

ASSESSMENT

6 November 2024



Contacts

Vivian Lee Sustainable Finance Analyst vivian.lee@moodys.com

Susie KoSustainable Fin Associate
susie.ko@moodys.com

Gonzalo Marambio Sustainable Finance Analyst gonzalo.marambio@moodys.com

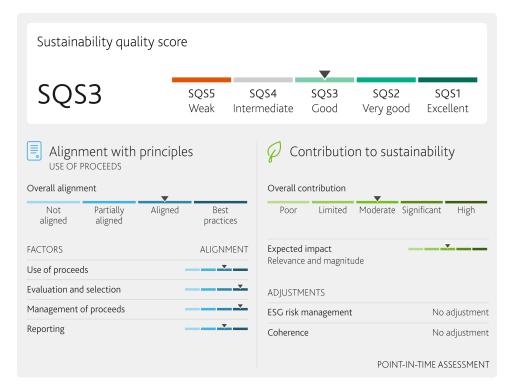
Matthew Kuchtyak SVP-Sustainable Finance matthew.kuchtyak@moodys.com

Infinity Water Solutions LLC

Second Party Opinion – Blue Circular Economy Financing Framework Assigned SQS3 Sustainability Quality Score

Summary

We have assigned an SQS3 sustainability quality score (good) to Infinity Water Solutions LLC's (Infinity) blue circular economy financing framework dated October 2024. The issuer has established its use-of-proceeds framework with the aim of financing projects across three eligible green categories. The framework is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2021 (with June 2022 Appendix 1) and the Green Loan Principles (GLP) 2023 of the Loan Market Association, the Asia Pacific Loan Market Association and the Loan Syndications and Trading Association (LMA/APLMA/LSTA). The framework demonstrates a moderate contribution to sustainability.



This Second Party Opinion was originally assigned on a private basis on 31 October 2024 and is being published on 6 November 2024 at the request of the issuer.

Scope

We have provided a second party opinion (SPO) on the sustainability credentials of Infinity's blue circular economy financing framework, including the framework's alignment with the ICMA's GBP 2021 (with June 2022 Appendix 1) and the GLP 2023 of the LMA/APLMA/LSTA. Under its framework, Infinity plans to issue bonds, loans, commercial paper or other credit products and capital markets issuances to finance projects across three eligible project categories, as outlined in Appendix 2 of this report.

Our assessment is based on the last updated version of the framework received on 28 October 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

Headquartered in Austin, Texas, Infinity Water Solutions is a pure play water management company operating a closed-loop zero liquid discharge water sharing network, recycling and treatment system. Through its wholly-owned US-based subsidiary Enchantment Water, LLC, the company currently owns and operates a water sharing network covering more than 130,000 acres with a treatment capacity of 125,000 barrels per day (bpd) with plans to expand treatment capacity to more than 800,000 bpd by end of 2025. Today the company largely treats produced water generated from oil & gas (O&G) activities in the Permian Basin in New Mexico. The company is focused on sustainable water management, reusing 100% of treated water to conserve freshwater resources across industries.

Strengths

- » Closed loop water treatment and recycling projects respond to a highly relevant environmental challenge in areas facing water stress in which the company operates
- » Zero liquid discharge system recovers 100% of water for reuse and mitigates seismic and groundwater pollution risks inherent in conventional disposal methods
- » Clear disclosure of the process for project evaluation and selection
- » Short maximum proceeds allocation period of 24 months, in line with best market practice

Challenges

- » Currently the main offtakers for most of the projects to be financed under the framework include oil & gas producers who utilize treated produced water for extraction activities
- » Although the framework is in line with current market practices, the inclusion of potential equity and pure play expenditures constitutes a non-standard use of proceeds susceptible to specific challenges
- » Impact reporting will only be conducted until full allocation of proceeds rather than the market best practice of until instrument maturity

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.moodys.com for the most updated credit rating action information and rating history.

Alignment with principles

Infinity's circular blue economy framework is aligned with the four components of the ICMA's GBP 2021 (with June 2022 Appendix 1) and the GLP 2023 of the LMA/APLMA/LSTA:

✓ Green Bond Principles (GBP)○ Social Loan Principles (SLP)	Social Bond Principles (SBP)Sustainability-Linked Bond Principles (SLBP)		en Loan Principles (GLP) ainability Linked Loan Principles (SLLP)
Use of proceeds			
Not aligned	Partially aligned	Aligned	Best practices

Clarity of the eligible categories - ALIGNED

The company has clearly communicated the nature of the expenditures, as well as the eligibility and exclusion criteria for financed projects. The net proceeds from instruments issued under the framework will be allocated to finance or refinance, in whole or in part, new or existing eligible expenditures or investments that meet the eligibility criteria. Although Infinity has articulated the eligibility criteria for most of the projects, the criteria for some projects remain broadly defined. In particular, the desalination projects under the sustainable water and wastewater management category do not specify an energy efficiency threshold to be eligible for financing and there is a lack of specificity on the likely types of biodiversity and conservation projects under the advanced water technologies and conservation category. Exclusion criteria are explicit in the framework. Eligible projects will primarily be located in the southwest US, including areas that are identified with heightened water stress risks based on data produced by government or recognized regulatory bodies.

The cornerstone of the ICMA's Green Bond Principles is the full utilization of net bond proceeds to eligible projects with clear environmental benefits. Infinity's framework includes the potential use of net proceeds for the acquisition of assets and/or pure play entities that derive at least 90% of their revenue from activities involved in any of the eligible categories. The company may also allocate net proceeds for equity investments and loans that meet the eligibility criteria, such as supporting joint ventures and investments in innovative water technologies. The company has shared that eligible equity expenditures are likely to include controlling equity stakes in a target company. The company commits to monitor the continued compliance of the aforementioned investments with the eligibility criteria, including monitoring for potential environmental risks and controversies. Allocations will likely focus on water-related hard assets and investments in new technologies under the sustainable water and wastewater treatment and the advanced water technologies and conservation categories, respectively.

In our view, pure play and equity investments represent a non-standard use of proceeds that introduce potential challenges related to asset-level adherence to environmental objectives, allocation and traceability, impact reporting, as well as an increased risk of double counting. Infinity commits to report on the financing cost for its share of equity-related and acquisition expenditures to enhance traceability of proceeds for allocation and impact reporting. Traceability will be further supported by the company's expectation to maintain controlling stakes in potential target companies. Potential double counting risks are likely minimized given the company's pro-rata reporting approach and its commitment to not allow the execution of dual sustainable financing instruments with overlapping benefits. With these practices in place, we consider the company's processes to be in line with current market practices and sufficient to largely mitigate the potential associated risks.

Clarity of the environmental or social objectives - BEST PRACTICES

The company has clearly outlined the environmental objectives associated with all three eligible categories. All eligible categories are relevant to the respective environmental objectives to which they are aiming to contribute. The company has referenced the UN Sustainable Development Goals (SDGs) in articulating the objectives of the eligible categories (see Appendix 1).

Clarity of expected benefits - ALIGNED

The company has identified clear and relevant expected environmental benefits for most of the eligible project categories. However, some sub-projects within categories lack clear quantifiable metrics to demonstrate the claimed environmental benefits. For example, there are no impact metrics to quantify the pollution prevention and biodiversity benefits claimed under the renewable energy and climate category, as well as the advanced water technologies and conservation technologies category, respectively. Nevertheless, the company has committed to report on the impact metrics it intends to disclose in its annual reporting.

Infinity intends to disclose the estimated share of financing and refinancing of existing or new eligible projects in the respective transaction documentation. The lookback period is 24 months before each relevant issuance under the framework.

Best practices identified — use of proceeds

- » Objectives set are defined, relevant and coherent for all project categories
- » Relevant benefits are identified for all project categories
- » 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 process for defining eligible projects - BEST PRACTICES

The company has established a clear and structured decision-making process for the selection and evaluation of eligible assets. The company's sustainable finance committee is responsible for identifying, evaluating, selecting and monitoring eligible projects in accordance with the eligibility criteria under the framework, as well as ensuring project adherence to the company's environmental and social risk policies.

The committee is comprised of representatives with relevant expertise across the company. The committee meets annually to select eligible projects to ensure their compliance with the framework criteria, consistency with the company's broader sustainability strategy and allocation of proceeds in accordance with the allocation period defined in the framework. In case an asset is no longer compliant with the eligibility criteria, the ineligible asset will be removed, and a substitute asset will be identified. Eligible projects will be subject to the company's ongoing monitoring of ESG risks which applies through instrument maturity. Traceability of the process is ensured through the documentation of internal meetings.

Environmental and social risk mitigation process – BEST PRACTICES

The environmental and social risk mitigation process is disclosed at a high level in the framework. The company carries out appropriate ESG risk due diligence in accordance with its environmental risk mitigation policy. All eligible projects will be subject to environmental and social risk assessments at the outset of any eligible projects, and the assessments include continuous monitoring to ensure compliance with environmental regulations. ESG controversies are monitored until instrument maturity.

Best practices identified — process for project evaluation and selection

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

Management of proceeds



Allocation and tracking of proceeds – BEST PRACTICES

The company has defined a clear process for the management and allocation of proceeds in its framework. Net proceeds from instruments issued under the framework are placed in a general bank account and the proceeds are tracked in a register. The register is monitored by the committee and will be updated on a quarterly basis. The company will perform periodic adjustments of net proceeds to eligible assets. The bank aims to fully allocate the net proceeds within a period of 24 months after the issuance of each instrument under the framework. For municipal placements or tax exempt financings, as well as syndicated and bilateral loans, the allocation of net proceeds will be governed under the relevant offering documents and financing agreements.

Management of unallocated proceeds - BEST PRACTICES

Unallocated proceeds will be held in cash or cash equivalents, used to repay existing indebtedness, or held in accordance with Infinity's liquidity management policies. Although an explicit greenhouse gas (GHG) exclusion criteria for placement of unallocated proceeds is not established, the company commits to monitor for any potential risks or controversies that may arise from the placement of unallocated proceeds. In the event of project divestment, sale or repayment, the project will be removed from the register and the company commits to reallocate proceeds to projects that meet the framework's eligibility criteria on a reasonable effort basis.

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
- » Commitment to reallocate proceeds to projects that are compliant with the framework

Reporting



Transparency of reporting - ALIGNED

The company will report annually on the allocation reporting until full allocation for term instruments and through maturity for revolving loans. The company's circular blue economy financing report will be publicly available on its website and will include indicators such as the amount of net proceeds of all outstanding instruments; the amount of net proceeds allocated at the eligible category level; the share of financing and refinancing; the balance of unallocated proceeds; and the impact metrics. The report may also include disclosure of material risks, developments and controversies related to projects following the affirmative covenants under relevant instruments.

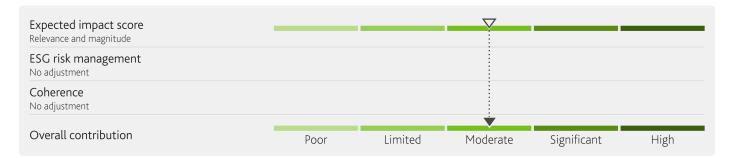
Impact reporting within its financing reports will be provided until full allocation of proceeds. The reports will include disclosure of the calculation methodologies used for the impact assessments. For each allocation report, Infinity will request an assurance report from an independent external auditor or third party to verify the allocation of proceeds. Although the company has not committed to provide an independent verification of the reported impact metrics at a framework level, the company will seek to provide an external review of the reported impact metrics based on specific investor and lender requirements.

Best practices identified — reporting

- » Reporting covers material developments and issues related to the projects or assets
- » Reporting on allocation of proceeds and benefits done at least at eligible category level
- » Exhaustive allocation reporting balance or % of unallocated funds, types of temporary investments (e.g. cash or cash equivalent) and share of financing vs re-financing
- » 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

Contribution to sustainability

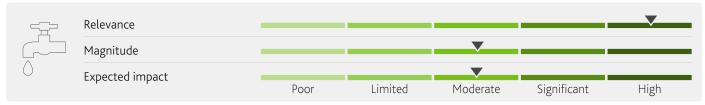
The framework demonstrates a moderate overall contribution to sustainability.



Expected impact

The expected impact of the eligible projects on environmental objectives is moderate. Based on information provided by the company, we expect proceeds from forthcoming issuances to represent a higher proportion for the sustainable water and wastewater treatment category. We have therefore assigned a higher weight to this category in our assessment of the overall framework's contribution to sustainability. A detailed assessment by eligible category is provided below.

Sustainable water and wastewater treatment



The wastewater treatment plants contemplated under the framework are core to the company's business and are highly relevant to address water sustainability challenges in areas identified with heightened water stress in the southwest US. This is particularly relevant in New Mexico, which faces severe water stress risks because of prolonged drought and variable precipitation patterns. Near term projects include zero liquid discharge (ZLD) wastewater treatment facilities in the Permian Basin in New Mexico to treat produced water. Produced water, a highly saline byproduct of oil and gas production, contains hydrocarbons, chemicals, heavy metals, dissolved and suspended solids. Recycling treated produced water is a water management solution for a byproduct that would otherwise be disposed of using conventional methods such as deep injection wells, that have been found to induce seismic activities and increase risks to soil and groundwater contamination. Legislative efforts through New Mexico's 2019 Produced Water Act and the state's 50-year water action plan underscore the need to preserve and sustainably manage water resources, which includes the reuse of treated produced water. The 2019 Produced Water Act aims to establish clear regulatory pathways for fit-for-purpose non-potable reuse of wastewater outside of the O&G sector to bolster long-term water security. By reusing treated produced water, the projects address critical issues within the local context by conserving freshwater resources and avoiding environmental externalities from conventional produced water disposal methods.

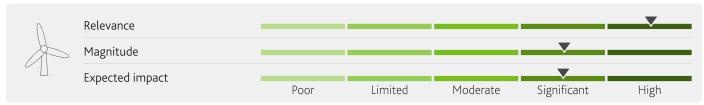
The magnitude of the projects is moderate, balancing the expected long-term benefits of the wastewater treatment system and the potential beneficial reuse of treated produced water to sectors outside of O&G, against the projects' linkage with high carbon-emitting activities.

The company has shared that it intends to use a combination of electrodialysis and thermal distillation including humidification-dehumudification (HDH) desalination methods as part of its treatment process. The company has estimated that the energy intensity of the end-to-end treatment process is roughly 27kWh/m3, mostly stemming from the desalination step of the process. The company has shared that through HDH technology, or solar desalination, roughly 15% of the energy requirement will be derived from solar sources, which reduces energy-related emissions from the process. Through a ZLD system, the projects recover 100% of water and avoids liquid discharge. Although the company aims to expand its renewable energy investments at treatment sites, we expect that the facilities are likely to rely mostly on grid energy which currently is mainly sourced from fossil fuels. We expect energy emissions to moderate over time as states advance on grid decarbonization plans. For example, under New Mexico's Renewable Portfolio Standard, the state aims to have 80% of electricity to come from renewable energy sources by 2040.³

The potential beneficial reuse of treated produced water outside of O&G is also factored into the magnitude score. The company is actively pursuing expansion of its services and has established commitments with companies in other water intensive sectors such as agriculture and manufacturing to supply non-potable freshwater for their operations. The company has chosen to treat produced water as its initial intake water because it can recover metals and minerals that can be sold to offset the cost of treatment, while also creating a new water source that can be used in other applications to reduce strain on freshwater supplies. As the technology scales, the company plans to extend its services beyond produced water by treating other industrial wastewater streams.

However, at present, the water treated and commercialized by the company is linked to high carbon-emitting activities. Main offtakers for most of the projects to be financed under the framework include O&G producers who utilize treated produced water for extraction activities. Although the O&G sector will likely continue to play a central role in the company's strategy, we expect this exposure to fall over time given the company's active strategy to diversify its offtakers and the adaptability of the technology to other sectors.

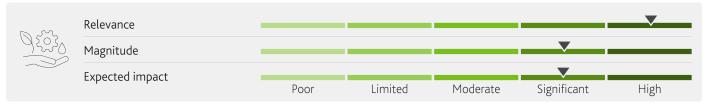
Renewable energy and climate



Investments in renewable energy and pollution prevention assets are highly relevant to reduce energy-related emissions and to reduce and minimize air pollution from the treatment system. The company has an objective to transition 20% of energy use to renewable energy sources by 2030 and to reduce GHG emissions by at least 25% by 2035, signaling the importance of these projects to the company's strategy. Infrastructure to capture methane and hydrocarbons within the process ensures that wastewater is treated to a level consistent with national regulatory standards for non-potable water.

The projects are likely to have a significant impact on mitigating emissions and air pollutants. Infinity has communicated that investments under this category will primarily be used to finance on-site solar installations at treatment facilities. Solar energy projects are best in class renewable technologies and are likely to provide long-term environmental benefits with no lock-in effects. Other eligible investments include long term physical power purchase agreements and virtual power purchase agreements (VPPA) from renewable energy sources. While near term investments are focused on on-site solar installations, we recognize that VPPAs are typically weaker emission mitigation strategies than physical contracts and on-site generation because of the indirect procurement of renewables in the marketplace to abate emissions from company-owned properties, and the potential lack of additionality of renewable power to the local grid. Other eligible projects for financing in this category include energy efficiency upgrades within the treatment system that achieve at least 20% energy savings and waste energy and heat recovery assets that can improve energy efficiency and offset the direct energy use of the process.

Advanced water technologies and conservation



Investments under this category are highly relevant to improve the water and energy efficiency of closed loop water treatment technologies through research and development (R&D) initiatives. The company has shared that most of the net proceeds under this category will be allocated to R&D initiatives to enhance operational efficiencies of the treatment technology, underscoring the high relevance score. While important, eligible biodiversity mitigation projects address a secondary environmental issue relative to the company's core business activity.

The magnitude is significant, largely reflecting the expected benefits from the advancement of water recycling technologies through the development of a regional research hub and conservation platforms which are likely to support continuous innovation and collaboration with stakeholders. Through industry collaboration, the technology can achieve broader adoption for water reuse and recycling across industries. The company has articulated advanced technologies that it will pursue with the aim to enhance operational efficiencies within the treatment process. However, the extent of the likely benefits is dependent on the commercial viability and technological readiness of new water technologies. We expect broad long-term impact from eligible biodiversity projects such as wetland restoration and targeted afforestation projects. However, the lack of clarity on the types of projects to be financed limits our ability to assess the potential contribution of these projects to the claimed benefits.

ESG risk management

We have not applied a negative adjustment for ESG risk management to the expected impact score. Infinity has robust E&S risk management systems in place for all projects and operations. Eligible projects are subject to the company's policies and procedures on environmental and social risks, which are outlined in its health, safety and environment manual. Projects undergo relevant E&S risk assessments at the outset and are monitored for ongoing compliance.

Coherence

We have not applied a negative adjustment for coherence to the expected impact score. Projects to be financed under the company's framework align with its overall sustainability priorities as the company's business is entirely dedicated to water and wastewater management.

Although projects to be financed are consistent with the company's sustainability strategy and will likely contribute positively to the stated environmental objectives, the treated water is linked to extraction activities, as main offtakers for most of the projects to be financed under the framework include the O&G sector. This is already largely captured in the moderate expected impact score, however. Of note, the company is actively exploring the beneficial reuse of treated produced water for water intensive sectors outside the O&G sector and the treatment of other industrial wastewater to support the sustainable management of water resources across the broader economy.

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

The three eligible categories included in Infinity's framework are likely to contribute to eight of the United Nations' Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals	Eligible Category	SDG Targets		
GOAL 6: Clean Water and Sanitation	Sustainwable water & wastewater treatment	6.3: Improve water quality by reducing pollution, eliminating dumping and minimizing hazardous chemicals and materials		
	Advanced water technologies & conservation; Sustainable water & wastewater treatment	6.4: Increase water-use efficiency across all sectors and ensure sustainable supply of freshwater to reduce water scarcity		
	Advanced water technologies & conservation	6.B: Support and strengthen the participation of local communities in improving water and sanitation management		
GOAL 7: Affordable and Clean Energy	Renewable energy and climate	7.2: Increase substantially the share of renewable energy in the global energy mix		
		7.3: Double the global rate of improvement in energy efficiency		
GOAL 9: Industry, Innovation and Infrastructure	technologies & conservation; Sustainable water &	9.4: Upgrade infrastructure and retrofit industries to make them sustainable, with al countries taking action		
GOAL 11: Sustainable Cities and Communities	wastewater treatment Advanced water technologies & conservation	11.6: Reduce the adverse per capita environmental impact of cities, with special attention to air quality and waste management		
GOAL 12: Responsible Consumption and Production	Sustainable water & wastewater treatment	12.2: Achieve the sustainable management and efficient use of natural resources		
GOAL 13: Climate Action	Renewable energy and climate	13.2: Integrate climate change measures into national policies, strategies and planning		
GOAL 14: Life Below Water	Advanced water technologies & conservation	14.2: Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts		
GOAL 15: Life on Land	Advanced water technologies & conservation	15.1: Ensure the conservation and sustainable use of terrestrial and inland freshwater ecosystems and their services		
		15.2: Promote the implementation of sustainable management of all types of forests		
		15.A: Mobilize and increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems		

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

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

Eligible assets	Description	Environmental Objectives	Impact Reporting
Sustainable water & wastewater treatment	Expenditures or investments related to the research, development, construction, maintenance, or acquisition of water projects, which promote 100% closed-loop water treatment, recycling and sharing with zero liquid discharge including: - Water treatment and recycling facilities and associated infrastructure - Desalination facilities - Terminals, pipelines, and transportation infrastructure utilized for waste and recycled water conveyance - Water conservation and storage assets - Technologies removing PFAS and similar substances	Sustainable water and wastewater management	- Barrels of wastewater gathered (Barrels) - Gallons of freshwater withdrawal avoided (Gallons) - Percentage of gathered water recycled (%) - Annual GHG emissions avoided/reduced (tCO2e) - Other relevant indicators dependin on the considered projects - Water Conservation: Reduction in water usage due to more efficient energy systems, measured in gallons or barrels
Renewable energy and climate	Expenditures or investments related to (i) the research, development, construction, maintenance, or acquisition of generation assets (on-site or off-site), or (ii) purchase of renewable energy pursuant to long-term (>5 years) power purchase agreements ("PPAs") or virtual power purchase agreements ("VPPAs") from the following sources: - Solar - Wind - Geothermal - On-site hydro pressure powered generation Expenditures or investments related to the research, development, construction, maintenance, or acquisition of pollution prevention and control-related infrastructure including: - Methane and hydrocarbon gas scrubbers - Waste energy and heat recovery - Energy efficiency upgrades (at least 20% savings)	Climate change mitigation	- Annual GHG emissions avoided/reduced (tCO2e) - On-site renewable energy capacity developed (MW) - Annual renewable energy generated, procured, or consumed (MWh) - Percentage of electricity generated or procured from renewable sources - Energy Savings: Measured in kilowatt-hours (kWh) or saved annually
Advanced water technologies & conservation	Expenditures or investments related to the research, development, construction, maintenance, or acquisition of water conservation and biodiversity enhancing infrastructure, products, services, and technologies including: - Establishment of a water technology innovation hub - Regional water conservation platforms to reclaim and reuse water - Biodiversity enhancements for areas surrounding water recycling facilities - Wetland restoration projects - Targeted afforestation effforts - Job training programs to equip local residents with skills in water management and infrastructure maintenance	Biodiversity; Natural resource conservation	- Number of breakthrough technologies or R&D initiatives implemented - Acres of natural habitat preserved - Number of soil erosion measures implemented - Water Conservation: Reduction in water usage due to more efficient energy systems, measured in gallons or barrels

11

Endnotes

- $\underline{\mathbf{1}}$ Point-in-time assessment is applicable only on date of assignment or update.
- 2 Alban Echchelh, Justin M. Hutchison, Stephen J. Randtke, Edward Peltier, Treated water from oil and gas extraction as an unconventional water resource for agriculture in the Anadarko Basin, Science of The Total Environment, Volume 912, 2024, 168820, ISSN 0048-9697, https://doi.org/10.1016/j.scitotenv.2023.168820

3 US Energy Information Administration, New Mexico

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

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDITATING, 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.moodys.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 Calificadora 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

1421149