

# **Green Bond Annual Report**

December 2024

## LG Chem's Sustainability Strategy

LG Chem is a global chemical company that operates in the petrochemicals business, as well as the advanced materials business including engineering materials and battery materials, and the life sciences business. As we anticipate our greenhouse gas (GHG) emissions to rise in line with the growth of our businesses and the expansion of our production, we have agonized over our survival and sustainable growth.

In 2020, we made a pre-emptive move by announcing our sustainability strategy and declaring the "2050 Carbon-neutral Growth" goal, making us the first in the domestic chemical industry to make such a commitment. To keep pace with sustainable growth as a Top Global Science Company, in 2022, we advanced our existing target of achieving Carbon-neutral Growth by 20 years and declared a new target of reaching "2050 Net-Zero". We are actively promoting the adoption of innovative processes, the use of eco-friendly materials and fuels, and the expansion of renewable energy use to achieve this new target. Furthermore, we are establishing a management system for the voluntary areas (scope 3) that go beyond regulatory requirements (scope 1 and 2) to enhance the competitiveness of our low-carbon products.

We have selected 5 priority actions: climate action, renewable energy transition, circular economy, environmental protection, and responsible supply chain. We committed to provide innovative and differentiated sustainable solutions for the environment and society.

#### **LG Chem's 5 Sustainability Priorities**



## **General Information**

To facilitate transparency, disclosure, integrity and quality in LG Chem, Ltd. ("LG Chem" or the "Company")'s Green Bond/Loan for interested investors and stakeholders, the Company updated its Green Financing Framework ("Framework") in June 2021 in line with ICMA Green Bond Principles ("GBP") and Green Loan Principles ("GLP"). Tables below list out LG Chem's green bond issuances as of the end of the reporting period under the Framework.

Issuer	LG Chem, Ltd			
Issuer Ratings	A3 Stable by Moody's / BBB+ Positive by S&P			
Format	144A ,	/ RegS		
Issue Date	July 7	, 2021		
Structure	Senior Unsecured			
Tenor	5-Year 10-Year			
Issue Size	US\$500mm			
Maturity Date	July 7, 2026 July 7, 2031			
Coupon	1.375% 2.375%			
	Finance or refinance, in whole or in part, new and/or existing			
Use of Proceeds	Eligible Green Project Categories (as further described in LG			
	Chem's Green Finance Framework dated June 2021)			
Terms	SGX Listing, New York Law			

Issuer	LG Chem, Ltd
Issuer Ratings	A3 Stable by Moody's / BBB+ Positive by S&P
Format	144A / RegS
Issue Date	July 14, 2022
Structure	Senior Unsecured
Tenor	3-Year
Issue Size	US\$300mm
Maturity Date	July 14, 2025
Coupon	4.375%
	Finance or refinance, in whole or in part, new and/or existing
Use of Proceeds	Eligible Green Project Categories (as further described in LG
	Chem's Green Finance Framework dated June 2021)
Terms	SGX Listing, New York Law

## **Management of Proceeds**

According to the Framework, LG Chem has deployed the net proceeds from the issuances of the Green Bond/Loan to finance and/or refinance, in whole or in part, the combination of new or existing projects ("Eligible projects") that fall under the Eligible Green Categories as listed below. As a member of the United Nation ("UN") Global Compact, LG Chem actively supports the UN's Sustainable Development Goals ("SDGs"). LG Chem will contribute to the sustainable development of the world by aligning its business with the SDGs.

- Renewable Energy
- Circular Economy
- Clean Transportation

A dedicated Green Financing Working Group ("GFWG") has been created to oversee the entire issuance process and to be responsible for sustainability management. The company has below process in place with regards to project evaluation and selection:

- 1) Each business unit selects the projects based on internal selection criteria
- 2) GFWG verifies the adequacy and eligibility of the selected projects
- 3) Eligible projects are approved after final review by the Investment Committee

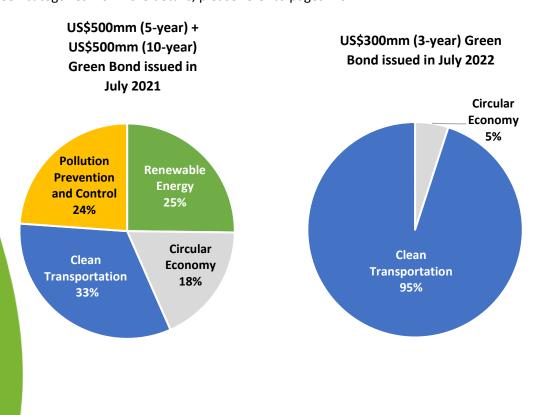
The GFWG will review the allocation of the Green Bond/Loan proceeds to the Eligible projects annually and determine if any adjustment is necessary. The GFWG will ensure that all projects included under the Use of Proceeds are aligned with the Eligible Green Category or determine if replacement / deletion / additions are necessary.

## Allocation of Use of Proceeds

According to the Framework, LG Chem has committed to provide the allocation report with below 4 key pillars:

- 1) Allocation per Eligible Project Categories
- 2) Examples of projects financed by the proceeds, including their description (location, category, progress) and the corresponding allocated amount
- 3) The balance amount of unallocated net proceeds
- 4) Portion of financing and refinancing

The pie charts below show the percentage allocation of proceeds from LG Chem's Green Bonds by eligible green categories. For more details, please refer to pages 4-6.



### I. US\$500mm (5-year) + US\$500mm (10-year) Green Bond issued in July 2021

The total USD 1billion has been fully allocated to the assets under Eligible Green Categories with below details, among which 100% has been deployed as of the end of reporting period. Total amount of USD 1billion has been 100% allocated into new projects.

Allocation summary by green category:

Green Asset Category		# of Projects	Total Proceeds Allocated (1)(2)	Amount Disbursed (1) Until OCT. '24	Percentage of Disbursed Proceeds <sup>(2)</sup>
Renewable Energy	Polyolefin Elastomer (POE)	1	3,236 (254)	3,236 (254)	100%
Circular Economy	Biodegradable Plastics Development	1	2,338 (183)	2,338 (183)	100%
Clean Transportation	Carbon Nanotube, Cathode materials	3	4,201 (330)	4,201 (330)	100%
Pollution Prevention and Control <sup>(3)</sup>	Carbon Emissions Reduction	1	3,065 (240)	3,065 (240)	100%
Total		6	12,840 (1,007)	12,840 (1,007)	100%

Examples of projects financed by the green use of proceeds:

Category	Business Unit	Description	Total Proceeds Allocated <sup>(1) (2)</sup>	Amount Disbursed <sup>(1)</sup> Until OCT. '24	Percentage of Disbursed Proceeds <sup>(2)</sup>
Renewable Energy	Petrochemical	100K-ton capacity addition at Daesan POE Plant	3,236 (254)	3,236 (254)	100%
Circular Economy	Petrochemical	Establishment of 50K-ton Daesan PBAT Plant	2,338 (183)	2,338 (183)	100%
	Petrochemical	1.2K-ton capacity addition at Yeosu CNT Plant (Phase 2)	633 (50)	633 (50)	100%
Clean Transportation	Advanced	Capacity addition at Cheongju Cathode Material Plant No. 4	2,230 (175)	2,230 (175)	100%
	Materials	Capital injection in Gumi Cathode Material J/V (Phase 1)	1,338 (105)	1,338 (105)	100%
Pollution Prevention and Control <sup>(3)</sup>	Petrochemical	Yeosu ABS Plant upgrading	3,065 (240)	3,065 (240)	100%
	Total		12,840 (1,007)	12,840 (1,007)	100%

- (1) Unit: KRW 100mm/\$1 mm, FX rate of 1,275.58 (USD/KRW) is applied for the allocation reporting of issuances in 2021 to match the FX rate applied in the same accounting period of proceed deployment
- (2) LG Chem has previously reported a buffer for proceeds allocation to eligible green projects, resulting a greater allocation amount than actual issuance amount in our 2023 Green Bond Report. For accounting purpose, we have adjusted the amount of proceeds allocated into actual numbers in order to match the amount of proceeds disbursed. As of Oct 2024, 100% of the proceeds from USD1bil Green Bond Issuances have been allocated and disbursed to eligible green projects as shown above
- (3) Along with the business development, LG Chem has allocated the Green Bond proceeds into a new category under "Pollution Prevention and Control". Being aware that "Pollution Prevention and Control Category" is not included in LG Chem's current Framework, we have strictly followed <a href="ICMA Green Bond Principles">ICMA Green Bond Principles</a> during the project selection and evaluation before proceeds were allocated and relevant impact metrics are disclosed in this report. LG Chem confirms all the outstanding Green Bonds are aligned with all the Core Components of Green Bond Principles and plans to incorporate this category in the next framework update to reflect ongoing business development

#### II. US\$300mm (3-year) Green Bond issued in July 2022

The total USD 300million has been fully allocated to the assets under Eligible Green Categories with below details, among which 100% has been deployed as of the end of reporting period. Total amount of USD 300million has been 100% allocated into new projects.

Allocation summary by green category:

Green Asset Category		# of Projects	Total Proceeds Allocated <sup>(1)</sup>	Amount Disbursed (1) Until Nov. '23	Percentage of Disbursed Proceeds
Circular Economy	Plastic Waste Chemical Recycling and Bio- based and Biodegradable Plastic Development	5	215 (17)	215 (17)	100%
Clean Transportation	Investments and Construction of EV Battery Material Manufacture	4	3,890 (302)	3,890 (302)	100%
Total		9	4,105 (319)	4,105 (319)	100%

Examples of projects financed by the green use of proceeds:

Category	Business Unit	Description	Total Proceeds Allocated <sup>(1)</sup>	Amount Disbursed <sup>(1)</sup> Until Nov. '23	Percentage of Disbursed Proceeds
Circular	Dotrochomical	Plastic waste chemical recycling	117 (9)	117 (9)	100%
Economy	nomy Petrochemical	Bio-based and biodegradable plastic development	98 (8)	98 (8)	100%
Clean	Advanced	Lithium battery recycling and manufacture for EV	3,380 (262)	3,380 (262)	100%
Transportation Materials	Construction of precursor plant for EV batteries	510 (40)	510 (40)	100%	
	Total		4,105 (319)	4,105 (319)	100%

(1) Unit: KRW 100mm/\$1 mm, FX rate of 1,289.00 (USD/KRW) is applied for the allocation reporting of issuance in 2022 to match the FX rate applied in the same accounting period of proceed deployment

# **Impact Reporting**

Until full allocation, LG Chem will provide annual impact reporting on relevant impact metrics for each category of Eligible Projects on a best effort basis. The impact data of investments where LG Chem holds reasonably minority stakes have been excluded from this report to avoid double counting.

As of the end of reporting period, details of the impact of selective use of proceeds for the reporting period are shown as below:

Eligible Green Category	Impact Indicators
Renewable Energy	100,000 Tons of POE Annually
Circular Economy	50,000 Tons of PBAT Annually
Clean Transportation (1)	1,200 Tons of Carbon Nanotube for EV Batteries Annually 10,000 Tons of Precursor for EV Batteries Annually 63,600 Tons of Cathode materials for EV Batteries Annually
Pollution Prevention and Control	37,000 Tons of Carbon Emissions Reduced (2)

- (1) Current focus of LG Chem under Clean Transportation category is on upstream materials for EV battery manufacturing. As such, the impact reporting metrics are denominated in unit of annual production of relevant products instead
- (2) The carbon emissions reduction is expected to be realized in 2026. The reduction of 37,000 tons emissions equals to a 50% decrease compared to the business-as-usual emissions in 2026 using 2019 emissions as a baseline

# **Disclosure and Reporting**

The reporting will include allocation reporting and impact reporting and will be publicly available on LG Chem's official website. LG Chem, Ltd is responsible for the completeness, accuracy, and validity of the Green Bond Report.