



# **Hanwha Q CELLS**

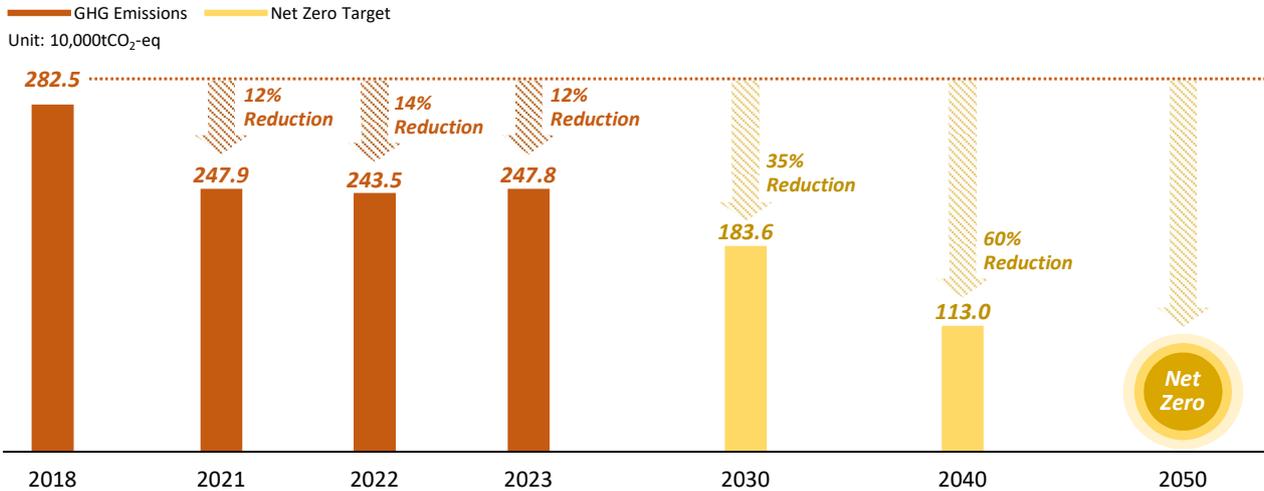
## **Green Bond Allocation and Impact Report**

**relating to**  
**National Finance Authority**  
**Taxable Industrial Development Revenue Bonds**  
**(Hanwha Q CELLS USA, Inc. Project)**  
**Series 2024A (Green Bonds)**

July 2025

# ESG Strategy

## Hanwha Solutions' 2050 Net Zero Roadmap



## 2050 Net Zero Implementation Strategy

### Net Zero

**Improve Energy Efficiency**

- ✓ **Chemical:** Reduce 7,000tCO<sub>2</sub>-eq of GHG emission per year by adopting high-efficiency facilities, and improving processes
- ✓ **Q Cell:** Reduce energy consumption by 2GWh per year by optimizing cooling facilities

**Transition to By-Product Hydrogen fuels**

- ✓ **Chemical:** Reduce 7,000tCO<sub>2</sub>-eq of GHG emission per year by utilizing electrolytic hydrogen produced in the CA(Chlor-Akali) process as a fuel

### K-RE 100

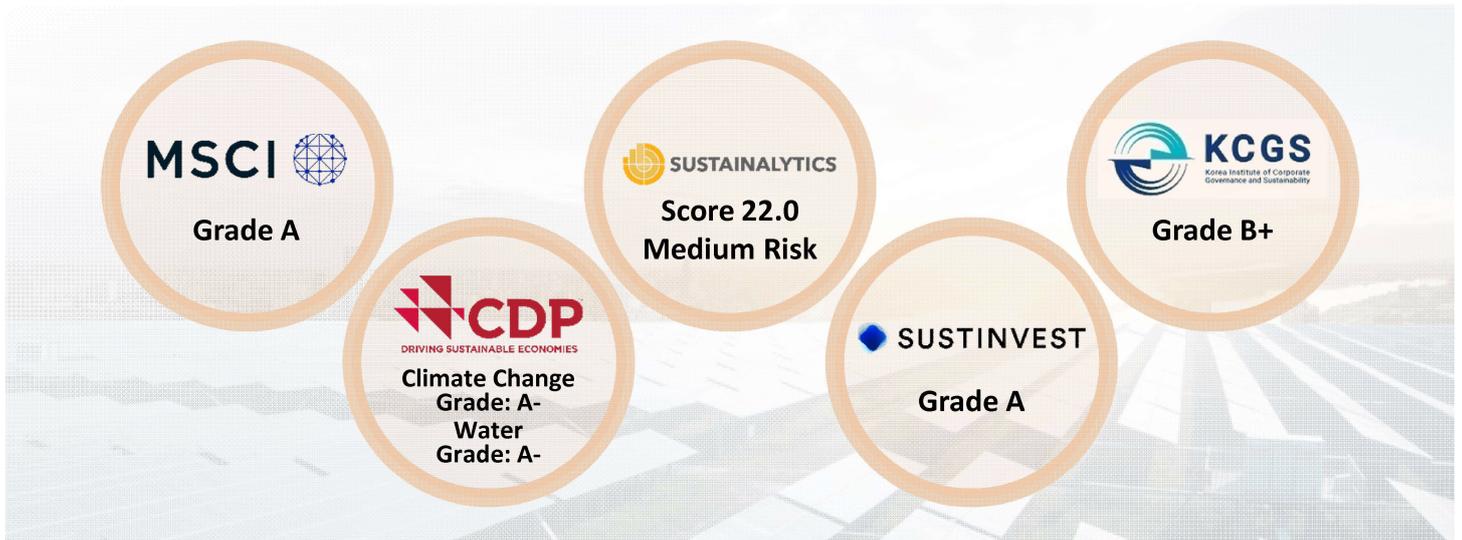
**Introduce Renewable Energy-Powered Electricity**

- ✓ Scale up self-generated electricity by the constructions on an additional PV power generation facility
- ✓ **Chemical:** Use 1.1GWh of renewable energy generated by PV power generation facility
- ✓ **Q Cell:** Secure 3.2GWh of renewable energy generated by PV power generation facility

**REC(Renewable Energy Certificate) Purchase Agreement**

- ✓ **Chemical:** 6,894MWh per year (Reduce 3,000tCO<sub>2</sub>-eq of GHG emission)

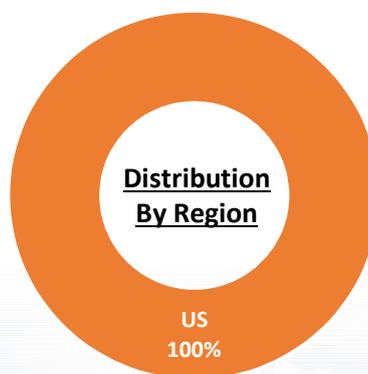
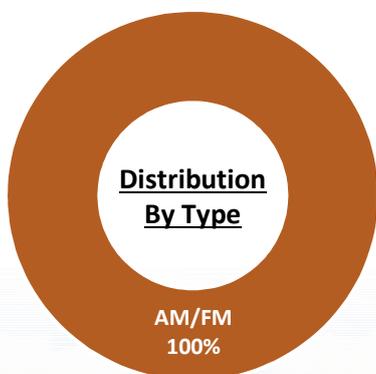
## Key Initiatives



# Green Bond Highlights

## Issuance under Hanwha Solutions Green Financing Framework

Key Issuance Metrics	
Issuer	National Finance Authority
Obligor	Hanwha Q CELLS USA, Inc.
Letter of Credit Bank / Guarantor	Kookmin Bank, New York Branch
Bond Description	Taxable Industrial Development Revenue Bonds (Hanwha Q CELLS USA, Inc. Project) Series 2024A (Green Bonds)
Bond Ratings	Moody's: Aa3/VMIG1 S&P: A+/A-1
Pricing Date	14 February 2024
Size	USD \$500.0 million
Interest Rate Mode	Weekly Variable Rate
Maturity	1 February 2029
Use of Proceeds	To finance or refinance, in whole or in part, Eligible Green Projects in accordance with the Hanwha Solutions Green Financing Framework
CUSIP	63609FAD1



**“USD \$500.0mn, or 100% of total proceeds of green bond allocated to 12 solar power projects committed across 2 categories”**

# Allocation & Impact Reporting

## Allocation of Green Bond Proceeds

Total proceeds of USD \$500.0 million from Taxable Industrial Development Revenue Bonds (Hanwha Q CELLS USA, Inc. Project), Series 2024A (Green Bonds) have been **fully allocated to the integrated solar power production complex, the Solar Hub.**

Projects	Amount Allocated (USD mn)
Construction of solar power components manufacturing plant	377.2
Equipment for producing solar power components	122.8
<b>Total</b>	<b>500.0</b>

## Impact Breakdown - Annual number of solar components production

Solar Components <sup>1</sup>	Expected Annual Production Volume							
	2026				2027			
	Total		Green Bond Share		Total		Green Bond Share	
	kpcs	GW	kpcs	GW	Kpcs	GW	kpcs	GW
Cell	307,160	3.27	44,675	0.48	325,932	3.49	47,405	0.51
Module	4,614	3.10	671	0.45	4,987	3.38	725	0.49

## Impact Breakdown - Annual renewable energy production

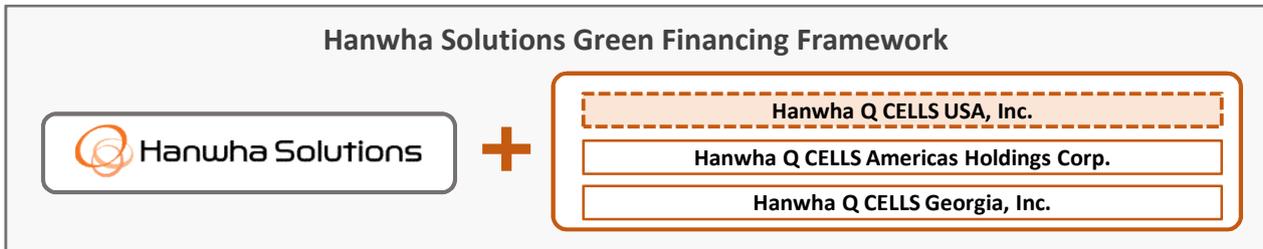
Expected No. of Module Produced <sup>2</sup>	<b>4,987,203</b>
Average Total Capacity of Solar Unit <sup>3</sup> (W)	<b>670</b>
Maximum Module Efficiency <sup>4</sup> (%)	<b>21.9%</b>
Total Expected Renewable Energy Production <sup>5</sup> (MWh)	<b>176,333,626</b>
Green Bond Share of Expected Annual Renewable Energy Production (MWh)	<b>1,068,612</b>

- 1) Annual number of solar components produced under Hanwha Q CELLS Georgia
- 2) Expected number of module produced at full capacity of Hanwha Q CELLS Georgia
- 3) Expected total installed capacity of Q.PEAK DUO ML-G12S-BFG series solar unit: 660 – 680 W
- 4) Maximum module efficiency of Q.PEAK DUO ML-G12S-BFG series
- 5) Total expected renewable energy production with max. expected degradation during the expected lifespan of 30 years

# Framework Overview

## Structure of the Green Financing Framework

- Hanwha Solutions has updated a Green Financing Framework as the basis for Hanwha Solutions and its subsidiaries to raise funds through issuance of green bond and/ or borrowing green loans.



## Use of Proceeds

- A maximum 3 year look-back period would apply for refinanced projects and we expect to be fully allocated within 1 year from the issuance of the Green Financing Instrument.

Category	Eligible Projects
<p>Renewable Energy</p>	<ul style="list-style-type: none"> <li>Production and R&amp;D of solar power components, energy retail businesses and the acquisition and/or construction and/or operation of solar power generation assets</li> <li>Construction and/or operation of wind or solar power generation assets</li> <li>Investment in BESS business for the construction and/or operation of BESS assets</li> </ul>

## Project Evaluation and Selection Process

- Hanwha Solutions has established a Green Financing Working Group (“GFWG”), which is comprised of senior representatives from the international finance team, and other business units responsible for the eligible green projects.

## Reporting

<b>Allocation Reporting</b>	On an annual basis until full bond maturity or upon any material development, Hanwha Solutions and its subsidiaries will provide a dedicated green bond report
<b>Impact Reporting</b>	Environmental benefits of the Eligible Green Projects ✓ Number of solar components produced (number per year) ✓ Annual renewable energy production (GW) ✓ Annual production capacity (GW) ✓ Annual CO2 emission reduced or avoided and etc.

## Management of Proceeds

Dedicated Ledger	Green Bonds details			
	Allocation of Proceeds	Eligible Project List & Categories		Amount of Unallocated Proceeds
		Project Description		
		Project Cost, Amount Allocated		
		Company’s Ownership (%)		

## Second Party Opinion