



# BANGKOK EXPRESSWAY AND METRO PLC. SUSTAINABLE FINANCING FRAMEWORK

## SECOND PARTY OPINION



**Document title:** Second Party Opinion on Bangkok Expressway and Metro PLC Sustainable Financing Framework

**Prepared by:** DNV Business Assurance Australia Ltd.

**Location:** Sydney, Australia; Bangkok, Thailand

**Date:** 23 February 2022



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### Disclaimer

Our assessment relies on the premise that the data and information provided by the client to us as part of our review procedures have been provided in good faith. Because of the selected nature (sampling) and other inherent limitation of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities, possibly significant, may not have been detected. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied as per scope of work. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Statement.

### Statement of Competence and Independence

DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2011 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We have complied with the DNV Code of Conduct<sup>1</sup> during the assessment and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of statements or data included in the Framework except for this Statement. DNV maintains complete impartiality toward stakeholders interviewed during the assessment process.

<sup>1</sup> DNV Code of Conduct is available from DNV website ([www.dnv.com](http://www.dnv.com))



## DNV'S INDEPENDENT ASSESSMENT

### Scope and Objectives

Bangkok Expressway and Metro Public Company Limited ("BEM" or "Issuer"), is a public transportation company in Thailand. It operates two metro lines and expressways in Bangkok and its vicinity. BEM is committed to establishing and maintaining transport infrastructure and operations in its service area of Bangkok, Thailand and its vicinity.

BEM has developed a Sustainable Financing Framework and is considering the issuance of Sustainability Finance Instruments ("SFIs") as defined within the following (collectively the "Principles"):

- Green Bond Principles ("GBP"), International Capital Market Association ("ICMA"), June 2021
- Green Loan Principles 2021 ("GLP"), Loan Market Association ("LMA"), February 2021
- Social Bond Principles ("SBP"), ICMA, June 2021
- Social Loan Principles ("SLP"), LMA, April 2021
- Sustainability Bond Guidelines ("SBG"), ICMA, June 2021
- ASEAN Green Bond Standards ("GBS"), ASEAN Capital Markets Forum ("ACMF"), October 2018
- ASEAN Social Bond Standards ("SBS"), ACMF, October 2018
- ASEAN Sustainability Bond Standards ("SUS"), ACMF, October 2018

Proposed SFIs are to be issued with a notional value of up to THB 24.5 billion. Note that this comprises the following:

1. THB 6 billion, which was raised under a 2021 Sustainability Bond under a Framework for which DNV issued a SPO on 20 May 2021; and
2. THB 18.5 billion of additional funding to be raised on the basis of a revised Sustainable Financing Framework, dated February 2022.

This SPO incorporates all funding described above, and as such, supersedes the DNV SPO of 20 May 2021.

BEM intends to use the proceeds of the SFIs to finance and/or refinance projects within the categories of :

- Clean Transportation;
- Energy Efficiency;
- Renewable Energy;
- Water Management;
- Affordable Basic Infrastructure;
- Employment Generation and Training; and
- Quality Education.

DNV Business Assurance Australia Pty Ltd ("DNV") has been commissioned by BEM to provide a Sustainability Bond or Loan eligibility assessment of the SFIs. Our methodology to achieve this is described under 'Work Undertaken' below. We were not commissioned to provide independent assurance or other audit activities.



No assurance is provided regarding the financial performance of the SFIs, the value of any investments in the SFIs, or the long-term environmental benefits of the transaction. Our objective has been to provide an assessment that the SFIs have met the criteria established on the basis set out below.

The scope of this DNV opinion is limited to the Principles listed above.

## Responsibilities of the Management of BEM and DNV

The management of BEM has provided the information and data used by DNV during the delivery of this review. Our statement represents an independent opinion and is intended to inform BEM management and other interested stakeholders in the SFIs as to whether the established criteria have been met, based on the information provided to us. In our work we have relied on the information and the facts presented to us by BEM. DNV is not responsible for any aspect of the nominated assets referred to in this opinion and cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Thus, DNV shall not be held liable if any of the information or data provided by BEM's management and used as a basis for this assessment were not correct or complete.

## Basis of DNV's opinion

We have adapted assessment methodology described by the Principles, to create a BEM-specific SFIs Eligibility Assessment Protocol (henceforth referred to as "Protocol"). Our Protocol includes a set of suitable criteria that can be used to underpin DNV's opinion. The overarching principle behind the criteria is that a SFIs should "enable capital-raising and investment for new and existing projects with environmental and/or social benefits". As per our Protocol, the criteria against which the SFIs has been reviewed are grouped under the Principles:

- **Principle One: Use of Proceeds.** The Use of Proceeds criteria are guided by the requirement that an issuer of SFIs must use the funds raised to finance and/or refinance eligible activities. The eligible activities should produce clear environmental and social benefits.
- **Principle Two: Process for Project Evaluation and Selection.** The Project Evaluation and Selection criteria are guided by the requirements that an issuer of SFIs should outline the process it follows when determining eligibility of an investment using SFIs proceeds, and outline any impact objectives it will consider.
- **Principle Three: Management of Proceeds.** The Management of Proceeds criteria are guided by the requirements that SFIs should be tracked within the issuing/borrowing organization, that separate portfolios should be created when necessary and that a declaration of how unallocated funds will be handled should be made.
- **Principle Four: Reporting.** The Reporting criteria are guided by the recommendation that at least Sustainability Reporting to the SFIs investors/lenders should be made of the use of SFIs proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.

## Work Undertaken

Our work constituted a high-level review of the available information, based on the understanding that this information was provided to us by BEM in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The work undertaken to form our opinion included:



- Creation of an BEM-specific Protocol, adapted to the purpose of the SFIs, as described above and in Schedule 2 and 3 to this Assessment;
- Assessment of documentary evidence provided by BEM on the SFIs and supplemented by a highlevel desktop research. These checks refer to current assessment best practices and standards methodology;
- Assessment of compliance with the Principles;
- Discussions with BEM management, and review of relevant documentation;
- Documentation of findings against each element of the criteria. Our opinion as detailed below is a summary of these findings.

## Findings and DNV's Opinion

DNV's findings are listed below:

### 1. Use of Proceeds

BEM intends to use the proceeds of the SFIs to finance and/or refinance projects and assets within the categories of: Clean Transportation; Energy Efficiency; Renewable Energy; Water Management; Affordable Basic Infrastructure; Employment Generation and Training; and Quality Education.

DNV undertook an analysis of the associated project types including type and location and scale of the assets to determine eligibility of these projects as "Green" and "Socially Beneficial" in line with the Principles. DNV evaluates and concludes that BEM's nominated projects and assets are aligned with one of eligible Green and Social project categories specified in the Principles. Refer to Schedule 1 for further information.

### 2. Process for Project Evaluation and Selection

The SFI's proceeds will be allocated to finance and/or refinance the assets as defined in Schedule 1. DNV has reviewed evidence that demonstrates that BEM regularly assesses opportunities for improvement and devises action plans and initiatives to mitigate negative environmental and social impacts from its operations.

### 3. Management of Proceeds

DNV has reviewed evidence showing how BEM plans to trace the proceeds from the SFIs, from the time of issuance to the time of disbursement. BEM will monitor the allocation of an amount equal to the proceeds via internal information systems. A record will be created to facilitate the monitoring and reporting of the issued SFIs and the deployment of an amount equal to the net proceeds. As stated above, DNV provides no assurance regarding the financial performance of the SFIs, the value of any investments in the SFIs, or the effects of the transaction. DNV has confirmed the proposed issuance value (up to THB 24.5 billion) is less than the BEM exposure to the eligible projects and assets.

### 4. Reporting

BEM has confirmed that it will, where feasible, report on its website the following:

- i. The amount of net proceeds allocated per Eligible Projects/Assets;
- ii. The percentage of financing/refinancing of projects/assets ;
- iii. The amount of unallocated proceeds, if any, at the date of reporting;
- iv. Location and status of the projects/assets;
- v. Impacts Reporting associated with the SFIs;



On the basis of the information provided by BEM and the work undertaken, it is DNV's opinion that the BEM Sustainable Financing Framework and proposed SFIs meet the criteria established in the Protocol and are aligned with the stated definition of green and social bonds/loans. Based on the External Review procedures conducted, nothing has come to our attention that causes us to believe that the BEM Sustainable Financing Framework and SFIs are not, in all material respects, in accordance with the Principles.



**for DNV Business Assurance Australia Pty Ltd.**

Sydney, NSW, Australia 23 February 2022  
Bangkok, Thailand, 23 February 2022

A handwritten signature in black ink, appearing to read "Mark Robinson".

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Mark Robinson  
**Lead Verifier, Sustainability  
Services**

A handwritten signature in blue ink, appearing to read "Thomas Leonard".

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Thomas Leonard  
**Technical Reviewer**



## Schedule 1. Description of Categories to be financed or refinanced through BEM's SFIs

Project	Type	Category	Use of Proceeds	Location	Exposure (THBm)
MRT rail networks	Green	Clean Transportation	<ul style="list-style-type: none"> <li>• Electric vehicle / train, metro networks, related systems, stations, facilities, utilities and other infrastructure</li> </ul>	Bangkok, Thailand	Up to THB 24.5 billion
		Energy Efficiency	<ul style="list-style-type: none"> <li>• Systems, products, technologies to reduce energy consumption or improve efficiency or mitigate GHG emissions</li> <li>• New and energy-efficient trains or light rail vehicles</li> <li>• Energy efficient heating, air-conditioning, cooling, lighting and electrical equipment such as light emitting diodes (LEDs), solar cell, sensor systems, platform screen doors, air or water cooled chillers</li> </ul>		
		Renewable Energy	<ul style="list-style-type: none"> <li>• Renewable energy i.e. solar roof</li> </ul>		
		Water Management	<ul style="list-style-type: none"> <li>• Improvement in water management including water treatment and recycling of water</li> </ul>		
	Social	Affordable Basic Infrastructure	<ul style="list-style-type: none"> <li>• Upgrade station facilities, services and trains for all or elderly and special need groups</li> <li>• Health / hygiene services and equipment</li> <li>• Recreation areas for passengers / community</li> <li>• Support for school/college students, and children / elderly i.e. fare discount</li> </ul>		
		Employment Generation and Training	<ul style="list-style-type: none"> <li>• Employment generation</li> <li>• Sharing knowledge to educational institutions</li> <li>• Sharing knowledge across the company</li> <li>• Relief measures for those affected by unexpected economic and financial disruptions.</li> </ul>		
		Quality education	<ul style="list-style-type: none"> <li>• Scholarships to underprivileged youth</li> </ul>		

## Schedule 2. Green/Social Bond and Green/Social Loan Principles Verifications

### 1. Use of Proceeds

Ref	Criteria	Requirements	Work Undertaken	DNV Findings
1a	Type of SFIs	<p>The SFIs must fall in one of the following categories, as defined by the Principles:</p> <ul style="list-style-type: none"> <li>• Green/Social Use of Proceeds Bonds/Loans</li> <li>• Green/Social Use of Proceeds Revenue Bonds/Loans</li> <li>• Green/Social Project Bonds/ Loans</li> <li>• Green/Social Securitized Bonds/ Loans</li> </ul>	<p>Review of:</p> <ul style="list-style-type: none"> <li>• SFIs Issuance Information</li> <li>• BEM Sustainable Financing Framework</li> </ul> <p>Correspondence with BEM management</p>	<p>The reviewed evidence confirms that the SFIs fall in the category: Sustainable Use of Proceeds Bonds/Loans.</p>
1b	Sustainability Project Categories	<p>The cornerstone of a Sustainability Bonds/Loans is the utilization of the proceeds of the SFIs which should be appropriately described in the legal documentation for the security.</p>	<p>Review of:</p> <ul style="list-style-type: none"> <li>• SFIs Issuance Information</li> <li>• BEM Sustainable Financing Framework</li> </ul> <p>Correspondence with BEM management</p>	<p>As identified by the SFIs Issuance Information the purpose of the SFIs is to use the proceeds for the financing or refinancing of:</p> <ul style="list-style-type: none"> <li>• Clean Transportation</li> <li>• Energy Efficiency</li> <li>• Renewable Energy</li> <li>• Water Management</li> <li>• Affordable Basic Infrastructure</li> <li>• Employment Generation and Training</li> <li>• Quality education</li> </ul> <p>The BEM Sustainable Finance Framework considers Use of Proceeds from Green and Social perspectives. Specifically, the use of proceeds for the proposed BEM SFIs are summarised in Schedule 1 above.</p> <p>DNV's assessment concluded that these assets would present tangible and genuine environmental and social benefits in the target areas and for the target populations.</p> <p>Environmental Use of Proceeds impacts have been linked to SDGs 6; Clean Water and Sanitation, 7; Affordable and Clean Energy, 11; Sustainable Cities and Communities, 12; Responsible Consumption and Production, 13; Climate Action.</p> <p>Social Use of Proceeds impacts have been linked to SDGs 3; Good Health and Wellbeing, 4; Quality Education, 8; Decent Work and Economic Growth, 9; Industry, Innovation and Infrastructure, 11; Sustainable Cities and Communities.</p> <p>DNV considers the SDG linkages made to reasonably reflect the impacts resulting from the nominated projects and the Use of Proceeds</p>

				set out in the Framework. DNV confirms that the Use of Proceeds set out in the framework have clear Green and Social benefits.
1c	Environmental and Social benefits	All designated Green Project categories should provide clear environmentally sustainable benefits, which, where feasible, will be quantified or assessed by the Issuer.	<p>Review of:</p> <ul style="list-style-type: none"> <li>• SFIs Issuance Information</li> <li>• BEM Sustainable Financing Framework</li> </ul> <p>Correspondence with BEM management</p>	<p><b>Clean Transportation</b></p> <p>DNV confirms that Clean transportation investments in Electrified Rail and supporting infrastructure as listed in Schedule 1 are considered to be green for the purposes of the Green Bond Principles and the Green Loan Principles. Electrified rail presents a low emissions alternative to road based transport. DNV considers these projects to be well aligned with the Principles.</p> <p><b>Energy Efficiency</b></p> <p>The LED Lighting upgrade investments have a direct impact on the energy consumption throughout the MRT infrastructure and have been quantified to reduce electricity consumption. DNV can confirm that this investment is well aligned with the Principles.</p> <p><b>Renewable energy</b></p> <p>Solar power is an eligible green investment category, assuming any solar facility does not have &gt;15% fossil fuel back up.</p> <p><b>Water Management</b></p> <p>The water treatment and water recycling system installed on the MRT facilities for the purposes of recovering train washing water are a quantified water efficiency asset and are likely contribute a water saving for BEM. DNV can confirm that this investment is well aligned with the Principles.</p> <p><b>Affordable Basic Infrastructure</b></p> <p>The delivery of basic infrastructure associated with public transportation services in dense urban environments have been provided by the issuer. DNV can confirm that the benefits and target populations associated with the delivery of Affordable Basic Infrastructure have been well defined and are well aligned with the Use of Proceeds requirements of the Social Bond Principles and the Social Loan Principles.</p> <p><b>Employment Generation and Training</b></p> <p>The delivery of staff and contractor training for the personal and professional development of human resources, especially related to safety, sanitation and efficient operation of the railway is considered to be well aligned with the Social Bond Principles and the Social Loan Principles.</p> <p><b>Quality education</b></p> <p>The provision of scholarships to underprivileged youth is considered to be well aligned with the Social Bond Principles and the Social Loan Principles.</p>

				DNV can confirm that the Use of Proceeds associated with the BEM Sustainability Bond and/or Loan are considered to qualify under and be well aligned with the Use of Proceeds and associated Categories Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines and Green Loan Principles and Social Loan Principles.
1d	Financing/ Refinancing share	In the event that a proportion of the proceeds may be used for refinancing, it is recommended that issuers provide an estimate of the share of financing vs. refinancing, and where appropriate, also clarify which investments or project portfolios may be financed and/or refinanced.	<p>Review of:</p> <ul style="list-style-type: none"> <li>SFIs Issuance Information</li> <li>BEM Sustainable Financing Framework</li> </ul> <p>Correspondence with BEM management</p>	Proceeds of the SFIs will be used to finance and/or refinance the assets listed in Schedule 1 above.

## 2. Process for Project Selection and Evaluation

Ref	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Investment decision process	<p>The Issuer/Borrower of SFIs should outline the decision-making process it follows to determine the eligibility of projects using Sustainability Bond and/or Loan proceeds. This includes, without limitation:</p> <ul style="list-style-type: none"> <li>A process to determine how the projects fit within the eligible Green and Social Projects categories identified in the Principles;</li> <li>The criteria making the projects eligible for using the Sustainability Bond and/or Loan proceeds; and</li> <li>The environmental/social sustainability objectives</li> </ul>	<p>Review of:</p> <ul style="list-style-type: none"> <li>SFIs Issuance Information</li> <li>BEM Sustainable Financing Framework</li> </ul> <p>Correspondence with BEM management</p>	<p>As per the BEM Sustainable Financing Framework, the Issuer/Borrower has set out the following for project selection:</p> <p>The selection and evaluation of eligible projects/assets for Sustainable Financing instruments will be performed in concert among BEM's Financial Planning Department, Quality Management Division, Corporate Image and Marketing Communication Department and Investor Relations Department ("Sustainable Finance Working Group"). In addition, Sustainable Finance Working Group will monitor the allocation process as per the Eligible Projects/Assets Description defined in the Use of Proceeds.</p> <p>BEM has in place policies, systems, and procedures including for Environmental and Social aspects that equip it to "do no significant harm" to the environment or social aspects. DNV can confirm that the Use of Proceeds set out in the BEM policies, systems and procedures and the BEM Framework provide mitigating measures for reducing the risk of significant harm.</p> <p>DNV has reviewed the structure and function of the Project Selection criteria and confirmed it is in line with the criteria set out in the Principles.</p>
2b	Issuer's /Borrower's environmental and social	In addition to information disclosed by an issuer/a borrower on its SFIs	Review of:	<p>BEM has published a Corporate Sustainability Framework including focus on:</p> <ul style="list-style-type: none"> <li>Communication - Sustainability Culture;</li> </ul>

	and governance framework	process, criteria and assurances, SFIs' investors/lenders may also take into consideration the quality of the SFIs' overall framework and performance regarding environmental sustainability.	<ul style="list-style-type: none"> <li>• SFIs Issuance Information</li> <li>• BEM Sustainable Financing Framework</li> </ul> <p>Correspondence with BEM management</p>	<ul style="list-style-type: none"> <li>• Promoting training, learning, and counseling;</li> <li>• Organisational Support for Sustainability.</li> </ul> <p>BEM also has a stated set of ESG commitments related to its operations, goals and targets. DNV has confirmed this is well aligned to the purpose and function of the proposed SFIs.</p> <p>We have also carried out a high-level media review of BEM. No outstanding ESG incidents or controversies were identified. Based on the evidence reviewed and the discussion we had with senior managers, we found that BEM's current environmental, social and governance framework is in line with good practice of the industry for the nominated projects and assets within the proposed SFIs.</p>
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### 3. Management of proceeds

Ref	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Tracking procedure	The net proceeds of SFIs should be credited to a subaccount, moved to a sub-portfolio or otherwise tracked by the Issuer/Borrower in an appropriate manner and attested to by a formal internal process that will be linked to the Issuer's/Borrower's lending and investment operations for Green/Social Projects.	<p>Review of:</p> <ul style="list-style-type: none"> <li>• SFIs Issuance Information</li> <li>• BEM Sustainable Financing Framework</li> </ul> <p>Correspondence with BEM management</p>	SFIs and the deployment of an amount equal to the net proceeds. DNV concludes that the process set out in BEM's Framework is aligned with the Management of Proceeds as set out in the Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines and Green Loan Principles. and Social Loan Principles.
3b	Tracking procedure	So long as the SFIs are outstanding, the balance of the tracked proceeds should be periodically reduced by amounts matching eligible green/social investments or loan disbursements made during that period.	<p>Review of:</p> <ul style="list-style-type: none"> <li>• SFIs Issuance Information</li> <li>• BEM Sustainable Financing Framework</li> </ul> <p>Correspondence with BEM management</p>	The evidence reviewed shows that BEM plans to trace the proceeds from the SFIs, from the time of issuance to the time of disbursement. On an annual basis, the outstanding balance of the SFIs will be reviewed.
3c	Temporary holdings	Pending such investments or disbursements to eligible Green and Social Projects, the Issuer/Borrower should make known to investors/Lenders the intended types of temporary investment	<p>Review of:</p> <ul style="list-style-type: none"> <li>• SFIs Issuance Information</li> <li>• BEM Sustainable Financing Framework</li> </ul>	The net proceeds of the SFIs will be held in cash or cash equivalent on account until disbursement to the nominated assets as per the BEM Sustainable Financing Framework. BEM will aim to be fully allocated to Green and Social Projects within 30 months of Issue date. BEM have nominated the use of proceeds as per Schedule 1 within their Sustainable Financing Framework.

		instruments for the balance of unallocated proceeds.	Correspondence with BEM management	
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#### 4. Reporting

Ref	Criteria	Requirements	Work Undertaken	DNV Findings								
4a	Periodical reporting	In addition to reporting on the use of proceeds and the temporary investment of unallocated proceeds, Issuers should provide at least annually a list of projects to which Sustainability Bond/Loan proceeds have been allocated including - when possible with regards to confidentiality and/or competitive considerations - a brief description of the projects and the amounts disbursed, as well as the expected environmentally sustainable impact.	Review of: <ul style="list-style-type: none"> <li>SFIs Proceeds and Reporting Framework</li> </ul> Correspondence with BEM management	<p>BEM has confirmed that it will report on its corporate website and integrated annual reporting the following: Allocation Reporting (until full allocation):</p> <ul style="list-style-type: none"> <li>The amount of net proceeds allocated per Eligible Projects/Assets</li> <li>The percentage of financing/refinancing of projects/assets</li> <li>The amount of unallocated proceeds, if any, at the date of reporting</li> <li>Location and status of the projects/assets</li> </ul> <p>Impact Reporting:</p> <p>Where feasible, BEM intends to report on the impact of the portfolio by category from environmental perspective on an annual basis, subject to the availability of information and baseline data and based on methodologies that will be publicly available. BEM has set out a broad range of potential metrics in their Sustainable Financing Framework including:</p> <table border="1"> <tr> <td>Clean Transportation</td> <td> <ul style="list-style-type: none"> <li>Reduced and/or avoided GHG emissions (in t. CO2e/year)</li> <li># of passengers carried/passenger trips</li> <li>Estimated reduction in car use in number or kilometres driven</li> <li>Estimated reduction in fuel consumption</li> <li>Total in kilometres of new or improved train lines</li> <li># of rolling stock, carriages, locomotives bought, repaired and modernized</li> </ul> </td> </tr> <tr> <td>Energy Efficiency</td> <td> <ul style="list-style-type: none"> <li>Annual reduction of energy consumption</li> <li>Annual GHG emissions avoided (in t.CO2e/year)</li> </ul> </td> </tr> <tr> <td>Renewable Energy</td> <td> <ul style="list-style-type: none"> <li>Install capacity in megawatt</li> <li>Annual GHG emissions avoided (in t .CO2e/year)</li> </ul> </td> </tr> <tr> <td>Water Management</td> <td> <ul style="list-style-type: none"> <li>Annual reduction in water consumption</li> </ul> </td> </tr> </table>	Clean Transportation	<ul style="list-style-type: none"> <li>Reduced and/or avoided GHG emissions (in t. CO2e/year)</li> <li># of passengers carried/passenger trips</li> <li>Estimated reduction in car use in number or kilometres driven</li> <li>Estimated reduction in fuel consumption</li> <li>Total in kilometres of new or improved train lines</li> <li># of rolling stock, carriages, locomotives bought, repaired and modernized</li> </ul>	Energy Efficiency	<ul style="list-style-type: none"> <li>Annual reduction of energy consumption</li> <li>Annual GHG emissions avoided (in t.CO2e/year)</li> </ul>	Renewable Energy	<ul style="list-style-type: none"> <li>Install capacity in megawatt</li> <li>Annual GHG emissions avoided (in t .CO2e/year)</li> </ul>	Water Management	<ul style="list-style-type: none"> <li>Annual reduction in water consumption</li> </ul>
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Water Management	<ul style="list-style-type: none"> <li>Annual reduction in water consumption</li> </ul>											

					<ul style="list-style-type: none"> <li>• Annual volume of water reused (in cubic metres)</li> <li>• Annual volume of wastewater treated (in cubic metres)</li> </ul>
				Affordable Basic Infrastructure	<ul style="list-style-type: none"> <li>• # of passengers carried/passenger trips</li> <li>• # of passengers/target population benefited</li> <li>• # of sanitation and healthcare equipment provided</li> <li>• # of Additional Cleaning Personnel Hired</li> <li>• # of recreation area / accessible infrastructure / facilities built</li> <li>• # of Road accident reduction</li> <li>• Estimated travel time reduction</li> </ul>
				Employment Generation and Training	<ul style="list-style-type: none"> <li>• Estimated jobs created or retained</li> <li>• Customer satisfaction scoring</li> <li>• # of people within target group benefited</li> </ul>
				Quality Education	<ul style="list-style-type: none"> <li>• # of scholarships awarded</li> </ul>
<p>DNV considers the proposed financial and impact reporting proposed and the means of communication to be aligned with the criteria set out in the Principles.</p>					

## Schedule 3. ASEAN Green and Social Bond Standards Verification

### Summary criteria for assertions of compliance with the ASEAN Sustainability Bond Standards 2018 and compliance conclusion.

The criteria against which BEM and its nominated projects and assets have been reviewed prior to inclusion in the Bond are grouped under the requirements as detailed within the ASEAN Sustainability Bond Standards 2018.

#### 3.0: Criteria for ASEAN Sustainability Bonds

Ref.	Criteria	Requirements
3.1	(i) Must be an ASEAN Issuer, or; (ii) In the case of a Non-ASEAN Issuer, the eligible Sustainability Projects must be located in any of the ASEAN countries.	The Bond Issuer and nominated project is located in Thailand, an ASEAN member country.
3.2	ASEAN Sustainability Bonds issuances must be originated from any of the ASEAN member countries.	The bond is to be originated from Thailand and issued in THB.

#### 4.0: Guidance for the Four Components of the GBP

##### 4.1 Use of Proceeds

Ref.	Criteria	Requirements
4.1.1	The utilisation of proceeds from the ASEAN Sustainability Bonds must be described in the documentation for issuance of the ASEAN Sustainability Bonds.	The Issuer has set out the Use of Proceeds in both the Sustainable Financing Framework and the listing of Nominated Projects and Assets as summarised in Schedule 1.
4.1.2	In relation to 4.1.1, the Issuer must disclose the following information: (i) The categories of eligible Green/Social Projects to which the ASEAN Sustainability Bonds proceeds will be allocated; and/or (ii) The information on specific Green/Social Projects in the case where the Issuer has identified the specific Green/Social Projects to which the ASEAN Sustainability Bonds proceeds will be allocated.	(i) The Issuer has set out the categories for Nominated Projects and Assets in the Use of Proceeds section of the Sustainable Financing Framework. (ii) The Issuer has detailed the specific Green and Social Projects as per Schedule 1 of this report.
4.1.3	All designated Green and Social Projects must provide clear environmental / social benefits, which will be assessed and, where feasible, quantified by the Issuer.	As per 1c in Schedule 2 above, the Nominated Projects have clear and demonstrated environmental and social benefits with defined target populations.
4.1.4	In the event that all or a proportion of the proceeds are or may be used for refinancing, it is recommended that Issuers provide an estimate of the share of financing and refinancing, and where appropriate, also clarify which investments or project portfolios may be refinanced and, to the extent relevant, the expected look-back period for refinanced Sustainability Projects.	The Issuer has detailed the financing and/or refinancing share as shown in Schedule 2.



4.1.5	Sustainability Bond Categories	Sustainability Bond categories have been disclosed by the Issuer in both the Sustainable Financing Framework and as per Schedule 1.
4.1.6	For clarification purposes, fossil fuel power generation projects are excluded from the ASEAN SBS.	DNV has confirmed that the Use of Proceeds is not proposed to include fossil fuel power generation project related activities.

#### 4.2: Process for Project Evaluation and Selection

Ref.	Criteria	Requirements
4.2.1	The Issuer of ASEAN Sustainability Bonds must clearly communicate to investors: (i) the environmental/social sustainability objectives; (ii) the process by which the Issuer determines how the projects fit within the eligible Green/Social Projects categories identified above; and (iii) the related eligibility criteria, including, if applicable, exclusion criteria or any other process applied to identify and manage potentially material environmental and social risks associated with the Green / Social Projects.	The Issuer has communicated: (i) The sustainability objectives of their Sustainability Finance Program and of the Nominated Projects and Assets has been communicated in the Sustainable Financing Framework. (ii) The Issuer has described the process for Project Evaluation and Selection in the Sustainable Financing Framework. (iii) Selection criteria has been set out in section 2.1 Use of Proceeds and section 2.2 Process for Project Selection and Evaluation.
4.2.2	The Issuer must establish the process for project evaluation and selection prior to the issuance of the ASEAN Green/Social Bonds and disclose the same to investors in the documentation for the issuance of the ASEAN Sustainability Bonds.	The Process for Project Selection and Evaluation has been defined and presented in the Sustainable Financing Framework prior to issuance.
4.2.3	Issuers are encouraged to position this information within the context of the Issuers' overarching objectives, strategy, policy and/or processes relating to environmental sustainability. Issuers are also encouraged to disclose any green standards or certifications referenced in project selection.	The Issuer has presented the Sustainable Financing Framework in the context of BEM's Sustainability Program, policies and procedures.
4.2.4	It is recommended that the Issuer's process for project evaluation and selection be supported by an external review.	This external verification has been conducted to provide external review of the Issuers claims.
4.2.5	The Issuer must make the following publicly available on a website designated by the Issuer at the time of the issuance and throughout the tenure of ASEAN Sustainability Bonds: (i) The process for project evaluation; (ii) The use of proceeds; and (iii) External review report on the process (if any).	The Issuer proposes to make publicly available on its corporate website the: (i) Sustainable Financing Framework including Process for Project Evaluation; (ii) Use of Proceeds, and; (iii) This external review report.

### 4.3: Management of Proceeds

Ref.	Criteria	Requirements
4.3.1	Prior to the issuance of the ASEAN Sustainability Bonds, the Issuer must disclose to investors in the documentation for the issuance of the ASEAN Sustainability Bonds the process for managing the net proceeds from the ASEAN Sustainability Bonds.	The issuer has disclosed to bond placement investors that it will hold Sustainability Bond proceeds raised in internal treasury cash accounts for allocation to existing and new investments associated with nominated projects and assets.
4.3.2	The net proceeds from the ASEAN Sustainability Bonds, or an amount equal to these net proceeds, must be credited into a sub-account, moved to a sub-portfolio or otherwise tracked by the Issuer in an appropriate manner and attested to by a formal internal process linked to the Issuer's lending and investment operations for Green and Social Projects. The total amount deployed from the net proceeds for the eligible Green and Social Projects need not occur simultaneously.	The Issuer has prepared and presented the process for the tracking and monitoring of proceeds and allocation reporting in the Sustainable Financing Framework.
4.3.3	As long as the ASEAN Sustainability Bonds are outstanding, the balance of tracked proceeds must be periodically adjusted to match allocations to eligible Green and Social Projects made during that period.	The Issuer has defined how proceeds are to be tracked and reported to match the allocation to eligible Green and Social Projects.
4.3.4	The Issuer must also disclose to investors in the documentation for the issuance of the ASEAN Sustainability Bonds the intended types of temporary placement for the balance of unallocated proceeds.	The Issuer has disclosed that all temporary investments will be held in cash or cash equivalent.
4.3.5	It is recommended that the Issuer's management of proceeds be supplemented by the use of an auditor, or other third party to verify the internal tracking method and the allocation of funds from the ASEAN Sustainability Bonds proceeds.	The Issuer has confirmed in order to provide transparent information about the reporting of the funds from bonds issued under this framework, BEM intends to engage a Second Party Opinion Provider / Verifier / External Auditor to provide the assessment on the alignment of the allocation of funds with Framework's criteria until the full allocation of the proceeds.
4.3.6	Where the Issuer appoints an auditor or other third party to verify the Issuer's management of proceeds, the Issuer must make the report produced by the auditor or other third party publicly available on a website designated by the Issuer at the time of the issuance of the ASEAN Sustainability Bonds.	The verification report will be made available for investors on its corporate website.

### 4.4: Reporting

Ref.	Criteria	Requirements
4.4.1	Issuers must report to investors at least on an annual basis and encouraged to make more frequent reporting on the use of proceeds until full allocation, and as necessary thereafter in the event of material developments. This should include a list of the projects to which the ASEAN Sustainability Bonds proceeds have been allocated, as well as a	The Issuer has confirmed annual reporting on the sustainability bond allocations until full allocation. DNV notes that BEM expects to fully and immediately allocate the proceeds raised after issuance. After confirmation of the full and complete allocation of proceeds, further allocation would not be expected and any ongoing allocation reporting

	brief description of the projects and the amounts allocated and their expected impact.	would be expected to reflect that complete allocation had occurred.
<b>4.4.2</b>	Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the Issuer may present the information in generic terms or on an aggregated portfolio basis.	The Issuer reserves the right to manage confidentiality obligations with regards to Sustainability Bond reporting.
<b>4.4.3</b>	It is recommended that Issuers use qualitative performance indicators, and where feasible, quantitative performance measures and disclosure of the key underlying methodology and/or assumptions used in the quantitative determination.	The Issuer intends to provide qualitative and where possible quantitative impact reporting.
<b>4.4.4</b>	It is recommended that the Issuer's annual reporting on the use of proceeds be supplemented by a confirmation of such use of proceeds by an external reviewer along with any relevant updates of the external review.	The Issuer has confirmed the initial SPO is to be the subject of this SPO. BEM will consider the review of annual reporting by an external party until the full allocation of the proceeds.
<b>4.4.5</b>	The Issuer must provide to investors the annual reporting and the external review on the annual reporting, if any, through a website designated by the Issuer and/ or annual reports throughout the tenure of the ASEAN Sustainability Bonds.	The verification report will be made available for investors on its corporate website.

## 5.0: External Review

Ref.	Criteria	Requirements
<b>5.1</b>	Issuers are recommended to appoint external review providers for their ASEAN Sustainability Bonds issuances.	DNV has been appointed as External Reviewer of the Sustainability Bond Issuance.
<b>5.2</b>	The external review may be partial, covering only certain aspects of the Issuer's ASEAN Sustainability Bonds framework or full, assessing alignment with all four core components as stated in the ASEAN SBS.	The scope of this verification is full compliance with the four core components as stated in the ASEAN SBS.
<b>5.3</b>	The external review provider must have the relevant expertise and experience in the components of the ASEAN Sustainability Bonds which they are reviewing.	DNV is an Accredited Verifier under the Climate Bonds Standard with global experience providing Green Bond Verification and Services since 2011.
<b>5.4</b>	The external review provider must also disclose their relevant credentials and expertise, and the scope of the review conducted in the review report.	DNV's credentials and expertise have been disclosed in this Opinion. The scope of this Verification has been detailed in the "Scope and Objective" section.
<b>5.5</b>	There are a variety of ways for Issuers to obtain outside input into the formulation of their ASEAN Sustainability Bonds process and there are several levels and types of review that can be conducted.	This Verification has been conducted as an independent external review and verification against the criteria set out in the ASEAN SBS.
<b>5.6</b>	Independent external reviews may vary in scope and may address an ASEAN Sustainability Bonds framework / programme, an individual ASEAN Sustainability Bonds issuance, the underlying assets and/or procedures.	This Verification has been conducted as an independent external review and verification against the criteria set out in the ASEAN SBS.



## Schedule 4. SFIs Programme External Review Form

### Section 1. Basic Information

**Issuer name:**

Bangkok Expressway and Metro Public Company Limited. ("BEM")

**Framework Name, if applicable:**

Sustainable Financing Framework 2022

**Independent External Review provider's name:**

DNV Business Assurance Australia Pty Ltd.

**Completion date of this form:**

23 February 2022

**Publication date of review publication:**

23 February 2022

### Section 2. Review overview

#### SCOPE OF REVIEW

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

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

- Green Bond Principles ("GBP"), International Capital Market Association ("ICMA"), June 2021
- Green Loan Principles 2021 ("GLP"), Loan Market Association ("LMA"), February 2021
- Social Bond Principles ("SBP"), ICMA, June 2021
- Social Loan Principles ("SLP"), LMA, April 2021
- Sustainability Bond Guidelines ("SBG"), ICMA, June 2021
- ASEAN Green Bond Standards ("GBS"), ASEAN Capital Markets Forum ("ACMF"), October 2018
- ASEAN Social Bond Standards ("SBS"), ACMF, October 2018
- ASEAN Sustainability Bond Standards ("SUS"), ACMF, October 2018

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

#### ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Second Party Opinion  | <input type="checkbox"/> Certification  |
| <input checked="" type="checkbox"/> Verification          | <input type="checkbox"/> Scoring/Rating |
| <input type="checkbox"/> Other ( <i>please specify</i> ): |   |

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

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

On the basis of the information provided by BEM and the work undertaken, it is DNV's opinion that the BEM Sustainable Financing Framework and proposed SFIs meet the criteria established in the Protocol and are aligned with the stated definition of green and social bonds/loans within the Principles.
---



### Section 3. Detailed review

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

#### 1. USE OF PROCEEDS

**Overall comment on section (if applicable):**

BEM intends to use the proceeds of the SFIs to finance and/or refinance projects and assets within the categories of Clean Transportation, Energy Efficiency, Renewable Energy, Water Management, Affordable Basic Infrastructure, Employment Generation and Training and Quality Education. DNV undertook an analysis of the associated project types including type and location and scale of the assets to determine eligibility of these projects as "Green" and "Socially Beneficial" in line with the Principles. DNV evaluates and concludes that BEM's nominated projects and assets are aligned with one of eligible Green and Social project categories specified in the Principles. Refer to Schedule 1 for further information.

**Use of proceeds categories as per GBP/GLP:**

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

If applicable please specify the environmental taxonomy, if other than GBPs, GLPs, ASEAN GBS.

**Use of proceeds categories as per SBP/SLP:**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Affordable basic infrastructure  | <input type="checkbox"/> Access to essential services   |
| <input type="checkbox"/> Affordable housing  | <input checked="" type="checkbox"/> Employment generation / programs designed to prevent and/or alleviate unemployment stemming from socioeconomic crises |
| <input type="checkbox"/> Food security and sustainable food systems  | <input checked="" type="checkbox"/> Socioeconomic advancement and empowerment   |
| <input type="checkbox"/> Unknown at issuance but currently expected  |   |
| <input type="checkbox"/> To conform with SBP/SLP categories, or other eligible areas not yet stated in SBPs/SLPs | <input checked="" type="checkbox"/> Other (please specify): Quality Education   |

If applicable please specify the social taxonomy, if other than SBPs, SLPs.

**Target populations:**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Living below the poverty line | <input type="checkbox"/> Excluded and/or marginalised populations and / or communities                  |
| <input checked="" type="checkbox"/> People with disabilities      | <input type="checkbox"/> Migrants and /or displaced persons   |
| <input checked="" type="checkbox"/> Undereducated                 | <input type="checkbox"/> Underserved, owing to a lack of quality access to essential goods and services |



- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Unemployed                              | <input type="checkbox"/> Women and/or sexual and gender minorities                           |
| <input checked="" type="checkbox"/> Aging populations and vulnerable youth  | <input type="checkbox"/> Other vulnerable groups, including as a result of natural disasters |
| <input checked="" type="checkbox"/> Other (please specify): Urban residents |  |

## 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

### Overall comment on section (if applicable):

The SFI's proceeds will be allocated to finance and/or refinance the assets as defined in Schedule 1. DNV has reviewed evidence that demonstrates that BEM regularly assesses opportunities for improvement and devises action plans and initiatives to mitigate negative environmental and social impacts from its operations.

### Evaluation and selection

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

### Information on Responsibilities and Accountability

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

## 3. MANAGEMENT OF PROCEEDS

### Overall comment on section (if applicable):

DNV has reviewed evidence showing how BEM plans to trace the proceeds from the SFIs, from the time of issuance to the time of disbursement. BEM will monitor the allocation of an amount equal to the proceeds via internal information systems. A record will be created to facilitate the monitoring and reporting of the issued SFIs and the deployment of an amount equal to the net proceeds. As stated above, DNV provides no assurance regarding the financial performance of the SFIs, the value of any investments in the SFIs, or the effects of the transaction. DNV has confirmed the proposed issuance value (up to THB 24.5 billion) is less than the BEM exposure to the eligible projects and assets.

### Tracking of proceeds:

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

### Additional disclosure:

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



#### 4. REPORTING

**Overall comment on section (if applicable):**  
 BEM has confirmed that it will, where feasible, report on its website the following:  
 (i) The amount of net proceeds allocated per Eligible Projects/Assets;  
 (ii) The percentage of financing/refinancing of projects/assets ;  
 (iii) The amount of unallocated proceeds, if any, at the date of reporting;  
 (iv) Location and status of the projects/assets;  
 (v) Impacts Reporting associated with the SFIs.

#### Use of proceeds reporting:

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

#### Information reported:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Allocated amounts | <input type="checkbox"/> Sustainability Bond financed share of total investment |
| <input type="checkbox"/> Other (please specify):      |   |

#### Frequency:

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

#### Impact reporting:

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

#### Frequency:

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

#### Information reported (expected or ex-post):

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> GHG Emissions / Savings | <input checked="" type="checkbox"/> Energy Savings  |
| <input checked="" type="checkbox"/> Decrease in water use   | <input checked="" type="checkbox"/> Number of beneficiaries                                       |
| <input checked="" type="checkbox"/> Target populations      | <input checked="" type="checkbox"/> Other ESG indicators (please specify):<br>Website Publication |

#### Means of Disclosure

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Information published in financial report   | <input checked="" type="checkbox"/> Information published in sustainability report                                |
| <input type="checkbox"/> Information published in ad hoc documents  | <input checked="" type="checkbox"/> Other (please specify):<br>- Impact report as a part of sustainability report |
| <input type="checkbox"/> Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): |   |

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

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

BEM Corporate Governance Policy <https://www.bemplc.co.th/CorporatePolicy?lang=en>

**SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE**



**Type(s) of Review provided:**

- |                                     |                                  |                          |                |
|-------------------------------------|----------------------------------|--------------------------|----------------|
| <input checked="" type="checkbox"/> | Second Party Opinion             | <input type="checkbox"/> | Certification  |
| <input checked="" type="checkbox"/> | Verification                     | <input type="checkbox"/> | Scoring/Rating |
| <input type="checkbox"/>            | Other ( <i>please specify</i> ): |                          |                |

**Review provider(s):**

DNV Business Assurance Australia Pty Ltd.

**Date of publication:**

23 February 2022



## **ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP, GLP, SBP, SLP, SBG and ASEAN SUS**

- 1. Second Party Opinion:** An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its SFIs 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 Green Bond Principles, Green Loan Principles, Social Bond Principles, Social Loan Principles, Sustainability Bond Guidelines and ASEAN Sustainability Bond Standards. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental/social sustainability, and an evaluation of the environmental/social features of the type of projects intended for the Use of Proceeds.
- 2. Verification:** An issuer/a borrower can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally 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 SFIs proceeds, statement of environmental/social impact or alignment of reporting with the relevant principles and/or guidelines, may also be termed verification.
- 3. Certification:** An issuer/a borrower can have its SFIs or associated Green/Social/Sustainability Financing Framework or Use of Proceeds certified against a recognised external green/social/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. SFIs Scoring/Rating:** An issuer/a borrower can have its SFIs, associated Green/Social/Sustainability Financing 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/social performance data, the process relative to the GBP, GLP, SBP, SLP, SBG and ASEAN SUS, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental/social risks.



## About DNV

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight. With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.

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