

SILVER DRAGON WATER SUPPLY LIMITED SUSTAINABLE FINANCE FRAMEWORK

SECOND-PARTY OPINION (SPO)

MSCI ESG Research LLC

May 2023



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Summary

SPO Publication date: May 23, 2023

It is the opinion of MSCI ESG Research LLC that the Sustainable Finance Framework published by Silver Dragon Water Supply Limited in March 2023 is aligned with:

Relevant Standards	Aligned?
The MSCI Sustainability Bond and Sustainability Loan Assessment Methodology as of March 2023	Yes
All the core components of the Sustainability Bond Guidelines 2021 as administered by the International Capital Market Association (ICMA)	Yes

The MSCI Sustainability Bond and Sustainability Loan Assessment Methodology is a part of the <u>MSCI</u> <u>Labeled Bond and Loan Assessment Methodology</u>.

About the Company

Incorporated in Bermuda in 2021, Silver Dragon Water Supply Group Limited ("Silver Dragon" or the "Company") is a wholly owned subsidiary of China Water Affairs Group Limited ("China Water" or the "Parent") which is one of the largest publicly listed water utility companies in China. It is headquartered in Hong Kong and is listed on the Hong Kong Stock Exchange, with operation management centers in Beijing and Shenzhen.

Silver Dragon was established as a new entity to hold the water supply and direct drinking water business of China Water. As of Financial Year (FY) 2021-22, Silver Dragon had 7.4 million installed water meters and 158,000 km of water pipelines across China. Its Direct Drinking Water operation and construction segment covers 3 million users in various cities, including in Hunan, Hubei, Henan, Hebei, Guizhou, Jiangsu, Jiangsi, Shenzhen, Guangdong, Guangxi, Chongqing, Shandong, Shanxi, Anhui, Zhejiang, Yunnan, Sichuan, Ningxia, and Fujian.

With 217 water plants and daily water supply capacity of 15.4 million m³, it collects tariffs directly from the customers located in Tier 3 and Tier 4 cities in China, where local governments grant exclusive and renewable concession rights (under the One City One Water Supply Operator Policy) for 30-50 years.

Domicile: Hong Kong, **Incorporation**: Bermuda **Website**: <u>http://www.chinawatergroup.com/eng/</u>



Sustainability Targets and Alignment with Sustainable Finance Framework

Silver Dragon states that it intends to improve the quality of life in its operating regions by providing urban and rural residents with better "last-meter drinking water solutions". It aims to achieve this by implementing projects which facilitate drinking water to populations with insufficient water supply or regions where capacity is limited. Furthermore, Silver Dragon shall incorporate environmental and social goals into its operations and focus on:

- Eliminating the gap between urban and rural water supply by extending urban pipelines to rural areas
- Pipeline extension, pipeline connection, upgrading to optimize the deployment of the urban and rural water supply and reduce overall leakage
- Improving the operation and management system and upgrade rural water supply services
- Meeting the people's demand for healthy and high-quality drinking water, as well as achieving highstandard urban development
- Contributing to drinking water availability and waste reduction by replacing bottled water consumption with piped drinking water; helping achieve twin goals of affordability and "carbon neutrality"

Silver Dragon, states that it is committed to developing its direct drinking water business along with its conventional utility water supply business to promote healthy and quality water consumption model at affordable prices and to reduce the consumption of plastic bottles, in an effort to help alleviate the plastic pollution in China.¹

Furthermore, Silver Dragon shall follow China Water's plan called "Carbon Peaking and Carbon Neutrality", which sets out objectives, plots the path for implementation and proposes measures for greenhouse gas (GHG) emission reduction. These include achieving carbon emissions to peak by 2030, in line with China's national target and to achieve net-zero carbon emission by 2050, 10 years earlier than the national target. These plans shall be implemented through Green Operation's Plan, which aims to promote:

- Clean Energy: Applying solar applications including distributed photovoltaic power generation within water treatment facilities to reduce GHG emissions
- Energy Efficiency Improvements: Introducing smart control systems into the treatment facilities to control dosing and energy consumption
- Reduction in leakage rates: Introducing leak detection technologies and build new pipelines to improve leakage rate. For FY 2021-22, the water business of China Water claims to have achieved a leakage rate of 14.9% and an intent to reduce it to 10% for prefecture-level urban water supply and less than 12% for county-level urban water supply by 2035. Silver Dragon and its parent follow the same core corporate policy and strategy that is aligned with the national mission of providing clean drinking water.
- Green Construction: Using scientific management and technical guidance in construction activities which save valuable resources and reduce negative impacts on the environment.

¹ "How China is stemming the flow of ocean plastic." China Dialogue Ocean, March 11, 2021.



Silver Dragon has developed a Sustainable Finance Framework (the "Framework") to finance capital expenditures for projects with positive environmental and social impact. Aligned with Silver Dragon's overall strategy to improve the urban-rural water integration by extending water supply and providing safe drinking water to the underserved population, Silver Dragon, may borrow funds through bonds, loans, and other debt-like financing products where an amount equivalent to the net proceeds is applied to Eligible Sustainability Projects, as defined in the Framework.

Furthermore, Silver Dragon states that the activities funded using the proceeds raised under the Framework are likely to contribute to the following United Nations Sustainable Development Goals (UN SDGs):

- Goal 6: Clean Water and Sanitation
- Goal 7: Affordable and Clean Energy
- Goal 9: Industry, Innovation, and Infrastructure

Evaluation Process

In April 2023, MSCI ESG Research was commissioned by Silver Dragon to review and provide an independent second-party opinion on the alignment of Silver Dragon's Sustainable Finance Framework, with:

- 1. MSCI Sustainability Bond and Sustainability Loan Assessment Methodology
- 2. The Sustainability Bond Guidelines 2021 administered by ICMA

MSCI ESG Research has conducted a detailed review of the Framework provided by Silver Dragon. MSCI ESG Research has requested and received from the Company answers to in-depth questions on the Framework, including potential projects that could be funded by the sustainability bonds or loans issued under this Framework, potential risks associated with the projects, as well as potential positive and negative environmental and social impacts associated with the projects funded.

Based on the Framework and on the Company's responses to each of the questions posed across the different categories of the Framework, MSCI ESG Research consulted internal experts for evaluating the alignment of the Framework with the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA. The internal experts sit on the methodology committee within MSCI ESG Research, and based on their review, the Framework was assessed, and a second-party opinion was provided to Silver Dragon. The Company's Sustainable Finance Framework has been published as a separate document on its website.²

² Silver Dragon Water Supply Ltd Sustainable Finance Framework, March 2023:

http://www.chinawatergroup.com/pdfdown/SilverDragonSustainableFinanceFramework-22.03.23.pdf



Framework Alignment Details

Silver Dragon has published a Sustainable Finance Framework to fund projects, including on-site solar power generation; sustainable water management and affordable basic infrastructure projects.

The Sustainability Bond Guidelines 2021 administered by ICMA require that the Sustainable Finance Framework meets four principles outlined below:

Principle 1: Use of Proceeds

- Principle 2: Process for Project Evaluation and Selection
- **Principle 3: Management of Proceeds**
- Principle 4: Ongoing Reporting

The MSCI Sustainability Bond and Sustainability Loan Assessment Methodology also includes these four core criteria, based on the Sustainability Bond Guidelines 2021 administered by ICMA. The primary difference between the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology and the Sustainability Bond Guidelines 2021 administered by ICMA based on the Green Bond Principles 2022 administered by ICMA and the Social Bond Principles 2022 administered by ICMA is **Principle 1: Use of Proceeds**, where the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology is more stringent than the Sustainability Bond Guidelines 2021 administered by ICMA.³ The LMA has not published Sustainability Loan Principles or Guidelines. Hence, we refer to the Green Loan Principles and Social Loan Principles, and consequently the MSCI Sustainability Bond and Sustainability Bond and Sustainability Loan Assessment Methodology.

Principle 1: Use of Proceeds

The proceeds raised by the bonds or loans issued under this Framework shall be used to finance projects in the areas of: Sustainable Water Management, Renewable Energy, and Affordable Basic Infrastructure, as detailed below:

Eligible project category	Description of Project Types and Associated Criteria based on Silver Dragon's Framework	MSCI ESG Research review	Potential impacts associated with the project
Sustainable Water Management	Expenditures in new or existing potable water systems that improve efficiency (e.g., network upgrades, reducing non- revenue water), quality, capacity and/or reduce energy consumption/water losses. To be eligible: - The front-to-end water supply system must have a	The specified Use of Proceeds is aligned with the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA, which consider projects such as improvements of water supply and related facilities, infrastructure, or systems which attempt to resolve	The water supply projects should deliver clean drinking water to water scarce regions in China, thereby reducing dependence on bottled water. The new pipelines being laid should have less than half the leakage rate compared to the standard leakage rate in existing pipelines thereby increasing efficiency of

³ For further details, please see the Appendix.





Eligible project category	Description of Project Types and Associated Criteria based on Silver Dragon's Framework	MSCI ESG Research review	Potential impacts associated with the project
	high degree of energy efficiency measured by an average energy consumption of the system (including abstraction, treatment, and distribution) less than or equal to 0.5 kWh per cubic meter billed/unbilled authorized water supply. - The projects must do no significant harm to other environmental objectives and meet minimum social safeguards.	water scarcity or water quality issues to be eligible for funding by a green bond or a green loan.	water supply. Silver Dragon aims to build new pipelines and introduce leakage detection technologies which is aimed at reducing the overall leakage rate. Furthermore, it aims to reduce the leakage rate to 10% for prefecture-level urban water supply and less than 12% for county- level urban water supply by 2035.
Renewable Energy	Expenditures related to the construction, operation, and/or installation of solar photovoltaic plants (including roof-top solar) in, for example, water supply plants and/or administrative buildings.	The specified Use of Proceeds is aligned with the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA, which consider projects involving production of solar energy to be eligible for funding by a green bond or a green loan.	Renewable sources of energy have a low carbon footprint, which makes them an effective alternative to carbon intensive fossil-fuel based sources of energy and a substantial contributor to climate change mitigation activities. ⁴
Affordable Basic Infrastructure	Expenditures that improve access, reliability, and quality of water supply at affordable rates to populations living in rural areas to close the urban- rural supply-demand gap. ^{5,6,7}	The specified Use of Proceeds is aligned with the MSCI Sustainability Bond and Loan Assessment Methodology and the Sustainability Bond	Improving access to drinking water in the underserved area will support the efforts of China to ease water scarcity where the target population

⁴ "Life Cycle Greenhouse Gas Emissions from Electricity Generation: Update", National Renewable Energy Laboratory, September 2021.

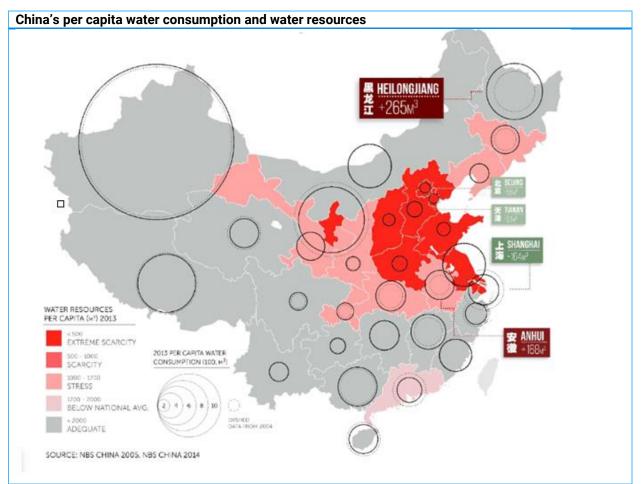
⁵ Water tariffs in China, when compared to those in other major economies, are very affordable. Chinese residents are expected to spend less than one percent of their disposable income on water, far less than the global average of around three to five percent. Additionally, during 2022, the "Measures for the Administration of Urban Water Supply Tariff", a new policy promulgated by the National Development and Reform Commission, came into effect, under which more transparency and higher predictability will be expected in the process and cycle of water price adjustment. It will provide further policy assurances for the healthy development of the Company's water supply business.

⁶ Urban-rural supply-demand gap: 98% of the population in urban regions have access to water in China, while in rural areas the percentage is 84%. In sanitation, the gap is somewhat greater, being 91% and 76% respectively. Data from UNICEF and WHO (2021). Available <u>here</u>.

⁷ The water supply plants that are financed under the Social Use of Proceeds Category must do no significant harm to environmental objectives, and therefore, must align with the high energy efficiency criterion (0.5 kWh per cubic meter billed/unbilled authorized water supply or less).



Eligible project category	Description of Project Types and Associated Criteria based on Silver Dragon's Framework	MSCI ESG Research review	Potential impacts associated with the project
		Guidelines 2021 administered ICMA. The category funded meets a specific social need and addresses a specified target population since it provides services and infrastructure projects that support the development or delivery of basic infrastructure such as drinking water distribution for underserved persons, including rural communities that have limited access to such basic infrastructure.	lacks access to a basic infrastructure. The company is targeting expansion in capacity of nearly 300,000 m ³ /d in underserved regions (refer below map on China's per capita water consumption and water resources) namely Shaanxi, Hunan and Hubei benefitting population of close to 800,000 people.



Source: Silver Dragon's roadshow presentation, September 2022



Silver Dragon's risk management process:

The policies and procedures of China Water are applicable to Silver Dragon as its wholly owned subsidiary. China Water has established a four-level risk management framework comprising the Board, the management, departments of different functions in its headquarters and person-in-charge of risk management of its subsidiaries to meet the requirements for continuous control of risks in its business development. The Board is responsible for implementing controls. The management, including operations, finance, engineering, legal and human resources teams, utilize their expertise for their respective internal control responsibilities. The Audit Committee, assisted by the external auditors, is responsible for monitoring the practices of the management of China Water and its wholly owned subsidiary Silver Dragon. Additionally, it has a dedicated professional procurement department to evaluate and analyze the suppliers involved in its supply chain. This includes the assessment of ESG disclosures of the suppliers, focusing on environmental issues, labor issues, social, and occupational health, and safety issues.

Based on the analysis above, MSCI ESG Research Silver Dragon's Use of Proceeds criteria to be credible, transparent, and **aligned** with Principle 1 of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.

Principle 2: Process for Project Evaluation and Selection

Silver Dragon shall create a checklist to be included in all project feasibility reports to help them identify the alignment of project with eligibility requirements of the framework. A composition of Finance and Operations team comprising of experts in environmental and social risk management as well as plant operations have created a Sustainable Finance Working Group ("Working Group"), which meets every six months to discuss and select Eligible Green and Social Projects according to the eligibility criteria of the Framework. The minutes of these meetings ensure the traceability of decisions regarding the project evaluation, selection, and monitoring. The Working Group considers the Company's sustainability strategy, Environmental and Social Risk Policy requirements and eligibility criteria as mentioned in the Framework to decide on project's eligibility. This group shall also be responsible for managing the future updates of the Framework. The funds shall be reallocated to other Eligible Green Projects if the selected project fails to meet the updated eligibility criteria.

MSCI ESG Research considers this process for the selection of projects to be **aligned** with Principle 2 of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.

Principle 3: Management of Proceeds

An amount equal to the net proceeds of the issuance shall be used to allocate to finance or refinance eligible green and social projects as per the Framework. Silver Dragon's Finance Team shall be responsible to manage and track each Sustainable Finance Transaction issued under the Framework and update the balance of funds periodically until full allocation. The net proceeds shall be tracked after depositing into the general account and earmarked to finance projects according to the framework. The Company commits to allocate the proceeds to eligible projects within 24 months or less from the issuance while the unallocated funds shall be held in short term deposits or investments as per Silver Dragon's liquidity guidelines. Silver Dragon also commits to avoid carbon intensive activities or conflicting projects as per the eligibility criteria of the Framework. The funds shall be reallocated to another eligible Green or Social Project within three months in case if the selected project ceases to meet the eligibility criteria.



MSCI ESG Research considers this process of management of proceeds to be **aligned** with Principle 3 of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.

Principle 4: Ongoing Reporting

Silver Dragon commits to reporting an annual Sustainable Finance Report within a year of the issuance. It shall also provide a report in case of material developments or controversies regarding the allocated projects. Its Finance Team shall be responsible to seek approval from the Working Group to provide the report to the investors in case of loans and publish within the annual ESG report in case of bond issuances. The annual ESG report will be available on the Company's website which will include allocations as well as impact reports regarding the projects funded under the eligible issuances. The Company aims to include the following data points within allocation reporting and impact reporting:

Allocation Reporting

- Details of each Sustainable Finance Transaction Outstanding,
- List of eligible Green and/or Social Projects financed or refinanced through the instrument, including a brief project description and amounts allocated,
- The percentage of financing versus refinancing of the proceeds,
- Proceeds allocated per eligible category, with information on types of temporary investments, and
- The remaining balance of unallocated proceeds at the end of the reporting period.

Impact Reporting

Impact Indicators for Green Projects

- Annual absolute (gross) water use before and after the project (m3/year),
- Reduction in annual absolute gross water use before and after the project (m3 or %),
- Annual volume of clean drinking water supplied for human consumption (m3/year),
- Non-revenue water (water leakage rate, in %),
- Average energy consumption of the system (kwh/m3).
- Greenhouse gas emissions reduction (t CO2 eq/year),
- Energy savings from Renewable Energy substitution for fossil fuel generated electricity (kWh/year),
- Installed Renewable Energy Capacity (kW).

Impact Indicators for Social Projects

- Number of people with access to clean water (# in urban, # in rural),
- Number of newly serviced population (#),
- Annual volume of clean drinking water supplied (m3/year),
- Water supply network penetration rate (% urban, % rural),
- Tariff rate per usage type (yuan/ton),
- Number of local employees hired for construction (#)

MSCI ESG Research considers this process of annual reporting to be **aligned** with Principle 4 of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.



Conclusion

Silver Dragon states that it intends to improve the quality of life in its operating regions by providing urban and rural residents with better "last-meter drinking water solutions." It aims to achieve this by implementing projects which facilitate drinking water to populations with insufficient water supply or regions where capacity is limited through the Sustainable Finance Framework. The Sustainable Finance Working Group is responsible for identifying relevant green or social projects funded by the bonds or loans issued under its Framework. Silver Dragon has committed to track all its investments and report on the Use of Proceeds from the bonds and loans annually to provide transparency to investors. It also has established measures to identify, manage and mitigate key environmental and social risks associated with their eligible Use of Proceeds.

MSCI ESG Research considers Silver Dragon's Sustainable Finance Framework to be robust and credible, and **aligned** with its sustainability goals and strategy. MSCI ESG Research believes that Silver Dragon's Framework adequately addresses all the requirements of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.

Alignment to the Sustainability Bond Guidelines 2021: Given that the Framework in our opinion meets all the core components of the four principles defined in the Green Bond Principles 2022 administered by ICMA and Social Bond Principles 2022 administered by ICMA, the Framework is considered to be aligned with the Sustainability Bond Guidelines 2021.

Alignment to MSCI Sustainability Bond and Sustainability Loan Assessment Methodology : Given that the Framework in our opinion meets all four principles defined in the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, the Framework is considered to be aligned with the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology.



ICMA Independent External Review Form

Completed template provided by ICMA for Sustainability Bond **Programmes**

Section 1. Basic Information

Issuer name: Silver Dragon Water Supply Group Limited

Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable: Sustainable **Finance Framework**

Independent External Review provider's name: MSCI ESG Research LLC

Completion date of this form: May 23, 2023

Publication date of review publication: May 23, 2023

Section 2. Review overview

SCOPE OF REVIEW

The review assessed the following elements and confirmed their alignment with the GBPs and the SBPs:

\boxtimes	Use of Proceeds	\boxtimes	Process for Project Evaluation and Selection	
\boxtimes	Management of Proceeds	\boxtimes	Reporting	

ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER

- Second Party Opinion Certification \mathbf{X} Π
- Verification П

Scoring/Rating

Other (please specify): П

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW

Silver Dragon states that it intends to improve the quality of life in its operating regions by providing urban and rural residents with better "last-meter drinking water solutions." It aims to achieve this by implementing projects which facilitate drinking water to populations with insufficient water supply or regions where capacity is limited through the Sustainable Finance Framework. The Sustainable Finance Working Group is responsible for identifying relevant green or social projects funded by the bonds or loans issued under its Framework. Silver Dragon has committed to track all its investments and report on the Use of Proceeds from the bonds and loans annually to provide transparency to investors. It also has established measures to identify, manage and mitigate key environmental and social risks associated with their eligible Use of Proceeds.



MSCI ESG Research considers Silver Dragon's Sustainable Finance Framework to be robust and credible, and **aligned** with its sustainability goals and strategy. MSCI ESG Research believes that Silver Dragon's Framework adequately addresses all the requirements of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.

Section 3. Detailed review

1. USE OF PROCEEDS

MSCI ESG Research Silver Dragon's Use of Proceeds criteria to be credible, transparent, and **aligned** with Principle 1 of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.

Use of proceeds categories as per GBP:

\boxtimes	Renewable energy	Energy efficiency
	Pollution prevention and control	Environmentally sustainable management of living natural resources and land use
	Terrestrial and aquatic biodiversity conservation	Clean transportation
\boxtimes	Sustainable water and wastewater management	Climate change adaptation
	Eco-efficient and/or circular economy adapted products, production technologies and processes	Green buildings
	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs	Other (please specify):



Use of proceeds categories as per SBP:

- ☑ Affordable basic infrastructure
 □ Access to essential services
- □ Affordable housing

 Employment generation / programs designed to prevent and/or alleviate unemployment stemming from

socioeconomic crises

- Food security and sustainable food systems
- Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBPs
- Socioeconomic advancement and empowerment
- □ Other (please specify):

Target populations:

\Box Living below the poverty line	 Excluded and/or marginalised populations and /or communities
\square People with disabilities	\square Migrants and /or displaced persons
□ Undereducated	⊠ Underserved, owing to a lack of quality access to essential goods and services
	\square Women and/or sexual and gender minorities
\square Aging populations and vulnerable youth	Other vulnerable groups, including as a result of natural disasters
□ Other (please specify):	



2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Silver Dragon shall create a checklist to be included in all project feasibility reports to help them identify the alignment of project with eligibility requirements of the framework. A composition of Finance and Operations team comprising of experts in environmental and social risk management as well as plant operations have created a Sustainable Finance Working Group ("Working Group"), which meets every six months to discuss and select Eligible Green and Social Projects according to the eligibility criteria of the Framework. The minutes of these meetings ensure the traceability of decisions regarding the project evaluation, selection, and monitoring. The Working Group considers the Company's sustainability strategy, Environmental and Social Risk Policy requirements and eligibility criteria as mentioned in the Framework to decide on project's eligibility. This group shall also be responsible for managing the future updates of the Framework. The funds shall be reallocated to other Eligible Green Projects if the selected project fails to meet the updated eligibility criteria.

MSCI ESG Research considers this process for the selection of projects to be **aligned** with Principle 2 of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.

Evaluation and selection

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

Information on Responsibilities and Accountability

- ☑ Evaluation / Selection criteria subject ⊠ In-house assessment to external advice or verification
- \Box Other (please specify):

3. MANAGEMENT OF PROCEEDS

An amount equal to the net proceeds of the issuance shall be used to allocate to finance or refinance eligible green and social projects as per the Framework. Silver Dragon's Finance Team shall be responsible to manage and track each Sustainable Finance Transaction issued under the Framework and update the balance of funds periodically until full allocation. The net proceeds shall be tracked after depositing into the general account and earmarked to finance projects according to the framework. The Company commits to allocate the proceeds to eligible projects within 24 months or less from the issuance while the unallocated funds shall be held in short term deposits or investments as per Silver Dragon's liquidity guidelines. Silver Dragon also commits to avoid carbon intensive activities or conflicting projects as per



the eligibility criteria of the Framework. The funds shall be reallocated to another eligible Green or Social Project within three months in case if the selected project ceases to meet the eligibility criteria.

MSCI ESG Research considers this process of management of proceeds to be **aligned** with Principle 3 of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.

Tracking of proceeds:

- Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner
- Disclosure of intended types of temporary investment instruments for unallocated proceeds
- \Box Other (please specify):

Additional disclosure:

- Allocations to future investments only
- Allocation to individual disbursements

- Allocations to both existing and future investments
- Allocation to a portfolio of disbursements
- Disclosure of portfolio balance of unallocated proceeds
- □ Other (please specify):

4. REPORTING

Silver Dragon commits to reporting an annual Sustainable Finance Report within a year of the issuance. It shall also provide a report in case of material developments or controversies regarding the allocated projects. Its Finance Team shall be responsible to seek approval from the Working Group to provide the report to the investors in case of loans and publish within the annual ESG report in case of bond issuances. The annual ESG report will be available on the Company's website which will include allocations as well as impact reports regarding the projects funded under the eligible issuances. The Company aims to include the following data points within allocation reporting and impact reporting:

Allocation Reporting

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- · The percentage of financing versus refinancing of the proceeds,
- Proceeds allocated per eligible category, with information on types of temporary investments, and
- The remaining balance of unallocated proceeds at the end of the reporting period.



Impact Reporting

Impact Indicators for Green Projects

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- Reduction in annual absolute gross water use before and after the project (m3 or %),
- Annual volume of clean drinking water supplied for human consumption (m3/year),
- Non-revenue water (water leakage rate, in %),
- Average energy consumption of the system (kwh/m3).
- · Greenhouse gas emissions reduction (t CO2 eq/year),
- · Energy savings from Renewable Energy substitution for fossil fuel generated electricity (kWh/year),
- Installed Renewable Energy Capacity (kW).

Impact Indicators for Social Projects

- Number of people with access to clean water (# in urban, # in rural),
- Number of newly serviced population (#),
- · Annual volume of clean drinking water supplied (m3/year),
- Water supply network penetration rate (% urban, % rural),
- Tariff rate per usage type (yuan/ton),
- Number of local employees hired for construction (#)

MSCI ESG Research considers this process of annual reporting to be **aligned** with Principle 4 of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology, and the Sustainability Bond Guidelines 2021 administered by ICMA.

Use of proceeds reporting:

	Project-by-project	\boxtimes	On a project portfolio basis
	Linkage to individual bond(s)		Other (please specify):
	Information reported:		
	⊠ Allocated amounts		Sustainability Bond financed share of total investment
	□ Other (please specify):		
	Frequency:		
	⊠ Annual		Semi-annual
	□ Other (please specify):		
Impac	t reporting:		
	Project-by-project	\boxtimes	On a project portfolio basis
	Linkage to individual bond(s)		Other (please specify):
	Frequency:		
	⊠ Annual		Semi-annual



	Other (please specify):			
	Information reported (expected or ex-post):			
	⊠ GHG Emissions / Savings	\mathbf{X}	Energy Savings	
	⊠ Decrease in water use	\mathbf{X}	Number of beneficiaries	
	⊠ Target populations		Other ESG indicators (please specify):	
Means	s of Disclosure			
	Information published in financial report	\boxtimes	Information published in sustainability report	
	Information published in ad hoc documents		Other (please specify):	
	Reporting reviewed (if yes, please specify wh	nich pa	arts of the reporting are subject to external review):	

Review provider(s): MSCI ESG Research

Date of publication: May 23, 2023



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

1. Second Party Opinion: An institution with sustainability expertise that is independent from the issuer may provide a Second Party Opinion. The institution should be independent from the issuer's adviser for its Sustainability Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second Party Opinion.

It normally entails an assessment of the alignment with the Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy, and/or processes relating to sustainability and an evaluation of the environmental and social features of the type of Projects intended for the Use of Proceeds.

2. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or sustainability criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally or socially sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Sustainability Bond proceeds, statement of environmental or social impact or alignment of reporting with the Principles may also be termed verification.

3. Certification: An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against a recognised external sustainability standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.

4. Green, Social and Sustainability Bond Scoring/Rating: An issuer can have its Sustainability Bond, associated Sustainability Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental and/or social performance data, process relative to the Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material sustainability risks.



MSCI ESG Research Credentials

MSCI ESG Research has been assessing green bonds since the launch of the Bloomberg Barclays MSCI Green Bond Index (now called the Bloomberg MSCI Green Bond Index) in 2014. Key design features include an independent evaluation of securities by MSCI ESG Research along four dimensions:

- 1) stated Use of Proceeds;
- 2) process for green project evaluation and selection;
- 3) process for management of proceeds; and
- 4) commitment to ongoing reporting on environmental performance of the Use of Proceeds

to help determine index eligibility.8

The MSCI Green Bond Assessment Methodology, now titled the MSCI Labeled Bond and Loan Assessment Methodology, is reviewed on a regular basis and updated based on client consultations to keep abreast with innovations in green financing in this rapidly growing market.

MSCI Second-Party Opinions are prepared by MSCI ESG Research analysts and are subject to review by the MSCI Green and Social Instruments Methodology Committee prior to publication.

MSCI ESG Research has been an Observer of the Green Bond Principles administered by ICMA since April 2021.

In addition to Second-Party Opinions, MSCI offers a range of solutions that evaluate environmental, social and governance factors across different sectors and markets. These include MSCI ESG Ratings, MSCI Climate Change Metrics, MSCI Sustainable Impact Metrics, MSCI Business Involvement Screening Research and MSCI ESG Controversies. Please see About MSCI ESG Research Products and Services below or visit msci.com for more information.

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- Silver Dragon Water Supply Ltd Sustainable Finance Framework as of March 2023
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⁸ "Bloomberg MSCI Green Bond Indices", Bloomberg and MSCI, September 2021.



Appendix

The MSCI Sustainability Bond and Sustainability Loan Assessment Methodology

The MSCI Sustainability Bond and Sustainability Loan Assessment Methodology evaluates bonds' alignment with the four core criteria below. These are based on the Green Bond Principles 2022 administered by ICMA.

Principle 1: Use of Proceeds Principle 2: Process for Selection Principle 3: Management of Proceeds Principle 4: Ongoing Reporting

The primary difference between the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology and the Green Bond Principles 2022 administered by ICMA is in Principle 1: Use of Proceeds, where the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology is more stringent than the Green Bond Principles 2022 administered by ICMA.

Summary of the MSCI Sustainability Bond and Sustainability Loan Assessment Methodology Use of Proceeds categories

Green Category	Eligible	Ineligible
Alternative Energy	Investments in products, services, manufacturing, or infrastructure projects that support the development or delivery of renewable energy and alternative fuels, including:	Funding to mining or extractive technologies or
	• Generation, transmission, and distribution of energy from renewable sources including wind, solar, geothermal, biomass ⁹ , small-scale hydro (25 MW) ¹⁰ , large-scale hydro (subject to additional sustainability criteria, as noted below), waste-to-energy, and wave and tidal energy.	processes
	• Fuels, technology, and infrastructure for the production and distribution of cleaner hybrid fuels, green hydrogen, fuel cells, and alternative fuels, including biodiesel, biogas, and cellulosic ethanol.	
	• Due to their potential negative environmental and social externalities (e.g., potential damage to biodiversity due to construction of an embankment or potential displacement of local communities due to the same) large-scale hydroelectric	

⁹ Biomass needs to be sustainably sourced i.e., sourced from FSC (Forest Stewardship Council), PEFC (Programme for the Endorsement of Forest Certification), SBP (Sustainable Biomass Program) or RSB (Roundtable on Sustainable Biomaterials) certified sources.

¹⁰ Small hydro is formally defined as including projects that fall below the thresholds set by the International Commission on Large Dams (ICOLD), which require that dams be below 15 meters in height (Source: "Constitution Status", ICOLD/CIGB, July 2011). MSCI ESG Research defines dams under 25MW in capacity qualify as "small", as capacity is used as a proxy for size where detailed information is not available. Large hydro is defined as all projects exceeding the small hydro thresholds



	projects are only considered as "green" if they satisfy one of the following international sustainability best practices: o Hydropower Sustainability Assessment Protocol – a published assessment report and score of '3' or above (i.e., in line with "Good Practices") on all relevant pillars ¹¹ ; or o International Finance Corporation (IFC) Performance Standards - a stated commitment before or at issuance of the bond or loan to meet the requirements outlined by all eight IFC Performance Standards ¹²	
Energy Efficiency	 Investments in products, services, infrastructure, or technologies that proactively address the growing global demand for energy while minimizing effects on the environment, including: Technologies and systems that promote efficiency of industrial operations (e.g., turbines, motors, and engines), industrial automation and controls, and optimization systems (e.g., cloud computing, data optimization systems). Infrastructure, technology, and systems that increase the efficiency of power management, power distribution (including electric district heating and cooling systems), power storage (e.g., batteries) and demand-side management (e.g., wireless sensors, advanced meters, smart grid). Pumped storage hydroelectric projects that meet the large hydropower sustainability criteria indicated above. Technologies and systems focused on reducing fuel consumption of transport vehicles and industrial operations (e.g., hybrid/electric vehicles, bicycles). Sustainable transportation infrastructure including urban mass transit, efficiency improvements of public transportation fleets, freight rail and related infrastructure (provided the rail is not dedicated to fossil fuel transport), electric vehicle charging, electric bicycle charging infrastructure, improved traffic systems. Heating, ventilation, and air conditioning (HVAC) equipment and systems, architectural glass, efficient lighting, insulation, building automation and controls, electric heat pumps and devices and systems designed to be utilized in the design and construction of environmentally sustainable buildings. 	 Corporate operational energy efficiency efforts, such as efficiency gains in manufacturing, transporting, or distributing standard products or services, where proceeds are not directly used for energy efficiency improvements or retrofits. Energy efficiency in fossil fuel-based energy generation, except for natural gas-based cogeneration.
Pollution Prevention & Control	Products, services, or projects that support pollution prevention, waste minimization, or recycling as a means of alleviating the burden of unsustainable waste generation, including:	Landfill or incineration waste treatment projects without a specific

¹¹ "Hydropower Sustainability Assessment Protocol, Background Document", International Hydropower Association, May 2020.

¹² "Performance Standards on Environmental and Social Sustainability" International Finance Corporation. January 1, 2012.



	 Technologies, systems, and projects that aim to reduce air pollution (e.g., environmental IT, conventional pollution control systems and direct air carbon capture and storage). Projects to salvage, use, reuse, and recycle post-consumer waste products, including composting of organic waste. Waste treatment and environmental remediation projects, including land treatment and brownfield cleanup, soil washing, chemical oxidation, bioremediation. Note that this is only valid where the issuer itself or any of its subsidiaries (majority or minority owned) or partner firms are not responsible for the contamination that has occurred. Sustainable alternative materials such as raw materials, low VOC paints and adhesives used in the construction of green buildings. 	waste to-energy component.
Sustainable Water	 Products, services, and projects that attempt to resolve water scarcity and water quality issues, including minimizing and monitoring current water use and demand increases, improving the quality of water supply, and improving the availability and reliability of water, such as: Infrastructure and engineering projects that develop new or repair existing water and sanitation pipelines, including equipment and technology providers, resulting in improved quality and/or water use efficiency. Note that all large dams (i.e., above 15 meters in height) for water storage need to have a stated commitment to meet the requirements outlined by all eight IFC Performance Standards¹³. Technologies and products that reduce, reuse, or recycle water as a means of conservation (e.g., smart metering 	Distribution of water, including drinking water, without measurable improvements to water quality, water efficiency, or climate change resilience components.
	 devices, low-flow equipment, and rainwater harvesting systems). Advanced materials, equipment, technologies, and services that filter or chemically treat wastewater for consumer or industrial use, including desalination. Investments in protection of land, forests, and other vegetation in the upper watershed as a means to improve the quality of water bodies and groundwater recharge areas. 	
Green Building	 Design, construction, redevelopment, retrofitting, or acquisition of green-certified properties – subject to local green building criteria, including: Properties that are certified as green based on the local country's environmental performance standard (e.g., based on Energy Star, NABERS [>3], or equivalent) or environmental design standards (e.g., LEED Certified, BREEAM, NZEB, Passive house or local equivalent). 	

¹³ "Performance Standards on Environmental and Social Sustainability" International Finance Corporation. January 01, 2012.





	 Properties that rank in the top 15% on energy efficiency measures relative to same-sector properties within the local market (e.g., top 15% of buildings on energy efficiency in a specific city, district, state, or country). The issuer must demonstrate that the buildings fall within the top 15% in energy efficiency in the market. Mortgage-backed securities and bonds that fund real estate properties that achieve a minimum 30% improvement in energy efficiency compared to baseline performance prior to the renovations and other capital improvements funded through the use of proceeds 	
Climate Adaptation	 Projects that reduce the vulnerability of social or environmental systems to the effects of risks related to climate change by maintaining or increasing adaptive capacity, reducing sensitivity to climate change or increasing climate resilience, including: Flood protection (e.g., flood defenses, waterway management, pumping stations and drainage improvement); 	
	 Food security and stress-resilient agricultural systems; Reforestation and watershed management; Climate resiliency services (e.g., modernization of meteorological systems and catastrophe risk insurance). 	
Other	 This category includes environmental activities and projects that are not covered in the six categories described above. These activities and projects include, but are not limited to: the protection and conservation of biodiversity; sustainable forestry and afforestation projects; and sustainable agricultural projects. 	

Note that funding to research and development for the categories described above is eligible.

In cases where project categories do not overlap entirely with MSCI ESG Research definitions, MSCI ESG Research will consider bonds eligible if at least 90% of the projected Use of Proceeds falls within eligible categories.

Social Category	Eligible	Ineligible
Food security	 Products, services or infrastructure projects that support the delivery of basic food, as defined by Choices International Foundation. 	Delivery of confectionery items, tobacco, alcohol and gourmet food.
	 Assistance provided to improve agricultural efficiency, agricultural supply chain and prevent food wastage. 	



Healthcare	 Products, services or infrastructure projects that support the development or delivery of the following, based on need of the target population, patient or consumer: Medical infrastructure like clinics, dispensaries and hospitals. Medical equipment. Pharmaceutical products. Training of hospital staff and welfare workers. 	Beauty products and high-end cosmetic procedures, controversial clinical trials (e.g., clinical trials that do not commit to the World Medical Association Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects, or adhere to the International Conference on Harmonization (ICH) Good Clinical Practice), and excludes clinical trials that fail to include informed consent in ethical clinical trial procedures).
Affordable real estate	 Products, services or infrastructure projects that support the development or delivery of: Affordable or social housing units for sale or rent, including apartments, standalone houses or commercial real estate for micro, small and medium enterprises (MSMEs). Funding to social housing associations designated by the government. 	Holiday homes, luxury homes and commercial spaces for corporate or luxury use.
Access to finance	 Products, services or infrastructure projects that support the development or delivery of finance to MSME businesses. Funding to social enterprises, as defined by national or regional regulations. Microfinance to individuals or communities for promoting entrepreneurship or education. Microfinance to small offices/home offices is also eligible. 	Predatory lending practices like payday loans, installment loans, pawn loans, title loans, tax refund anticipation loans and doorstep loans.
Education	 Products, services or infrastructure projects that support the development or delivery of: Primary school, secondary school, college-and university-related products and services, including residential facilities for such establishments. Technical/vocational training centers and programs. Support for professional certification programs. Financial literacy programs. Training for teachers and related staff. 	All non-educational content and any product or service that does not contain educational content used in a school or college environment. For example, exclusions include general literature, illustrated books, newspapers and magazines, TV programs, software product-related training courses and employee training.



Basic infrastructure	 Products, services or infrastructure projects that support the development or delivery of basic infrastructure such as: Public roads and bridges. Public transport infrastructure like public buses, subways, etc. Drinking water distribution and sanitation. Electricity distribution infrastructure. Digital infrastructure. 	Roads, airports, ports for luxury use such as cruises and digital home infrastructure like modems and cell phones.
Employment generation	 Employment generation initiatives by government or not-for-profit sectors. This includes support provided to companies for job creation and employee retention. Support for MSME businesses as vendors or business partners. Training initiatives to increase employability. 	Excludes corporations that provide employment to serve their business needs, casinos, for-profit prisons, or weapons manufacturing.
Other social	 This includes categories not covered above, particularly regarding government spending, such as: Payment of Social Security. Replacement income to people who have lost their jobs. Provision of health insurance to the populace. 	Generic categories like "socio- economic advancement."

Target demographics

Eligible target demographics are:

- Underserved persons, owing to a lack of access to essential goods and services. This includes rural communities that do not have access to basic infrastructure.
- Unemployed.
- People and communities displaced by natural disasters.
- Low- or middle-income persons, families or households.
- Least Developed Countries, as defined by the United Nations.
- Low-income countries as defined by the World Bank.
- Micro, small and medium enterprises (MSMEs) as classified by the local or national regulations.
- The elderly (over 65 years of age), including retirees.
- People with disabilities.
- Migrants and/or displaced persons.
- Racial, ethnic and other minorities or marginalized genders.
- Marginalized farmers, or farmers that lack access to markets.
- Other excluded and/or marginalized populations and/or communities.

In cases where government entities are developing infrastructure for healthcare or education that is accessible to the entire population of the region, the target population can be the general public.



Summary of the Green Bond Principles 2022, administered by ICMA, Green Bond Use of Proceeds categories¹⁴

The Eligible Green Projects categories, listed in no specific order, include, but are not limited to:

• Renewable energy (including production, transmission, appliances and products);

• Energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products);

• Pollution prevention and control (including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/ emission-efficient waste to energy);

• Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes);

• Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments);

• Clean transportation (such as electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions);

• Sustainable water and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation);

• Climate change adaptation (including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems);

• Circular economy adapted products, production technologies and processes (such as the design and introduction of reusable, recyclable and refurbished materials, components and products; circular tools and services); and/or certified eco-efficient products;

• Green buildings that meet regional, national or internationally recognised standards or certifications for environmental performance.

The Social Bond Principles 2022 social bond Use of Proceeds categories¹⁵

Social Project categories include, but are not limited to providing and/or promoting:

- Affordable basic infrastructure (e.g., clean drinking water, sewers, sanitation, transport, energy)
- Access to essential services (e.g., health, education and vocational training, healthcare, financing and financial services).

¹⁴ "Green Bond Principles 2022", International Capital Market Association, June 2022.

¹⁵ "Social Bond Principles 2022", International Capital Market Association, June 2022.



- Affordable housing
- Employment generation, and programs designed to prevent and/or alleviate unemployment stemming from socioeconomic crises; including through the potential use of SME financing and microfinance
- Food security and sustainable food systems (e.g., physical, social, and economic access to safe, nutritious, and sufficient food that meets dietary needs and requirements; resilient agricultural practices; reduction of food loss and waste; and improved productivity of small-scale food producers)
- Socioeconomic advancement and empowerment (e.g., equitable access to and control over assets, services, resources, and opportunities; equitable participation and integration into the market and society, including reduction of income inequality)

Examples of target populations include, but are not limited to, those that are³:

- 1. Living below the poverty line
- 2. Excluded and/or marginalized populations and/or communities
- 3. People with disabilities
- 4. Migrants and/or displaced persons
- 5. Undereducated
- 6. Underserved, owing to a lack of quality access to essential goods and services
- 7. Unemployed
- 8. Women and/or sexual and gender minorities
- 9. Aging populations and vulnerable youth
- 10. Other vulnerable groups, including as a result of natural disasters





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