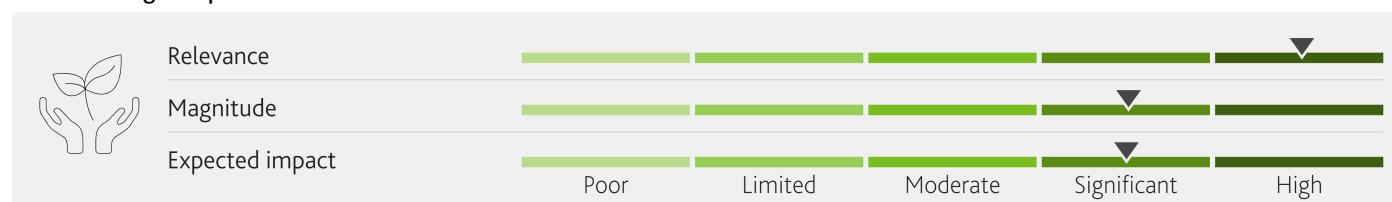
Energy efficiency



Investments in energy efficiency improvements are highly relevant to the issuer and the energy industry because of their potential to tackle major sustainability challenges and reduce energy-related emissions. Modernizing outdated infrastructure in both the Slovak Republic and the Czech Republic is key to achieving efficient, sustainable energy use, and decreasing fossil fuel dependence. The issuer's operations, focused on delivering sustainable energy solutions and including services to the real estate sector, directly address these challenges.

The magnitude of KOOR ESG SICAV's impact in the energy efficiency category is deemed significant, grounded in the projects' eligibility criteria, which align with the substantial contribution criteria of the EU Taxonomy economic activities 4.15, 7.2, 7.3, 7.5, 9.1 and 9.3. While activities in the area of district heating and cooling distribution employ best-in-class technologies, the specific minimum thresholds set for energy improvements or GHG-emission savings in the remaining activities within this category are not considered the most ambitious. In this context, renovating existing buildings to achieve at least a 30% reduction in primary energy demand (PED) meet essential requirements, but do not reach the highest levels, such as the 60% reduction contemplated for "deep" renovations². Similarly, the commitment to a minimum of 20% efficiency gains in the installation, maintenance and repair of energy efficiency equipment is seen as having a lower impact than the commonly achieved threshold of 30%. Finally, R&D-related projects like business model development and energy-efficiency consultancy lack specific project descriptions, including minimum thresholds for GHG-emission savings or energy improvements, resulting in an unclear climate impact. Nevertheless, we do not expect any carbon lock-in effects or any E&S externalities for all projects in scope.

Climate change adaptation



The relevance of KOOR ESG SICAV's R&D-related climate change adaptation activities is high, reflecting the critical need for decarbonization and energy efficiency improvements in the energy sectors of the Slovak Republic and the Czech Republic. These countries have historically depended on fossil fuels and have encountered challenges such as investments needed for renewable technologies, integration of renewables into the existing grid, and competition with fossil fuels and nuclear energy. However, in the two countries, both public and private investments in R&D for energy efficiency and decarbonization remain substantially lower than the EU average, indicating a lag in investment in these areas.

The magnitude of KOOR ESG SICAV's climate change adaptation project is significant, based on the projects' alignment with recognized international standards, specifically the substantial contribution criteria of the EU Taxonomy economic activities 9.2 (Annex II, Climate Change Adaptation). The eligible category encompasses enabling activities with the potential for short-, medium- or long-term impacts, depending on the activity type. Despite the lack of specified minimum thresholds for the resulting GHG-emission savings or energy improvements and, consequently, the low transparency regarding the actual impact and applied technologies, the focus on

service-related projects, such as the development of business models and providing energy-efficiency-related consultancy services, mitigates the potential for lock-in effects or negative E&S externalities.

ESG risk management

We have not applied a negative adjustment to the expected impact score for ESG risk management. KOOR ESG SICAV employs a formalized internal approach to assess the benefits and risks of its green projects. They follow the internal "Risk Identification and Assessment" directive and are ISO 9001 certified, integrating risk management practices. From the outset, project eligibility adheres to EU Taxonomy criteria for climate change mitigation, ensuring that they do not significantly harm environmental objectives. These objectives include climate change adaptation, water and marine resource protection, circular economy transition, pollution prevention and biodiversity protection. KOOR ESG SICAV's sustainability practices, which include considerations of the environment, labor and human rights, ethics, and sustainable procurement, were ranked in the top 15th percentile of all companies across industries within the database of an independent corporate sustainability ratings provider.

Coherence

We have not applied a negative adjustment to the expected impact score for coherence. Projects to be financed under KOOR ESG SICAV's green finance framework align with its broader sustainability priorities because the issuer's business is entirely dedicated to developing services, solutions and manufacturing products for more energy efficiency and less carbon footprint linked to heating equipment and buildings.

Appendix 1 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The three eligible categories included in KOOR ESG SICAV's green finance framework are likely to contribute to three of the UN's SDGs, namely:

UN SDG 17 Goals	Eligible Category	SDG Targets
GOAL 7: Affordable and Clean Energy	Renewable energy	7.2: Increase substantially the share of renewable energy in the global energy mix
	Energy efficiency	7.3: Double the global rate of improvement in energy efficiency
GOAL 9: Industry, Innovation and Infrastructure	Renewable energy Energy efficiency	9.4: Upgrade infrastructure and retrofit industries to make them sustainable, with all countries taking action
GOAL 13: Climate Action	Renewable energy Energy efficiency Climate change adaptation	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

The mapping of the UN's SDGs in this SPO considers the eligible project categories and associated sustainability objectives/benefits documented in the issuer's green finance framework, as well as resources and guidelines from public institutions, such as the ICMA's SDG Mapping Guidance and the UN's SDG targets and indicators.

Appendix 2 - Summary of eligible categories in KOOR ESG SICAV's green finance framework

Eligible Categories	Description	Sustainability Objectives	Impact Reporting Metrics
Renewable energy	<p>Types of contracts or projects:</p> <ul style="list-style-type: none"> - PPA (Power purchase agreement) - RE (Renewable energy) – Provision of renewable energy equipment - BESS (Battery Energy Storage Systems) – Energy storage systems in a form of electric energy using batteries <p><u>EU Taxonomy economic activity:</u> 7.6. Installation, maintenance and repair of renewable energy technologies</p>	Climate Change Mitigation	<ul style="list-style-type: none"> - Estimated annual GHG emissions avoided in t CO₂e - Estimated annual renewable energy generation in MWh
Energy efficiency	<p>Types of contracts or projects:</p> <ul style="list-style-type: none"> - EPC (Energy Performance Contracting) – client pays from future savings - GES (Guaranteed Energy Service) – energy savings are guaranteed to the client - PBC (Performance based contract) - EC (Energy contracting) <p><u>EU Taxonomy economic activities:</u> 4.15. District heating/cooling distribution 7.2. Renovation of existing buildings 7.3. Installation, maintenance and repair of energy efficiency equipment 7.5. Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings 9.1. Close to market research, development and innovation 9.3. Professional services related to energy performance of buildings</p>	Climate Change Mitigation	<ul style="list-style-type: none"> - Estimated annual energy savings in MWh - Estimated annual GHG emissions avoided in t CO₂e
Climate change adaptation	<p><u>EU Taxonomy economic activity:</u> 9.2. Close to market research, development and innovation</p>	Climate Change Adaptation	- Estimated increase in generation and storage in MWh

Endnotes

¹ The point-in-time assessment is applicable only on the date of assignment or update.

² Official Journal of the European Union, [Commission Recommendation \(EU\) 2019/786 of 8 May 2019 on building renovation \(notified under document C\(2019\) 3352\) \(Text with EEA relevance.\)](#), May 2019.

Moody's assigns SPOs in alignment with the main tenets of the ICMA Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews and the LSTA/LMA/APLMA Guidance for Green, Social and Sustainability-Linked Loans External Reviews, as applicable; Moody's practices may however diverge in some respects from the practices recommended in those documents. Moody's approach to assigning SPOs is described in its Assessment Framework, and is subject to the ethical and professional principles set forth in the Moody's Investors Service Code of Professional Conduct.

Additional terms with respect to Second Party Opinions (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

© 2024 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V., I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Clasificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

REPORT NUMBER 1420768