

Green Bond Annual Report

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September 2024 Strictly Private and Confidential

CARBON NEGATIVE STRATEGY

Carbon Negative Strategy

- Joining global climate change response efforts, LG Energy Solution ("LGES") has established a carbon negative strategy to achieve carbon neutrality across its value chain by 2050 and going carbon negative from 2050 onwards.
- The interim targets include reducing GHG emissions by 53% from the baseline of 2021 and achieving RE100 at all global sites by 2030, and achieving carbon neutrality within the scope of LG Energy Solution by 2040.



Source: Company Information



CARBON NEUTRALITY BY PHASE

Carbon Neutrality Strategy

Approximately 30% of total GHG emissions are scopes 1 and 2 emissions and the remaining 70% scope 3 emissions. LGES continues to devise and implement measures to mitigate GHG emissions from its direct operations, and regularly evaluate the effectiveness of mitigation measures and revise, as needed. Further, LGES engages with its suppliers and supports their commitment to RE100 and contribution to our carbon neutrality goal.

2030: Complete RE100 Transition

LGES: LGES makes efforts to secure stable supply of renewable energy, using varied measures catered to regulatory and power market conditions of each operating site – ranging from generating solar power from photovoltaic facilities installed in manufacturing plants, sourcing renewable energy through renewable energy certificates or green pricing, to exploring more stable and long-term measures such as power purchase agreement to contribute to additionality.

Suppliers: LGES plans to transition all electricity used in raw material production and components supplied by all Tier-1 suppliers to 100% renewable electricity by 2030.

2040: Achieve Carbon Neutrality in Own Operations (Scopes 1 & 2)

LGES: To achieve carbon neutrality in our own operations (Scopes 1 & 2) by 2040, fuels should be transitioned to renewable energy sources (biomass, hydrogen, or electricity). To that end, we are implementing projects to promote energy efficiency and optimize energy use, secure alternative green energy sources, and transition fuel into electric boilers.

Suppliers: LGES will continue to conduct Life Cycle Assessment (LCA) of the battery value chain to identify materials with high carbon emissions and help support the Tier-2+ upstream suppliers in transitioning to 100% renewable energy for the electricity used in their processes. In addition, LGES will use recycled metal in full compliance with requirements under EU Battery Regulation and procure low-carbon metals from critical material suppliers.

2050: Achieve Carbon Neutrality Across the Entire Value Chain

LGES plans to expand the monitoring boundary of carbon emission from Tier-1 suppliers to Tier-N suppliers (mining, etc.), and support their participation in RE100 and carbon reduction activities.

LGES will contribute to carbon reduction in batteries by gradually increasing the proportion of recycled raw materials with lower environmental impact than virgin materials and strive to build a closed loop of battery raw materials.

In addition, LGES aims to achieve carbon neutrality by 2050 through external carbon reduction activities, such as developing renewable energy and installing ESS for communities near the business sites.

Source: Company Information



LGES GREEN BOND SUMMARY

LG Energy Solution's 2023 Green Bond Details

- On September 25, 2023, LG Energy Solution issued its inaugural Green Bond under the Green Financing Framework.
- The bond generated total proceeds of US\$1bn, which have been fully allocated to projects that support global climate change initiatives.

Issuer	LG Energy Solution Co., Ltd.	
Issue Ratings	Baa1 by Moody's / BBB+ by S&P	
Format	144A / Reg S	
Issue Date	September 25, 2023	
Instrument	Senior Unsecured	
Tenor	ЗҮ	5Y
Issued Amount	US\$400mm	US\$600mm
Coupon	5.625%	5.750%
ISIN	US50205MAA71 / USY5S5CGAA01	US50205MAB54 / USY5S5CGAB83
Use of Proceeds	Finance or refinance, in whole or in part, new or existing projects related to (i) low carbon transportation and (ii) energy efficiency in accordance with LGES' Green Financing Framework dated February 2023	



ALLOCATION REPORT

Green Bond Allocation Summary

- As of June 31, 2024, the proceeds of US\$1bn from the Green Bond were fully allocated to construction of EV battery manufacturing facilities and R&D for EV batteries.
- Breakdown between new financing and refinancing:
 - New Financing: US\$761mm (76.1%)
 - Refinancing: US\$239mm (23.9%)

Allocation Breakdown by Project Category



EV Battery Manufacturing Sites



GM JV2 (Spring Hill, Tennessee)

Allocated:	\$117mm
SOP:	2024
Capacity:	50 GWh/year
Project Size:	\$2,367mm
Customer:	GM



GM JV3 (Lansing, Michigan)

Allocated:	\$321mm
SOP:	2025
Capacity:	50 GWh/year
Project Size:	\$2,600mm
Customer:	GM



AZ (Queen Creek, Arizona)

Allocated:	\$60mm
SOP:	2026
Capacity:	36 GWh/year
Project Size:	\$3,272mm
Customer:	

Note: Monthly average of USD/KRW FX rate applied for R&D expense incurred in each respective month



IMPACT REPORT

Green Bond Impact Summary







563,495 tCO₂

CO₂ reduced per year



* Tailpipe CO₂ emissions reduced

Calculation Methodology and Assumption

 We evaluated environmental impact by comparing total expected annual tailpipe emissions of EVs and gasoline vehicles. EVs have zero tailpipe emissions, and a typical gasoline vehicle would emit approximately 4.6 tCO₂ per year.

[(Difference in Annual CO₂ Emission Between Gasoline Vehicle and EV) * Number of Vehicles] * % of LGES Green Bond Proceeds in Total Project Size

- Assumption used in the calculation of tailpipe emissions of a gasoline vehicle:
 - Fuel economy of 22.2 miles per gallon
 - 11,500 miles travelled per year
 - ✓ 8,887 grams of CO₂ is emitted per gallon of gasoline burned

Source: US Environmental Protection Agency (https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle)

