



WHEN TRUST MATTERS



SK HYNIX GREEN BOND IMPACT REPORT PERIODIC REVIEW



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Prepared by: DNV Business Assurance Korea Ltd.

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This statement is valid until the Green Bond Impact Report provided on January 2022 remains unchanged.

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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.

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DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2015 - 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 Conduct¹ 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.

¹ DNV Code of Conduct is available from DNV website (www.dnv.com)

DNV'S INDEPENDENT ASSESSMENT

Scope and Objectives

On 19 January 2021, SK hynix issued a Green Bond (henceforth referred to as "BOND") with the total amount of USD 1 billion of proceeds. The BOND was issued on the basis of SK hynix's Green Financing Framework which was made on January 2021 and verified by Vigeo Eiris with its Second Party Opinion (SPO).

DNV has been commissioned by SK hynix to provide the review of 2022 SK hynix Green Bond Impact Report. Our criteria and information covered to serve the purpose are described under 'Work Undertaken' shown below. The periodic review was made based on the information and documents provided by SK hynix as well as the interview conducted with them and correspondence exchanges. We do not provide any independent assurance or other type of audit activities.

In this report, no assurance is provided regarding the financial performance of the Issuer, the value of any investments in the BOND, or the long-term environmental benefits arising from the nominated projects. Our main objective of these reviews has been to provide an assessment that the BOND has met the criteria established on the basis set out below.

Responsibilities of the Management of SK hynix and DNV

The management of SK hynix 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 SK hynix management and other interested stakeholders in the BOND 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 SK hynix. 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 SK hynix used as a basis for this assessment were not correct or complete.

Basis of DNV's opinion

- **Principle One: Use of Proceeds.** The Use of Proceeds criteria are guided by the requirement that an issuer of a green bond must use the funds raised to finance eligible activities. The eligible activities should produce clear environmental benefits.
- **Principle Two: Process for Project Evaluation and Selection.** The Project Evaluation and Selection criteria are guided by the requirements that an issuer of a green bond should outline the process it follows when determining eligibility of an investment using Green Bond 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 a green bond should be tracked within the issuing 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 bond investors should be made of the use of bond 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 SK hynix 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 a Protocol, adapted to the purpose of the annual and impact report, as described above and in Schedule 3 to this Assessment;
- Assessment of documentary evidence provided by SK hynix on the annual report and supplemented by a high-level desktop research. These checks refer to current assessment best practices and standards methodology;
- Review of published materials by SK hynix and SK hynix's website;
- Discussions with SK hynix's responsible people, and review of relevant documentation and evidence related to the criteria of the Protocol; and
- 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. Principle One: Use of Proceeds. SK hynix has reported use of the proceeds of the BOND to finance and refinance projects and assets including:

- Sustainable Water and Wastewater Management
- Energy Efficiency
- Terrestrial and Aquatic Biodiversity Conservation
- Pollution Prevention and Control

DNV reviewed the criteria for the project categories above to determine the eligibility of the nominated projects and assets.

2. Principle Two: Process for Project Evaluation and Selection. The BOND's proceeds have been allocated to finance and refinance the assets as defined in Schedule 1. DNV has reviewed evidence that demonstrates that SK hynix regularly assesses opportunities for improvement and devises action plans and initiatives to mitigate negative environmental impact from its operations.

3. Principle Three: Management of Proceeds DNV has reviewed evidence showing how SK hynix traced the proceeds from the Bond, from the time of issuance to the time of disbursement. The full amount of the proceeds will be managed within its existing accounting system, and thereafter disbursed in accordance with its financing schedule. The details of the disbursement and the outstanding value will be tracked using SK hynix's internal financial reporting system. At the end of each financial period, SK hynix reviews the outstanding balance of the BOND. As stated above, DNV provides no assurance regarding the financial performance of the Bond, the value of any investments in the Bond, or the effects of the transaction.

4. Principle Four: Reporting. SK hynix has confirmed that it will include and maintain a dedicated section on the Green Bond in its website. This includes a description of the project and value of the proceeds invested, as well as the associated qualitative and quantitative environmental impacts.

On the basis of the information provided by SK hynix and the work undertaken, it is DNV's opinion that the BOND meets the criteria established in the Protocol and that it is aligned with the stated definition of green bonds within the Green Bond Principles 2021, which is to "enable capital-raising and investment for new and existing projects with environmental benefits".

for DNV Business Assurance Korea Ltd.
Seoul, Republic of Korea / 19 January 2022



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Schedule 1. Nominated Assets & Green Bond Project Outline

Total Allocation²: KRW 590,141,873,736 (Equiv. USD 496,384,727)

Refinancing Ratio³: 82%

(Unit: KRW million)

Project Description	City ⁴	Amount Allocated (KRW million)			
		2018	2019	2020	2021 (1Q ~ 3Q)
Sustainable Water and Wastewater Management					
Regional municipal water Project 2nd phase	IC	909	17,273	36,531	22,524
Establishment of wastewater treatment plants and systems	IC	55,745	79,152	96,729	54,323
Improvement of trickling filter for wastewater reduction	IC, CJ	-	3,830	3,208	478
Construction of cooling tower drainage reuse system	IC	-	-	19,821	3,239
Expansion of sewage treatment plant	IC	-	883	-	-
Installation of wastewater reuse system and recycled water supply pipe	IC	-	25,704	-	-
Installation of temporary/ emergency storage for wastewater	IC	-	13,200	21,757	133
Energy Efficiency					
Installation of LED lighting for energy saving	IC, CJ	-	1,862	292	-

² KRW/ USD = 1188.88

³ Refinancing Ratio = Allocation from 2018-2020 (KRW 485,907 million) / Proceeds allocated from 2018 to Q3 2021 (KRW 590,142 million)

⁴ IC = Icheon; CJ = Cheongju; The places are located in Korea.

Project Description		City ⁴	Amount Allocated (KRW million)			
			2018	2019	2020	2021 (1Q ~ 3Q)
Investment in energy savings for manufacturing facilities to improve low power efficiency	IC, CJ	-	-	3,101	1,019	
Adoption of Heat Pump System for energy saving	CJ	-	1,114	-	-	
Terrestrial and Aquatic Biodiversity Conservation						
Icheon Eco Park Construction	IC	-	-	190	382	
Pollution Prevention and Control						
Investment in Equipment for Environmental Analysis Center	IC	-	-	-	350	
Installation of automatic water quality measurement equipment	IC	-	876	-	-	
Attachment of measuring equipment (Tele Monitoring System, TMS) for atmospheric management area	CJ	-	-	-	206	
Establishment of nitrogen oxide (NOx) reduction infrastructure	IC, CJ	-	14,377	26,779	18,606	
Improvement of waste heat recovery and temperature reduction system	IC	-	8,411	54,163	2,977	
Allocation			56,654	166,682	262,571	104,235

Schedule 2. Impact Reporting (Green Category)

Sustainable Water and Wastewater Management

Indicator	2018	2019	2020	2021		
				1Q	2Q	3Q
Water Reuse (1,000m ³)	18,644	21,631	26,932	7,054	8,239	8,436
Water Reuse Rate (%)	27	28	32	33	37	37
Water Consumption per Revenue (m ³ / 10 billion won)	2,899	4,250	3,267	3,387	3,342	3,526
Water Withdrawals per Revenue (m ³ / 10 billion won)	15,523	24,401	21,041	20,474	17,069	15,470
Wastewater Discharge (1,000m ³)	51,057	54,390	56,699	14,514	14,169	14,101

Energy Efficiency

Indicator	2018	2019	2020	2021		
				1Q	2Q	3Q
Total Energy Consumption per KRW (GJ/ 100 million won)	208	316	283	302	243	224

Terrestrial and Aquatic Biodiversity Conservation

Location	Area (m ²)	Impact
Icheon, Korea	20,419	Construction of ecological park to improve environment and secure biodiversity

Pollution Prevention and Control

Indicator	2018	2019	2020	2021		
				1Q	2Q	3Q
Installation of environment analysis system (unit)	-	-	-	-	2	-
Installation of water quality measurement system (unit)	-	3	1	-	-	-

Schedule 3. The SK hynix-specific Eligibility Assessment Protocol

1. Use of Proceeds

Ref.	Criteria	Requirements	Works Undertaken	DNV Findings
1a	Type of bond / loan	<p>The Bond and Loan must fall in one of the following categories, as defined by the Green/Social Bond Principles:</p> <ul style="list-style-type: none"> Green/Social Use of Proceeds Bond Green/Social Use of Proceeds Revenue Bond Green/Social Project Bond Green/Social Securitized Bond Loan instrument made available for Green and Social project (Green and Social use of loan proceeds) 	<p>Review of:</p> <ul style="list-style-type: none"> 2021 SK hynix Green Financing Framework 2022 SK hynix Green Bond Impact Report <p>Discussion with SK hynix management</p>	<p>The reviewed evidence confirms that the BOND falls in the category:</p> <p>Green Use of Proceeds Bond.</p>
1b	Sustainable Project Categories	<p>The cornerstones of Sustainability Bond and Loan are the utilization of the proceeds of the bond and the loan which should be appropriately described in the legal documentation for the security.</p>	<p>Review of:</p> <ul style="list-style-type: none"> 2021 SK hynix Green Financing Framework Sub Project Performance and Financial Documentation 2022 SK hynix Green Bond Impact Report <p>Discussion with SK hynix management</p>	<p>As identified by the purpose of the Bond was to use the proceeds to finance and refinance for projects falling under the following categories:</p> <ul style="list-style-type: none"> Sustainable Water and Wastewater Management (77.2%) Energy Efficiency (1.3%) Terrestrial and Aquatic Biodiversity Conservation (0.1%) Pollution Prevention and Control (21.5%) <p>Most of the proceeds were used for projects under the categories of Sustainable Water and Wastewater Management and Pollution Prevention and Control.</p> <p>DNV's assessment concluded that the above-mentioned assets lead to environmentally positive outcomes and qualify for the Green Bond Principles.</p>

Ref.	Criteria	Requirements	Works Undertaken	DNV Findings
1c	Environmental 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"> • 2021 SK hynix Green Financing Framework • Relevant project documents • Environmental impact verification related documents • 2022 SK hynix Green Bond Impact Report <p>Discussion with SK hynix management</p>	<p>DNV reviewed raw data provided by SK hynix to verify environmental impact of the invested projects and its accuracy of calculation.</p> <ul style="list-style-type: none"> • The SK hynix has announced the Green 2030 which plans to increase energy efficiency and the use of renewable energy for reducing energy use and greenhouse gas emissions. According to this initiative, the company intends to increase water reuse up to 3 times by 2030. In line with this DNV found that rate of water reuse has increased since 2018, reaching 37% in Q3 of 2021 (increase by 10% from the year 2018). • In terms of energy efficiency, SK hynix adopted total energy consumption per revenue (GJ / KRW 100 million) as impact indicator which has shown decline of energy consumption as general trend since 2019. Although proceeds of the BOND were limited to local projects in Korea, the company has disclosed performance of all factories (due to confidentiality reason) regarding energy efficiency which includes overseas factories. In communication with SK hynix responsible staff, DNV found that there were no outliers for the overseas factories which potentially damage veracity of the data. In this regard, DNV considers that energy efficiency has also been improving. • As for terrestrial and aquatic biodiversity conservation, DNV considers that construction of ecological park (covering the area of 20,419 m²) will lead to positive environmental outcomes. • In addition, 6 systems related to installation of environment analysis and water quality measurement were set up and DNV considers this will be conducive for pollution prevention. As case study of management of water quality,

Ref.	Criteria	Requirements	Works Undertaken	DNV Findings
				SK hynix disclosed data of Chemical Oxygen Demand (COD), Biological Oxygen Demand (BOD), Suspended Solids (SS), and Total Phosphorus (TP). DNV found that these water quality indicators have been managed in accordance with the Article 2 of the Enforcement Decree of the Framework Act on Environmental Policy in Korea.
1d	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. re-financing, and where appropriate, also clarify which investments or project portfolios may be refinanced.	Review of: <ul style="list-style-type: none"> 2022 SK hynix Green Bond Impact Report Sub Project Performance and Financial Documentation Discussion with SK hynix management	The SK hynix limited the look-back period to 36 months from the date of the Green Financing Instrument Transactions. For this BOND, look-back period covers the years from 2018 to 2020. The proceeds of the BOND (USD 496,384,727) were allocated to the eligible projects, whose portion is about 50% out of the total net proceeds (USD 1 billion). Out of the allocated proceeds (USD 496,384,727), 82% (USD 408,709,878) were used for refinancing.

2. Process for Project Selection and Evaluation

Ref.	Criteria	Requirements	Works Undertaken	DNV Findings
2a	Investment-decision process	The Issuer of a Sustainability Bond and Loan should outline the decision-making process it follows to determine the eligibility of projects using Sustainability Bond and Loan proceeds. This includes, without limitation: <ul style="list-style-type: none"> A process to determine how the projects fit within the eligible Green and Social Projects categories identified in the Green/Social Bond Principles and Green/Social Loan Principles; The criteria making the projects eligible for using the 	Review of: <ul style="list-style-type: none"> 2021 SK hynix Green Financing Framework 2022 SK hynix Green Bond Impact Report Discussion with SK hynix management	In the 2021 SK hynix Green Financing Framework, the company has indicated procedures for project selection and evaluation. DNV's assessment concluded that the company has followed the procedures in the Framework by enabling ESG working committee review and select potential eligible projects against the relevant criteria in the Framework which were screened first by the infrastructure team, and as final step empowering the CEO-participating ESG Management Committee to make final approval.

Ref.	Criteria	Requirements	Works Undertaken	DNV Findings
		Sustainability Bond proceeds; and <ul style="list-style-type: none"> The environmental sustainability objectives, and the social objectives 		
2b	Issuer/borrower's environmental and social and governance framework	In addition to information disclosed by an issuer on its Sustainability Bond process, criteria and assurances, Sustainability Bond and Loan investors may also take into consideration the quality of the issuer's overall framework and performance regarding environmental sustainability.	Review of: <ul style="list-style-type: none"> SK hynix Sustainability Policy SK hynix Sustainability Report 2021 2021 SK hynix Green Financing Framework 2022 SK hynix Green Bond Impact Report Discussion with SK hynix management	The SK hynix commits to environment-friendly management for sustainable development. Its commitment is explicitly shown in its vision of Green 2030 which aims to achieve following goals: <ul style="list-style-type: none"> 2050 RE100 (Establishing a preliminary, achievable goal by 2030) <ul style="list-style-type: none"> Achieving RE100 for production facilities in China by 2022 Net Zero by 2050 Zero additional emission of air pollutants Achieving Zero Waste to Landfill (ZWTL) Gold (99%) certification Increasing water reuse up to 3 times In addition, the company holds ISO 14001 certification, prioritizing environmental management system that meets the requirements of local and foreign regulatory clients, and also establishing operational policies and reviewing compliance on a quarterly basis for various environmental issues. Its annual Sustainability Report is also published in accordance with environmental reporting guidelines of the GRI reporting, TCFD, and SASB and has shown various environmental performance data in a quantitative manner.

3. Bond Characteristics

Ref.	Criteria	Requirements	Works Undertaken	DNV Findings
3a	Tracking procedure	The net proceeds of Sustainability Bonds should be credited to 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 that will be linked to the Issuer's lending and investment operations for Green/Social Projects.	Review of: <ul style="list-style-type: none"> 2021 SK hynix Green Financing Framework 2022 SK hynix Green Bond Impact Report Discussion with SK hynix management	<p>The evidence reviewed shows how SK hynix has tracked the BOND's proceeds appropriately, from the time of issuance to the time of disbursement. The full amount of the proceeds has reported to have been managed by SK hynix's financial department with existing accounting system. The details of the disbursement and the outstanding value have been tracked in SK hynix's internal financial system.</p> <p>DNV confirmed that SK hynix's internal process can manage and track the outstanding balance of the green bond proceeds.</p>
3b	Tracking procedure	So long as the Sustainability Bonds and Loans are outstanding, the balance of the tracked proceeds should be periodically reduced by amounts matching eligible green investments or loan disbursements made during that period.	Review of: <ul style="list-style-type: none"> 2021 SK hynix Green Financing Framework 2022 SK hynix Green Bond Impact Report Discussion with SK hynix management	<p>The evidence reviewed shows that SK hynix has traced the proceeds from the BOND, from the time of issuance to the time of disbursement, and reduced the net balance of proceeds by amounts in line with its financing schedule. At the end of each financial period, the outstanding balance of the Bond was reviewed.</p>
3c	Temporary holdings	Pending such investments or disbursements to eligible Green and Social Projects, the Issuer should make known to investors the intended types of temporary investment instruments for the balance of unallocated proceeds.	Review of: <ul style="list-style-type: none"> 2022 SK hynix Green Bond Impact Report Discussion with SK hynix management	<p>The evidence reviewed shows that the net proceeds of the Bond are being managed within SK hynix's existing accounting system, have been tracked and are reported that about 50% (USD 496,384,727) out of total net proceeds (USD 1 billion) are disbursed to the eligible projects and the remaining balance are invested in financial products such as Money Market Deposit Account (MMDA) and fixed deposit of banks and Money Market Trust (MMT) of securities firms.</p>

4. Reporting

Ref.	Criteria	Requirements	Works Undertaken	DNV Findings
4a	Periodical reporting	<p>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 proceeds have been allocated including</p> <ul style="list-style-type: none"> • 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. 	<p>Review of:</p> <ul style="list-style-type: none"> • Website • 2022 SK hynix Green Bond Impact Report <p>Discussion with SK hynix management</p>	<p>SK hynix will upload this Green Bond Impact Report on its website (https://www.skhynix.com/ir/UI-FR-IR13). The company intends to publish the Impact Report until the net proceeds are fully allocated and upload it on the website. In addition, the relevant information can be also found in its annual sustainability report.</p>



About DNV

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