



HANWHA ENERGY USA HOLDINGS CORPORATION PERIODIC REVIEW ON GREEN BOND IMPACT REPORT 2026



Document title: Periodic Review on Green Bond Impact Report 2026

Prepared by: DNV Business Assurance Korea Ltd.

Location: Seoul, Republic of Korea

Date: 28 September 2026

Ref. Nr.: DNV-2026-ASR-10637952

This statement is valid until the Report provided on September 2026 remains unchanged.

Table of Contents

Table of Contents	2
DNV'S INDEPENDENT ASSESSMENT	3
Scope and Objectives	3
Responsibilities of the Management of Hanwha Energy USA and DNV	3
Basis of DNV's Opinion	3
Work Undertaken	4
Findings and DNV's Opinion	4
Schedule 1. Nominated Assets & the Proceeds Allocation	6
Schedule 2. Impact Reporting	6
Schedule 3. Eligibility Assessment Protocol	7
1. Use of Proceeds	8
2. Process for Project Selection and Evaluation	9
3. Management of Proceeds	11
4. Reporting	12

Disclaimer

Our assessment relies on the premise that the data and information provided by the client to us as part of our review procedures are 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 be 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 17029:2019 - Conformity Assessment - General principles and requirements for validation and verification bodies, 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 during the assessment and maintain independence where required by relevant ethical requirements.

DNV'S INDEPENDENT ASSESSMENT

Scope and Objectives

Hanwha Energy USA Holdings Corporation (hereinafter referred as the "Hanwha Energy USA" or "Issuer") issued Green Bond (hereinafter referred as the "Bond") with the total amount of USD 400mn. The Bond was issued on the basis of Hanwha Energy USA's Green Bond Framework (hereinafter referred as the "Framework") which was published in June 2025.

DNV has been commissioned by Hanwha Energy USA to provide a review of 2026 Hanwha Energy USA's Green Bond Impact Report (hereinafter referred as the "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 Hanwha Energy USA as well as the interview conducted with its team or a delegated entity. We do not provide any independent assurance or other type of audit activities.

In this statement, no assurance is provided regarding the financial performance of the Issuer, the value of any investments in the Bond or the long-term social and green 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 Hanwha Energy USA and DNV

The management of Hanwha Energy USA 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 Hanwha Energy USA 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 Hanwha Energy USA. 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 Hanwha Energy USA used as a basis for this assessment were not correct or complete.

Basis of DNV's Opinion

DNV adapted our Green Bond Principles methodology, which incorporates the requirements of Green Bond Principles (GBP) 2025, to create a Hanwha Energy USA-specific 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.

As per our Protocol, the criteria against which the Bonds have been reviewed are grouped under the four Principles:

- **Principle One: Use of Proceeds.** The Use of Proceeds criteria are guided by the requirement that an issuer of Bonds must use the funds raised to finance eligible activities. The eligible activities should produce clear green benefits.
- **Principle Two: Process for Project Evaluation and Selection.** The Project Evaluation and Selection criteria are guided by the requirements that an issuer of Bonds should outline the process it follows when determining eligibility of an investment and outline any impact objectives it will consider.
- **Principle Three: Management of Proceeds.** The Management of Proceeds criteria are guided by the requirements that Bonds 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 managed should be made.

- **Principle Four: Reporting.** The Reporting criteria are guided by the recommendation that at least Sustainability Reporting to Bonds investors should be made of the use of Bonds 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 Hanwha Energy USA 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 Hanwha Energy USA on the report and supplemented by high-level desktop research. These checks refer to current assessment best practices and standards methodology;
- Review of published materials by Hanwha Energy USA and Hanwha Energy USA 's website;
- Discussions with Hanwha Energy USA management, and review of relevant documentation and evidence related to the criteria of the Protocol;
- 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.** Hanwha Energy USA has reported use of the proceeds of the Bond to finance projects and assets including:

Green Project Categories

- Pure PV – Solar Energy
- PV with ESS embedded
- Energy Storage System

DNV reviewed the criteria for the project categories above to determine the eligibility of the nominated projects. DNV can confirm that the use of the proceeds were used in accordance with the Hanwha Energy USA's Framework.

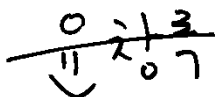
2. **Principle Two: Process for Project Evaluation and Selection.** The proceeds have been allocated to finance the assets as defined in Schedule 1. DNV has reviewed evidence that demonstrates that Hanwha Energy USA's Investment Committee oversees the selection of eligible projects and their compliance with the eligibility criteria described in the Framework.
3. **Principle Three: Management of Proceeds.** DNV has reviewed evidence showing how Hanwha Energy USA traced the proceeds from the Bond, from the time of issuance to the time of disbursement. Through its Internal information system, the proceeds were monitored and checked regularly. 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.** Hanwha Energy USA has confirmed that this Reporting will be updated on its website with this DNV's assurance report. The Reporting includes a description of the project and value of the proceeds invested, as well as the associated quantitative and qualitative environmental impacts.

On the basis of the information provided by Hanwha Energy USA and the work undertaken, it is DNV's opinion that the Bond meets the criteria established in the Protocol and that the projects are aligned with the GBP 2025, which is to enable capital-raising and investment for new and existing projects with environmental benefits.

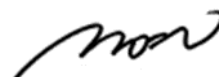
for DNV Business Assurance Korea Ltd.

Seoul, Republic of Korea / 28 September 2026



Chang Rok Yun

Lead Verifier



Sang Yeon Park

Quality Reviewer (an
accredited GHG verifier)

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.

Schedule 1. Nominated Assets & the Proceeds Allocation

- Total Allocation: USD 400 million (100% of the proceeds were allocated)
- Refinancing Ratio¹: 5.1%

Project Description	Location	Allocated (USD thousands)	Allocated (%)
Pure PV – Solar Energy	US	58,956.5	14.7%
PV with ESS embedded – Solar Energy	US	310,115.4	77.5%
Energy Storage System – Energy Storage System and Grid	US	30,928.1	7.7%
Total		400,000	100%

¹ Note: Refinancing Ratio = Allocation in the 2 years prior to the Bond Issuance

Schedule 2. Impact Reporting²

Project Description	Installed Capacity (MW)	Exp. Energy Produced (MWh/ year)	Exp. CO2 Avoided (tCO ₂ eq/ year)
Pure PV – Solar Energy	2,721	76,092	26,784
PV with ESS embedded – Solar Energy	16,238	529,813	186,494
Energy Storage System – Energy Storage System and Grid	8,516	N/A	5,413

² Both expected energy produced and expected CO2 avoided are measured in accordance with the green bond's share out of total impact

Schedule 3. Eligibility Assessment Protocol

1. Use of Proceeds

Ref	Criteria	Requirements	Works Undertaken	DNV Findings
1a	Type of bond / loan	The Bond must fall in one of the following categories, as defined by the Green Bond Principles: - Green Use of Proceeds Bond - Green Use of Proceeds Revenue Bond - Green Project Bond - Green Securitized Bond - Loan instrument made available for Green project (Green use of loan proceeds)	Review of: - Hanwha Energy USA Green Bond Framework (2025) - Hanwha Energy USA Green Bond Impact Report (2026) Discussion with Hanwha Energy USA (or a delegated entity)	The reviewed evidence confirms that the Green Bond falls in the category: Green Use of the Proceeds
1b	Sustainable Project Categories	The cornerstones of Sustainability Bond are the utilization of the proceeds of the bond and the loan which should be appropriately described in the legal documentation for the security.	Review of: - Hanwha Energy USA Green Bond Framework (2025) - Hanwha Energy USA Green Bond Impact Report (2026) Discussion with Hanwha Energy USA (or a delegated entity)	DNV confirms that Hanwha Energy USA appropriately describes green projects in the Impact Report. Green projects: Proceeds were used for Pure PV (solar energy), PV with ESS embedded (solar energy), and Energy Storage System (energy storage system and grid).
1c	Environmental benefits	All designated Environmental Project categories should provide clear environmentally sustainable benefits,	Review of: Hanwha Energy USA Green	Hanwha Energy USA financed green eligible projects in alignment with the use of proceeds defined in the Framework. DNV reviewed the calculation methodology³ and concluded that nothing came to

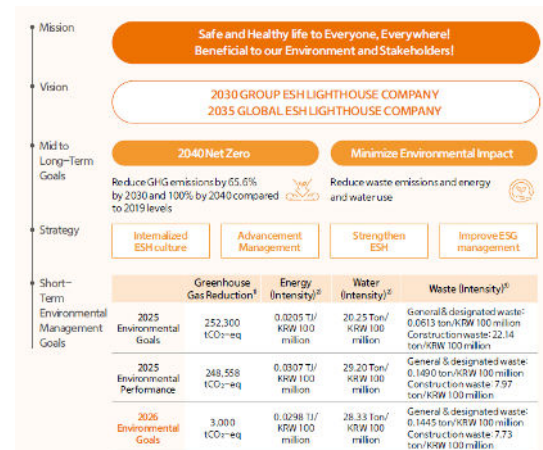
³ As for the calculating impacts, Hanwha Energy USA used EIB Methodology for the assessment of GHG emissions as well as the capacity factor of IEA 2020:

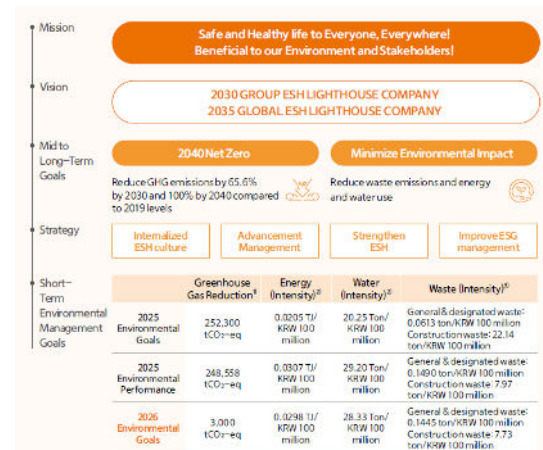
- EIB: https://www.eib.org/attachments/lucalli/eib_project_carbon_footprint_methodologies_2023_en.pdf
- IEA 2020: <https://iea.blob.core.windows.net/assets/ae17da3d-e8a5-4163-a3ec-2e6fb0b5677d/Projected-Costs-of-Generating-Electricity-2020.pdf>

		which, where feasible, will be quantified or assessed by the Issuer.	- Bond Framework (2025) - Hanwha Energy USA Green Bond Impact Report (2026) - Project-related Documentation	our attention that would suggest the use of inappropriate assumptions or unreliable data sources in estimating the reported environmental impacts. Regarding green impact measurement for ESS, Hanwha Energy USA used emission factor (equal to Combined Margin Intermittent Electricity Generation – Combined Margin Firm Electricity Generation/Electricity Consumption from EIB methodology for the USA), namely 106 kgCO₂e/MWh. Although green impact measurement of ESS is recognised by this method, DNV also notes that this may have limitation in measurement of actual green impact because the grid which ESS is connected to, may contain not only intermittent energy but also firm energy too, possibly leading to overestimation of the impact.
1c	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: - Hanwha Energy USA Green Bond Framework (2025) - Hanwha Energy USA Green Bond Impact Report (2026) - Project-related Documentation Discussion with Hanwha Energy USA (or a delegated entity)	DNV confirms that the proceeds of the Bond were refinanced in accordance with the Schedule 1, whose projects are limited to look-back period of 24 months prior to the Bond issuance. - Total Allocation: USD 400 Million - Refinanced Amount: 20.3 Million (5.1%)

2. Process for Project Selection and Evaluation

Ref	Criteria	Requirements	Works Undertaken	DNV Findings
2a	Investment-decision process	The Issuer of a Green Bond should outline the decision-making process it follows to determine the eligibility of projects using Sustainability Bond proceeds. This includes, without limitation: A process to determine how the	Review of: - Hanwha Energy USA Green Bond Framework (2025) - Hanwha Energy USA Green Bond Impact Report (2026) - Hanwha Energy USA Investment Committee	Hanwha Energy USA has communicated with DNV that it follows the project evaluation and selection described in the Framework. Hanwha Energy USA Investment Committee undertook assessment for inclusion of projects in accordance with the criteria of the Framework.

Ref	Criteria	Requirements	Works Undertaken	DNV Findings
		projects fit within the eligible Green Projects categories identified in the Green Bond Principles and Green Loan Principles; - The criteria making the projects eligible for using the Green Bond proceeds; and - The environmental sustainability objectives, and the social objectives	document Discussion with Hanwha Energy USA (or a delegated entity)	
2b	Issuer/borrower's environmental and social and governance framework	In addition to information disclosed by an issuer on its Green Bond process, criteria and assurances, Green Bond investors may also take into consideration the quality of the issuer's overall framework and performance regarding environmental sustainability.	Review of: - Hanwha Energy USA Green Bond Framework (2025) - Hanwha Energy USA Green Bond Impact Report (2026) - Hanwha Corporation Sustainability Report (2025) Discussion with Hanwha Energy USA (or a delegated entity)	Hanwha Corporation, which is a parent company of Hanwha Energy USA, set key ESG management indicators under the overarching vision of reaching Net Zero by 2040. In particular, Hanwha Corporation establishes mid- to long-term environmental management goals and strategies and sets annual targets based on them. To achieve these goals, Hanwha Corporation implements improvement initiatives at each business site and continuously monitors the related performance. 



3. Management of Proceeds

Ref	Criteria	Requirements	Works Undertaken	DNV Findings
3a	Tracking procedure	The net proceeds of Green 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 Projects.	Review of: - Hanwha Energy USA Green Bond Framework (2025) - Hanwha Energy USA Green Bond Impact Report (2026) - Allocation & Impact Calculation (excel sheet) Discussion with Hanwha Energy USA (or a delegated entity)	DNV has reviewed evidence showing how Hanwha Energy USA manages and tracks the proceeds of the Bond. The proceeds are tracked through a dedicated ledger, while the Investment Committee oversees the selection of Eligible Projects. DNV confirms that the Issuer's internal process can manage and track the allocation of proceeds in accordance with the Framework.
3b	Tracking procedure	So long as the Green 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: - Hanwha Energy USA Green Bond Framework (2025) - Hanwha Energy USA Green Bond Impact Report (2026) - Allocation & Impact Calculation (Excel sheet) - ERP Snapshot Discussion with Hanwha Energy USA (or a delegated entity)	DNV can confirm that the proceeds of the Bond have been traced, from the time of issuance to the time of disbursement, and the net balance has been reduced in line with its financing schedule. DNV also can confirm that at the end of each financial year, the outstanding balance of the Bond is reviewed.
3c	Temporary holdings	Pending such investments or disbursements to eligible Green Projects, the Issuer should make known to investors the intended types of temporary investment instruments for the balance of unallocated proceeds.	Review of: - Hanwha Energy USA Green Bond Framework (2025) - Hanwha Energy USA Green Bond Impact Report (2026)	Hanwha Energy USA has confirmed that any proceeds temporarily unallocated have been placed in short-term liquid money instruments such as cash and market securities according to the Company's investment guidelines until allocation to Eligible Green Projects.

4. Reporting

Ref	Criteria	Requirements	Works 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 Green Bond 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: - Hanwha Energy USA Green Bond Impact Report (2026) - Website Discussion with Hanwha Energy USA (or a delegated entity)	Hanwha Energy USA will upload the Report on its website. https://www.hanwhaenergyusa.com/ The Report includes a description of the projects and value of the proceeds invested, as well as associated qualitative and quantitative environmental impacts.