

**SK hynix**  
**Green Bond**  
**Impact Report 2023**  
**Revision**

## Note: Revision of Allocation

On 25 September 2023, SK hynix sold its Icheon Wastewater treatment plant to SK REITs. As part of this arrangement, SK hynix has leased back the wastewater treatment facility from SK REITs. In the SK hynix Green Bond Impact Report published in January 2023, green bond proceeds of KRW 590,775 million were initially allocated to Icheon Wastewater treatment plant. Although SK hynix remains responsible for operating, maintaining and repairing the wastewater treatment facility to generate positive environmental impact, SK hynix has decided to reallocate the Green Bond proceeds to fulfil the ESG market practice.

This revision report aims to update the 2023 Green Bond Impact Report by excluding the proceeds originally allocated to the Icheon Wastewater treatment plant and newly allocating to the development of SSD project.

### Exclusion of Allocation: Icheon Wastewater Treatment Plant KRW 590,775 million

Project Description	City <sup>1</sup>	Amount Allocated (KRW million)				
		2018	2019	2020	2021	2022 (1Q-3Q)
<b>Sustainable Water and Wastewater Management</b>						
Regional municipal wastewater project 2nd phase	IC	-	-	-	-	-
Establishment of wastewater treatment plants and systems	IC	55,745	79,152	96,729	148,411	163,695
Improvement of trickling filter for wastewater reduction	IC, CJ	-	-	-	-	-
Construction of cooling tower drainage reuse system	IC	-	-	-	-	-
Expansion of sewage treatment plant	IC	-	883	-	-	-
Installation of wastewater reuse system and recycled water supply pipe	IC	-	1,751	-	-	-
Installation of temporary/ emergency storage for wastewater	IC	-	13,200	21,757	133	-
Improvement of water pollutant treatment	CJ	-	-	-	-	-
Investment in nonpoint pollutant treatment facility	IC	-	-	-	4,044	-
Installation of sludge treatment system	IC	-	-	-	2,576	2,699
<b>Allocation</b>		<b>55,745</b>	<b>94,986</b>	<b>118,486</b>	<b>155,164</b>	<b>166,394</b>

### New Allocation: Development of SSD project KRW 723,991 million

Project Description	City <sup>1</sup>	Amount Allocated (KRW million)				
		2018	2019	2020	2021 (1Q-3Q)	2022 (4Q)
<b>Energy Efficiency</b>						
Development of SSD	IC, CJ, BD	127,668	166,797	191,631	159,185	78,710
<b>Allocation</b>		<b>127,668</b>	<b>166,797</b>	<b>191,631</b>	<b>159,185</b>	<b>78,710</b>

Notes:

1) IC = Icheon; CJ = Cheongju; BD = Bundang

## Revision: Allocation Reporting

Total Allocation<sup>1</sup> : KRW 1,229,333mn (Equiv. USD 1,018.6mn)

Refinancing Ratio<sup>2</sup> : 58.0%

Project Description	City <sup>3</sup>	Amount Allocated (KRW million)				
		2018	2019	2020	2021	2022 (1Q-3Q)
<b>Sustainable Water and Wastewater Management</b>						
Regional municipal wastewater project 2nd phase	IC	909	17,273	36,531	30,127	4,545
Improvement of trickling filter for wastewater reduction	IC, CJ	-	3,830	3,208	697	-
Construction of cooling tower drainage reuse system	IC	-	-	19,821	3,239	-
Installation of wastewater reuse system and recycled water supply pipe	IC	-	23,953	-	-	-
Improvement of water pollutant treatment	CJ	-	-	-	-	877
<b>Energy Efficiency</b>						
Installation of LED lighting for energy saving	IC, CJ	-	1,862	292	-	-
Investment in energy savings for manufacturing facilities to improve low power efficiency	IC, CJ	-	-	3,101	1,535	88
Adoption of Heat Pump System for energy saving	CJ	-	1,114	-	-	-
Development of SSD	IC, CJ, BD	127,668	166,797	191,631	194,696	237,903 <sup>4</sup>
<b>Terrestrial and Aquatic Biodiversity Conservation</b>						
Icheon Eco Park Construction	IC	-	-	190	600	3,505
<b>Pollution Prevention and Control</b>						
Establishment of Self Ecosystem Assessment System	IC	-	-	-	1,240	-
Investment in Equipment for Environmental Analysis Center	IC	-	-	-	350	-
Installation of automatic water quality measurement equipment	IC	-	876	-	-	291
Installation of Telemonitoring system (TMS) for atmospheric management area	IC, CJ	-	-	-	991	355
Establishment of nitrogen oxide (NOx) reduction infra	IC, CJ	-	14,377	26,779	40,692	559
Improvement of waste heat recovery and temperature reduction system	IC	-	8,411	54,163	2,977	-
Improvement in efficiency of nitrogen treatment facility	IC	-	-	-	629	-
Investment in VOCs reduction facility	CJ	-	-	-	652	-
<b>Allocation</b>		<b>128,577</b>	<b>238,493</b>	<b>335,716</b>	<b>278,424</b>	<b>248,123</b>

Notes:

1) 2018 – 3Q2021: KRW/ USD = 1,188.88 (as of end Dec 31, 2021); 4Q2021 – 4Q2022: KRW/ USD = 1,261.94 (as of end Dec 31, 2022)

2) Refinancing Ratio (based on USD equiv. amount) = Allocation from 2018-2020 / Allocation from 2018-2022

3) IC = Icheon; CJ = Cheongju; BD = Bundang

4) Allocation from 1Q2022 to 4Q2022

## Revision: Impact Reporting<sup>1,2</sup>

### Sustainable Water and Wastewater Management<sup>3,4</sup>

Indicator	2018	2019	2020	2021	2022
Water Reuse (1,000m <sup>3</sup> )	18,644	21,631	26,932	34,464	36,075
Water Reuse Rate (%)	27	28	32	37	37
Water Consumption per Revenue (m <sup>3</sup> / 10 billion won)	2,899	4,253	3,267	3,189	3,883
Water Withdrawals per Revenue (m <sup>3</sup> / 10 billion won)	15,523	24,401	21,041	16,675	17,522
Wastewater Discharge (1,000m <sup>3</sup> )	51,057	54,382	56,700	57,984	60,858

### Energy Efficiency<sup>5</sup>

#### (1) Improving Energy Efficiency in Business Sites

Indicator	2018	2019	2020	2021	2022
Total Energy Consumption per Revenue (GJ/ 100 million won)	208	316	283	241	244

#### (2-1) SSD Energy Efficiency Development\*

Generation**	Active Read/ Write Power	Seq.Read	Performance per Watt ((MB/s)/W)	Performance Improvement***
PE8110 E1.S	20W	6,400MB/s	320	100.0%
PE9010 E1.S <sup>6</sup>	20W	6,600MB/s	330	103.1%
PS1010 E3.S <sup>7</sup>	25W	14,800MB/s	592	185.0%

\* @8TB, Max Power

\*\* PE8110 (Previous Generation)/ PE9010 (Current Generation)/ PS1010 (Released in 2023)

\*\*\* Baseline PE8110 E1.S

#### (2-2) SSD vs HDD Performance Per Watt\*

Type (Model Code)	Power	Read (or Write)	Performance per Watt ((MB/s)/W)	HDD vs SSD**
HDD Model (A)***	5.3W	190MB/s	35.8	11.2%
HDD Model (B)***	6.2W	185MB/s	29.8	9.3%

\* @8TB, Max Power

\*\* HDD Performance per Watt vs SSD (PE8110 E1.S) Performance per Watt

\*\*\* Release Year: HDD Model (A) in 2017/ HDD Model (B) in 2021

Notes:

1) SK hynix decided not to disclose the impact by each of the allocated projects due to confidentiality

2) The indicators were made at the company level

3) Given the allocations were mostly for domestic projects, limited the impact indicators to domestic figures

4) Some data from 2019 to 2021 were revised due to simple numerical errors

5) Total energy consumption includes both overseas and domestic businesses such as Icheon, Cheongju, Bundang, Seoul (branch office), Wuxi and Chongqing; Bundang and Seoul (branch office) included from 2022. Due to confidentiality, the company cannot disclose data based on geography

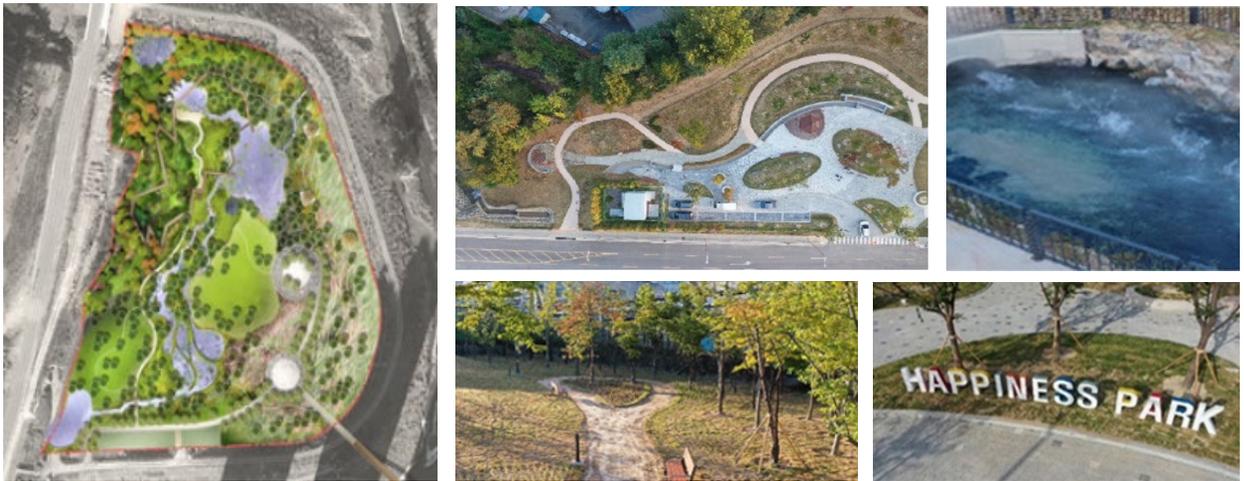
6) PE9110 was renewed and re-released under the name of PE9010. Seq.Read performance remains the same as PE9110

7) As of the release of PS1010 E3.S, its Seq.Read performance has improved from the expected 14,500MB/s stated in the previous report to 14,800MB/s

## Revision: Impact Reporting<sup>1,2</sup>

### Terrestrial and Aquatic Biodiversity Conservation

Location	Area (m <sup>2</sup> )	Impact
Icheon, Korea	20,334	Construction of ecological park to improve environment and secure biodiversity



Icheon Eco Park Construction

### Pollution Prevention and Control

Indicator	2018	2019	2020	2021	2022 (1Q-3Q)
Installation of Environment Analysis System (unit)	-	-	-	2	-
Installation of Water Quality Measurement system (unit)	-	3	1	-	1

Notes:

- 1) SK hynix decided not to disclose the impact by each of the allocated projects due to confidentiality
- 2) The indicators were made at the company level

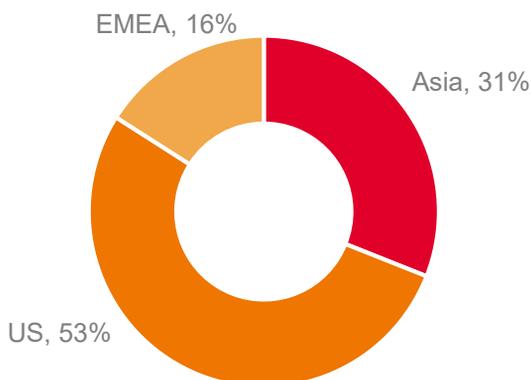
## Appendix: Green Bond Key Figures

On 19 January 2021, SK hynix issued a USD 2.5bn triple-tranche Senior Unsecured bond, consisting of a USD 500m 3-year tranche, a USD 1bn 5-year tranche and a **USD 1bn 10-year Green tranche**. The net proceeds from the 10-year Green Bond will be allocated to eligible projects in accordance with the **SK hynix’s Green Financing Framework**.

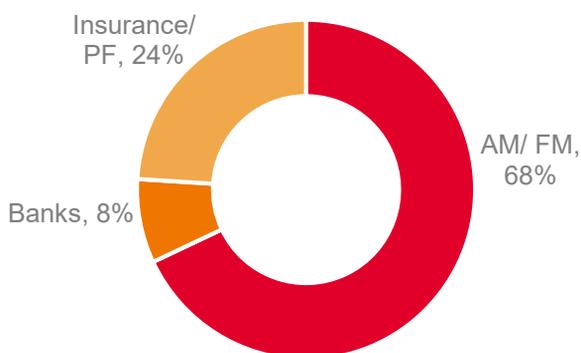
*SK hynix USD 1bn 10-year Senior Unsecured Green Bond was awarded as ‘Best Green Bond-Corporate’ by Asset Triple A and ‘Best of Northeast Asia Deal’ by Finance Asia.*

<b>Issuer</b>	<b>SK hynix Inc. (“SK hynix”)</b>
<b>Issue type</b>	Senior Unsecured, 144A/ RegS, <b>Green Bond</b>
<b>Issue Rating</b>	Baa2 / BBB- (Moody’s / S&P)
<b>Issue Date</b>	19 January 2021
<b>Amount Issued</b>	USD 1 billion
<b>Tenor</b>	10-year
<b>Coupon</b>	2.375%
<b>ISIN</b>	144A: US78392BAC19 RegS: USY8085FBD16

**Green Bond Allocation Distribution by Geography**



**Green Bond Allocation Distribution by Investor Type**



## Appendix: Framework and Second Party Opinion

The SK hynix Green Financing Framework (“Framework”) sets out the criteria, governance and processes under which the Company, intends to issue green bonds, loans, private placements or any other financing instruments.

### Use of proceeds



- Any Green Financing Instruments issued by SK hynix will be used to finance and/ or re-finance new or existing projects, under construction and/ or in operation (“Eligible Projects”) from any of the Eligible Green Categories.

#### Eligible green Categories

- Sustainable water and wastewater management
- Energy Efficiency
- Pollution prevention and control
- Terrestrial and aquatic biodiversity conservation

### Project selection and evaluation



- An internal ESG Working Group which is composed of Finance Management organization, ESG-related departments, and environment-related departments evaluates and selects potential Eligible Projects.
- Looking at the process in more detail, any department related to ESG activities can propose a green investment project. Once a proposal has been made, then the infrastructure team, responsible for project construction, calculates budget and plans construction method and associated timeline.
- The existing ESG Management Committee, which includes the CEO, then reviews the preliminarily selected potential Eligible Projects for final approval.

### Management of proceeds



- SK hynix intends to allocate the proceeds to fund Eligible Projects under the Eligible Green Categories, selected in accordance with the use of proceeds criteria and evaluation and selection process
- SK hynix will initially deposit the proceeds from any Green Financing Instrument into the general funding accounts of SK hynix.
- A Green Financing Register will be established to earmark the proceeds of the Green Financing Instruments against assessed and selected Eligible Projects

### Reporting



- A Green Financing Report will be made available to investors and lenders within one year from the date of the issuance of the Green Financing Instruments and thereafter once a year until the proceeds have been fully allocated.

## Second Party Opinion



V.E is of the opinion that SK hynix’s Framework is aligned with the four core components of the Green Bond Principles 2018 (“GBP”) and the Green Loan Principles 2020 (“GLP”).

Find SK hynix’s Green Financing Framework and SPO at <https://www.skhynix.com/ir/UI-FR-IR13/>