

ASSESSMENT

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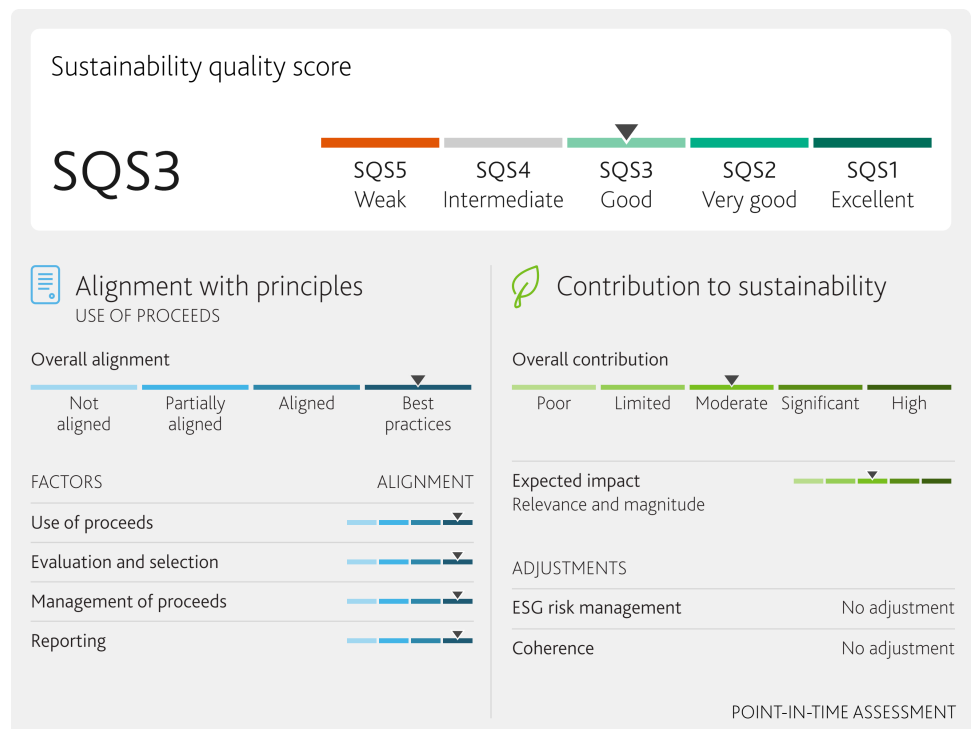
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National Mortgage Company Armenia

Second Party Opinion – Green Bond Framework Assigned SQS3 Sustainability Quality Score

Summary

We have assigned an SQS3 Sustainability Quality Score (good) to National Mortgage Company Armenia's (NMC) green bond framework dated May 2024. NMC has established its green bond framework with the aim of capitalizing projects across three eligible green categories — green home acquisition loans, green single-family house construction loans and green renovation loans. The framework is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles 2021 (including the June 2022 Appendix 1) and the company also incorporates Moody's Ratings identified best practices for all four components. The framework demonstrates a moderate contribution to sustainability.



Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of NMC's green finance framework, including the framework's alignment with the ICMA's Green Bond Principles 2021 (including the June 2022 Appendix 1). Under its framework, NMC plans to issue use-of-proceeds green bonds to finance projects in three green categories, as outlined in Appendix 2 of this report.

Our assessment is based on the last updated version of the framework received on 23 May 2024, and our opinion reflects our point-in-time assessment¹ of the details contained in this version of the framework, as well as other public and non-public information provided by the company.

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

Issuer profile

National Mortgage Company Armenia (NMC) was founded in 2009 as a refinancing credit organization, in the form of a closed joint-stock company. The goal of the company is to improve access to mortgage credit in Armenia, and make residential housing more affordable for low- and middle-income families. NMC places a strong emphasis on housing projects that prioritize energy efficiency. It is a wholesale lender that refinances mortgage portfolios from originating banks and credit organizations. The company was founded with the purpose of supporting the development of the Armenian mortgage market, which is accomplished through refinancing of mortgage loans provided to individuals by banks and credit organizations. The company's broader sustainability strategy is geared toward prioritizing resources that generate a positive environmental and social impact, thereby supporting the transition to a more sustainable future.

Strengths

- » There are clearly defined and relevant environmental objectives and benefits associated with all the eligible categories.
- » Comprehensive and transparent project evaluation and selection processes are in place and include relevant expertise.
- » The company has disclosed the details about temporary placements and has defined the exclusion criteria for environmentally or socially harmful activities.

Challenges

- » There is uncertainty around the energy performance of constructed single-family houses and acquired homes.

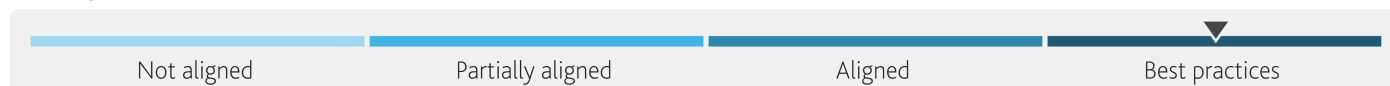
This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

Alignment with principles

NMC's green bond framework is aligned with the four core components of the ICMA's Green Bond Principles 2021 (including the June 2022 Appendix 1), and incorporates Moody's Ratings best practices for all four components:

- 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

The issuer has communicated the nature of expenditures, which will be loans aimed at refinancing assets that meet the eligible category description. The issuer has clearly defined the eligibility and exclusion criteria for all the three eligible green categories. All the eligible projects will be located within Armenia.

Clarity of the environmental or social objectives – BEST PRACTICES

NMC has clearly outlined the environmental objectives associated with all the three eligible categories, which are relevant to the respective environmental objectives to which they aim to contribute. Overall, the objectives are coherent with recognized international standards, and the framework has referenced relevant United Nations' (UN) Sustainable Development Goals (SDGs) including SDG 7 - Affordable and Clean Energy, SDG 11 - Sustainable Cities and Communities, and SDG 13 - Climate Action.

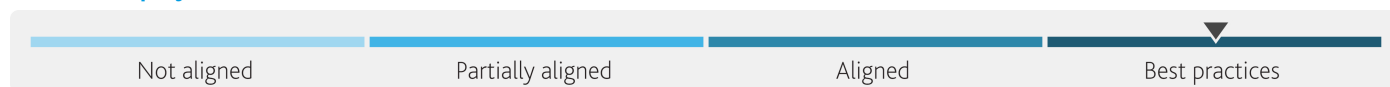
Clarity of expected benefits – BEST PRACTICES

NMC has identified clear and relevant expected environmental benefits for all three eligible categories based on the projects to be financed under each category. These correspond to energy savings and avoided greenhouse gas (GHG) emissions. The issuer has identified measurable indicators for all three eligible categories, which will be quantified in the reporting. The issuer has confirmed that all the proceeds from its green bonds will be used to refinance loans based on the selection criteria. The associated lookback period is 90 days and this is publicly disclosed in the company's refinancing bylaws.

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
- » Commitment to transparently disclose the share of proceeds used for refinancing where feasible
- » Commitment to transparently communicate the associated lookback period(s) where feasible

Process for project evaluation and selection



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

NMC has established a clear and structured decision-making process for determining the eligibility of projects and assets, which is formalized in its publicly available framework. A clear decision-making process is used throughout the evaluation and selection process. The roles and responsibilities for project evaluation and selection are clearly defined and include relevant expertise from the credit, risk management, and monitoring units, the green bond subcommittee and internal audit; the process is examined by an external independent auditor annually. Monitoring of continued eligibility of projects is carried out via the internal green bond subcommittee, which supervises the assigned loans and meets on a regular basis as long as any green bond remains outstanding. If a green loan is financing a project that no longer meets the eligibility criteria, it will be substituted with another eligible green loan.

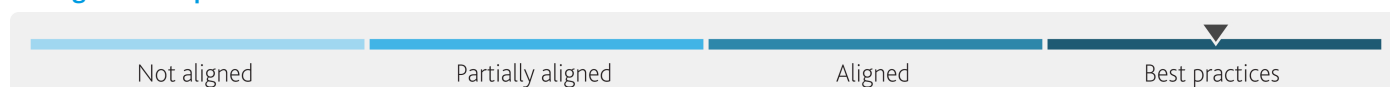
Environmental and social risk mitigation process – BEST PRACTICES

NMC has established an adequate environmental and social risk identification and mitigation process to manage risks related to the eligible projects. This process is outlined in the framework, which will be published on the issuer's website. NMC has committed to monitor for potential ESG risks and controversies associated with the financed projects. Both NMC and partner financial institutions (PFIs) will monitor the loans and projects. In the event an ESG risk or controversy is identified, the issuer will substitute the project with another green project according to the eligibility criteria. The monitoring of all loans will be done within 12 months after the origination of a loan, and every 12 months thereafter on a selective basis.

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

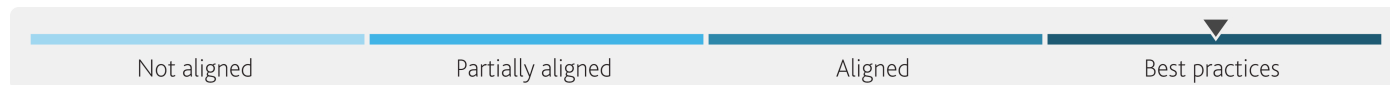
NMC has defined a clear process for the management and allocation of proceeds, which is detailed in its framework that will be publicly available on the website. Net proceeds from the green bond issuance covered by the framework will be held in a special account(s) dedicated exclusively to green bond transactions. NMC will diligently track and monitor these accounts through a formal internal process to ensure that they are only used for eligible projects. The balance of the tracked proceeds will be adjusted accordingly to match the amount allocated to the eligible projects financed from the green bond issuance. The issuer committed, through internal communication, to allocate the net proceeds within 24 months.

Management of unallocated proceeds – BEST PRACTICES

NMC will place any temporarily unallocated proceeds in instruments such as cash and cash equivalents, deposits and bonds issued by PFIs, government bonds, or foreign-exchange and interest rate hedging instruments, as prescribed in the exclusion list defined in the framework. The issuer commits to not invest temporarily unallocated proceeds in GHG emissions-intensive and high environmental impact or otherwise controversial activities. In the event of a project's cancellation, divestment or noncompliance with the eligibility criteria, the issuer will reallocate an equal amount of the funds to other projects eligible under the framework.

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**

NMC will report annually on the use of proceeds issued under the framework. The issuer committed, through internal communication, to report until maturity of the bond. The issuer will publish an allocation report that includes material information per category, including details of unallocated funds and their structure. Moreover, NMC has committed to report any significant developments, including issues or controversies related to the projects.

The issuer will publish an impact report detailing the anticipated environmental impact indicators of the financed green projects, reflecting the relevant environmental reporting indicators identified for all eligible categories as outlined in the framework, on its website. The calculation methodologies and assumptions used to report on the environmental impacts and metrics will be made publicly available.

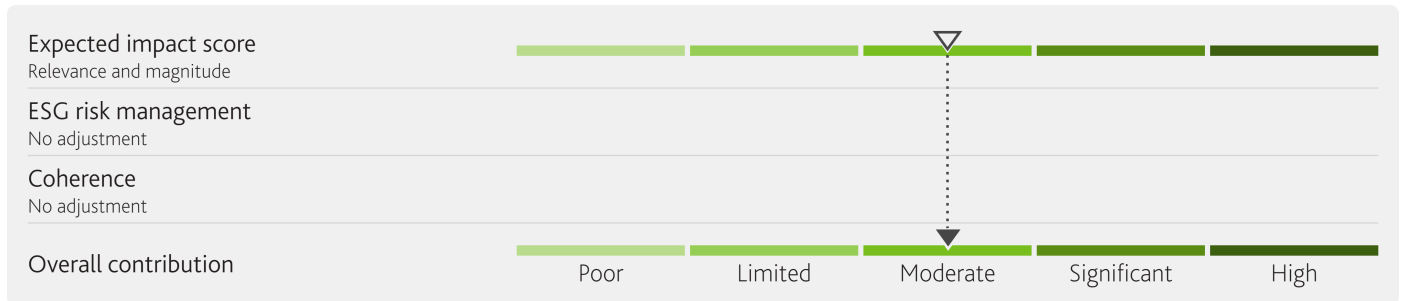
External auditors will verify annually the total outstanding amount reported in the annual report and its allocation to the eligible projects, as well as the environmental impact of investments, until maturity of the green bonds.

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

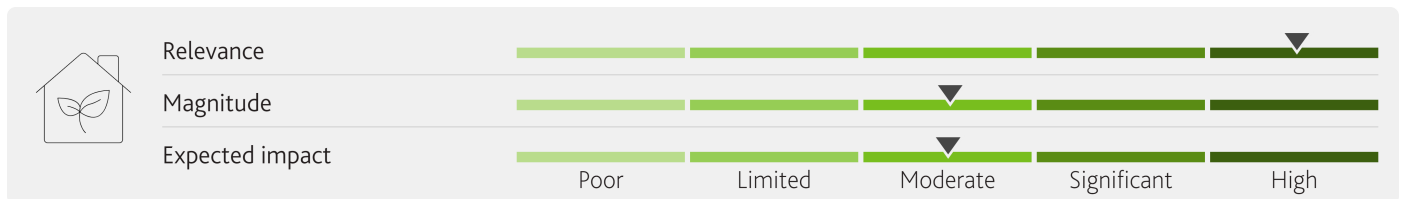
The framework demonstrates a moderate overall contribution to sustainability.



Expected impact

The expected impact of the eligible project categories on environmental objectives is moderate. The company has communicated that most of the proceeds from forthcoming issuances will be allocated to the green home acquisition loan and the green renovation loan categories. Therefore, we have weighted the eligible categories accordingly to assess the overall expected impact. A detailed assessment by eligible category is provided below.

Green home acquisition loans



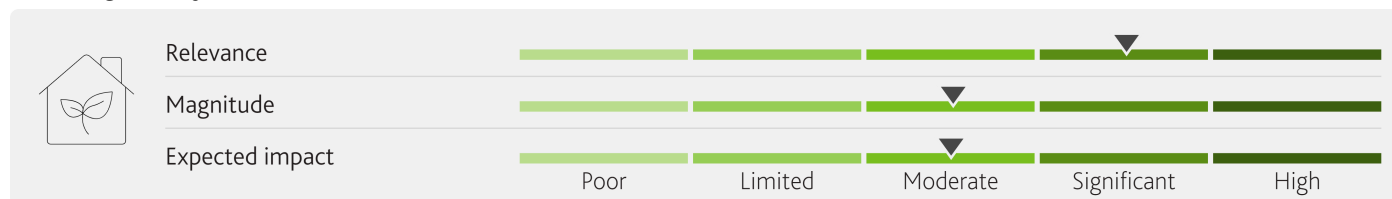
These loans are provided for the purchase of a house or an apartment. The acquired buildings in both the primary and secondary markets should have an energy passport issued by a certified entity, with an Energy Efficiency (EE) class of at least "B".

The decarbonization of the building sector in Armenia is highly relevant to address climate change in the country. The category responds to a national need and aligns with the government's policies for improving the efficiency of the building sector. According

to the International Energy Agency (IEA), improving the energy efficiency of buildings is central to the strategic development of the Republic of Armenia, where the sector that consumes the most energy is construction. The building stock accounts for nearly 40% of the country's total electricity demand and more than 25% of its gas demand². This category is also relevant to the issuer because its core business is the provision of loans to purchase, renovate or construct real estate. Moreover, this category includes further improvements, aiming to actively address the pressing need for decarbonization in a country that relies on natural gas, nuclear power and oil, and where the estimated energy-saving potential across residential, public and commercial buildings ranges from 40% to 60%.

The eligible projects will moderately contribute to lowering GHG emissions. While the homes under this category are likely to be among the top performing buildings in the country in terms of useful heating, there is a lack of visibility on the final overall energy use of the buildings, as well as the holistic positive environmental impact these buildings will have. The minimum requirement for a home to qualify for a loan is to hold an EE class of at least "B". According to the United Nations Economic Commission for Europe³, a building awarded "B" class would be considered energy efficient. An EE class B level is above the minimum requirement under Armenia's building code (currently at "C" class). However, the energy class does not cover the total emissions of the buildings because only heating and ventilation efficiency-related measures are included in the assessment, and other indicators, such as lighting and water efficiency savings, are excluded. Positive mitigation measures are taken into consideration; these include evidence that the land use for primary market projects has not changed over the last 12 months. Moreover, further energy efficiency measures are included as part of the eligibility criteria under this category, specifically, the installation of windows, doors, and thermal insulation. The issuer committed, through internal communication, to exclude heating systems using technologies compatible with fossil fuels, such as gas boilers, from the eligible criteria in this category.

Green single-family house construction loans

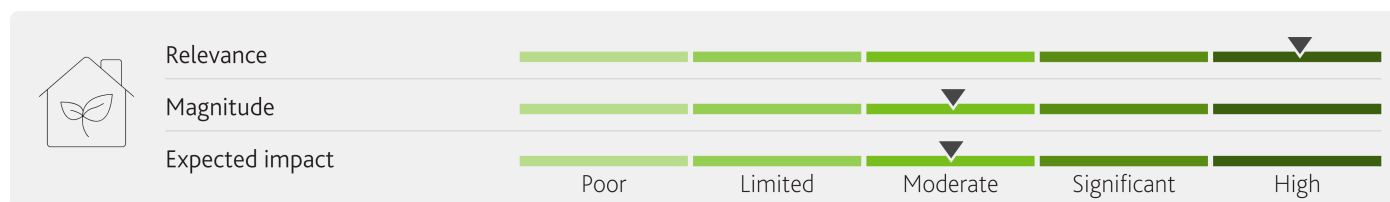


Under this category, the company plans to finance investments related to the construction of single-family houses, with minimum eligibility criteria linked to technical standards for external walls, windows, doors, heat supply efficiency rate above 92% and a 20% reduction in energy consumption compared to a set baseline scenario. Moreover, all energy efficiency measures that are eligible for renovation loans are also applicable in this category.

This category is significantly relevant due to the high share of energy consumption of the building sector in the local context and its importance to the issuer's core business. However, this category does not holistically cover the total environmental impact of the buildings. The projects in this category aim to achieve the climate action goal by facilitating the integration of the existing building stock with newly constructed efficient houses. The projects also aim to achieve the objective of affordable and clean energy, which is supported through not using technologies that are compatible with fossil fuels.

This category has a moderate magnitude, reflecting the lack of visibility on the energy performance of the houses once constructed. The eligibility criterion requiring houses to show that they are at least 20% more energy efficient compared with the baseline scenario does not guarantee an energy performance in line with good market standards. The issuer committed, through internal communication, to exclude home appliances and heating systems using technologies compatible with fossil fuels, such as gas boilers, from the eligible criteria in this category. Moreover, no embodied emissions or life-cycle assessments are taken into consideration, which could lead to inadequate management of negative externalities linked to construction processes.

Green renovation loans



Under this category, the company plans to finance investments related to improvements in the energy efficiency of apartments and houses. Eligible measures include insulation of outer walls and roof, installation of windows and entrance door, installation of LED lamps, and installation of solar water heaters and photovoltaic (PV) panels. Projects in this category target a 20% reduction in energy consumption compared with the baseline scenario.

The relevance of this category is high because of the importance of increasing the energy performance of the building stock in the regional context. The company will direct most of the funds within this category to high solutions such as PVs and solar water heaters. The projects aim to achieve the climate action goal by improving the operational energy performance of the buildings. In Armenia, around 75% of multi-apartment buildings were constructed between 1951 and 1990⁴, a period before the enforcement of code requirements that established minimum standards for energy efficiency, and when measures such as thermal insulation were almost nonexistent. The requirement for Armenia to adopt an energy efficiency strategy has been set out by recent government resolutions, underscoring the significance for the country of such measures to improve the energy performance of buildings.

The magnitude of this category is considered moderate, reflecting the targeted reduction in energy consumption, which might not necessarily represent an optimal performance when benchmarked against market standards. The issuer committed, through internal communication, to exclude home appliances and heating systems using technologies compatible with fossil fuels, such as gas boilers, from the eligible criteria in this category. This category overlooks life-cycle assessment considerations and environmental product declarations associated with the eligible measures. Consequently, this could limit the potential positive impact of the projects on key objectives like climate action, affordable and clean energy, and the development of sustainable cities.

ESG risk management

We have not applied a negative adjustment for ESG risk management to the expected impact score. The company appears to have adequate ESG risk monitoring practices in place to manage externalities. NMC has a CSR policy in force that details its ESG commitments and transfers them to PFIs through the Bylaw on Refinancing and the MLA signed with each PFI to initiate cooperation. The company has also updated its organizational structure in 2024 and plans to hire a specialist to enhance NMC's capacity for ESG risk assessment and reporting. In case some difficulties arise because of the nature of the expenditures and are no longer compliant, the issuer commits to engage closely with PFIs to substitute the expenditures and achieve greater transparency.

Coherence

We have not applied a negative adjustment for coherence to the expected impact score. Green proceeds will be allocated toward expenditures, which seems to align with the company's broader sustainability objectives, especially its commitment to support energy efficiency improvements in the building sector in Armenia. Over the years, NMC has developed a range of energy efficiency renovation, purchase and single-family house construction loan products, and has been actively promoting them in the Armenian mortgage market through its partner banks and credit organizations. Furthermore, NMC has launched awareness campaigns to educate the Armenian population about the benefits of energy-efficient investments. NMC's green bond framework and the associated eligible categories coherently align with the company's strategic sustainability priorities and contribute to achieving its sustainable commitments and goals.

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

The three eligible categories included in NMC's framework are likely to contribute to two of the UN SDGs, namely:

UN SDG 17 Goals	Eligible Category	SDG Targets
GOAL 7: Affordable and Clean Energy	Green home acquisition loans, Green single-family house construction loans, Green renovation loans	7.3: Double the global rate of improvement in energy efficiency
GOAL 11: Sustainable Cities and Communities	Green home acquisition loans, Green single-family house construction loans, Green renovation loans	11.1: Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
		11.6: Reduce the adverse per capita environmental impact of cities, with special attention to air quality and waste management
		11.B: Increase number of cities with plans towards inclusion, resource efficiency, and climate change and disaster resiliency

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

Appendix 2 - Summary of eligible categories in NMC's framework

Eligible Category	Description	Sustainability Objectives	Impact Reporting Metrics
Green home acquisition loans	<p>The loan product is designed for the purchase of a house or an apartment that meets the green eligibility criteria set by the Core Documents.</p> <p>For residential real estate, a loan is considered Green in the following cases:</p> <ul style="list-style-type: none"> - In the primary market, the project (multi-apartment building or residential complex) must have an energy passport issued by a certified entity, and the implied EE class shall be at least B. This implies at least a 20% energy saving status compared to the set baseline scenario. - In the secondary market, the building or residential complex must have an energy passport issued by a certified entity, and the EE class shall be at least B. This implies at least a 20% energy saving status compared to the set baseline scenario. <p>Additionally, projects/buildings are eligible if the following green renovation measures are implemented: the building is insulated; windows and external doors meeting at least the minimum requirements under the Green standards are installed.</p> <p>Under the program, the home purchase project will be assessed by the EEAT based on the energy passport issued by an independent certified energy auditor. The list of all eligible for refinancing projects will be available on the EEAT website.</p> <p>Gas boilers are not eligible under this category.</p>	Climate Action, Affordable and Clean Energy, Sustainable Cities and Communities	<ul style="list-style-type: none"> - Estimated annual energy savings (kWh) - Estimated annual reduced and/ or avoided GHG emissions (tCO2e) - Type of scheme, certification level, if applicable - Estimated annual GHG emission avoided (tCO2e)
Green single-family house construction loans	<p>The loan product is designed for the construction of single-family houses.</p> <p>A newly constructed house is considered Green if specific measures are implemented:</p> <ul style="list-style-type: none"> - External walls are insulated and the minimum thickness of the insulation is 5 cm, - Roof is insulated and the minimum thickness of the insulation is 15cm, - Efficient windows and external doors are installed, with options for double or triple glazing and frames made of PVC or aluminum with embedded thermal breaks. - windows to be installed, with a U-value ≤ 2.08 W/ m²*K. - doors to be installed with a U-value ≤ 2.22 W/ m²*K. <p>New heat supply efficiency rate $\geq 92\%$</p> <p>All energy efficiency measures which are eligible for green renovation loans are also eligible for this loan type.</p> <p>Single-family house construction projects shall result in at least a 20% reduction in energy consumption compared to the set baseline scenario.</p> <p>New construction, whether it is a single-family house or a multi-apartment building, shall not result in a change in the land's use.</p> <p>Detailed criteria can be found in the Core Documents. Under the program, the house construction project shall be assessed by the EEAT.</p> <p>Gas boilers and home appliances are not eligible investments.</p>	Climate Action, Affordable and Clean Energy, Sustainable Cities and Communities	<ul style="list-style-type: none"> - Estimated annual energy savings (kWh) - Estimated annual reduced and/ or avoided GHG emissions (tCO2e) - Type of scheme, certification level, if applicable - Expected annual renewable energy generation (kWh)
Green renovation loans	<p>The loan product is designed for energy efficiency improvements of apartments or houses.</p> <p>All types of renovations are available up to AMD 35 million. Minimum 90% of the loan amount shall be used for EE improvements in order for a loan to be classified as Green.</p> <p>Eligible energy efficiency measures include the following:</p> <ul style="list-style-type: none"> - Insulation of outer walls and/or the roof, and/or - Installation of windows and/or the entrance door, and/or - Installation of LED lamps, and/or - Installation of solar water heaters, and/or - Installation of PV panels. <p>The minimum requirements for energy efficiency and eligibility for the loan product are specified in the Core Documents.</p> <p>Under the program, a home improvement project shall be assessed by the EEAT. The target has been set to achieve at least a 20% energy efficiency saving overall relative to the defined baseline case.</p> <p>Gas boilers and home appliances are not eligible investments.</p>	Climate Action, Affordable and Clean Energy, Sustainable Cities and Communities	<ul style="list-style-type: none"> - Estimated annual energy savings (kWh) - Estimated annual reduced and/ or avoided GHG emissions (tCO2e) - Type of scheme, certification level, if applicable - Expected annual renewable energy generation (kWh)

Endnotes

- [1](#) Point-in-time assessment is applicable only on the date of assignment or update.
- [2](#) [Energy Efficient Buildings in Armenia: A Roadmap](#), IEA, October 2020.
- [3](#) [National study for Armenia](#), UNECE, April 2021.
- [4](#) [Long-term \(until 2050\) low emissions development strategy of the republic of Armenia](#), 2023.

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.

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