

# **Green Bond Annual Report**

September 2022

## **General Information**

In order 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 period under the Framework.

Issuer	LG Chem, Ltd		
Issuer Ratings	A3 Stable by Moody's / BBB+ Positive by S&P		
Format	144A / RegS		
Structure	Senior Unsecured		
Tenor	5-Year	10-Year	
Issue Size	US\$500mm	US\$500mm	
Maturity Date	July 7, 2026	July 7, 2031	
Coupon	1.375%	2.375%	
Use of Proceeds	Finance new eligible green projects (as further described in LG Chem Ltd.'s green financing 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 issuance 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

Annually, the GFWG will review the allocation of the Green Bond/Loan proceeds to the Eligible projects 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

As of the end of reporting period, USD 1,994 million has been fully allocated to the assets under Eligible Green Categories with below details. Total amount(USD 220 Million) has been directly invested into new projects. In essence, total amount will be fully utilized to finance new eligible green projects.

Green Asset Category		# of Projects	Project Value* (KRW 100mm/\$1 mm)	Amount of Proceeds Allocated* (KRW 100mm/\$1 mm)	Proceeds of the Green Bonds as the percentage of project value (%)
Renewable Energy	Polyolefin Elastomer (POE)	1	2,800 (217)	2,800 (217)	11%
Circular Economy	bio-diesel/naphtha using bio-feedstock OR bio-based plastic from bio-feedstock,	2	5,895 (456)	5,895 (456)	23%
Clean Transportation	CNT (Carbon Nanotube)	1	640 (50)	640 (50)	2%
Clean Transportation	Separator, Separator Coating	5	16,448 (1,272)	16,448 (1,272)	64%
То	tal	9	25,783 (1,994)	25,783 (1,994)	100%

\* Applied FX rate as of June 30, 2022: 1.292.90

Examples of projects financed by the green use of proceeds

Category	Business Unit	Project Description	Total Proceeds Allocated* (KRW 100mm/\$1 mm)	Amount Disbursed Until 1H22** (KRW 100mm/\$1 mm)	Percentage of Disbursed Proceeds
Renewable Energy	Petrochemical	100K-ton capacity addition at Daesan POE Plant	2,800 (217)	275 (21)	1%
Circular Economy	Petrochemical	Chemical recycling facility for waste plastics	1,520 (118)	-	-
		Establishment of biodiesel (HVO) and bio-naphtha plants	4,375 (338)	-	-
Clean Transportation	Petrochemical	1.2K-ton capacity addition at Yeosu CNT Plant	640 (50)	139 (11)	1%
	Advanced Materials	Capacity addition at Cheongju Cathode Material Plant No. 4	2,233 (173)	2,028 (157)	8%
		J/V for Onsan Precursor Plant	510 (39)	-	-
		J/V for Indonesia G-package	11,930 (923)	-	-
		Acquisition of Shares in Chinese copper foil company	401 (31)	401 (31)	2%
		Equity investment in precursor capacity expansion (No. 2 & No. 3) project in Quzhou	1,374 (106)	-	-
	Total		25,783 (1,994)	2,844 (220)	11%

\* Applied FX rate as of June 30, 2022: 1.292.90

\*\*Disbursements to be consecutively made until 2025

#### **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. As of the end of reporting period, details of the impact of the use of proceeds are shown as below.

Eligible Green Category	Impact Indicators	
Renewable Energy	100,000 tons in the amount of POE	
Circular Economy	* A separate impact assessment will be conducted once the proceeds are fully allocated	

Clean Transportation: Case Study

- Vehicle emissions can be divided into two general categories: air pollutants and greenhouse gases. Both categories of emissions can be evaluated on a direct basis and a well-to-wheel basis. Well-to-wheel emissions include all emissions related to fuel production, processing, distribution and use
  - Gasoline: Emissions are produced while extracting petroleum from the earth, refining it, distributing the fuel to stations, and burning it in vehicles
  - Electricity: Most electric power plants produce emissions, and there are additional emissions
    associated with the extraction, processing, and distribution of the primary energy sources they use for
    electricity production

- Conventional gasoline vehicles with an internal combustion engine ("ICE"): Produce direct emissions through the tailpipe, as well as through evaporation from the vehicle's fuel system and during the fueling process
- Plug-in Hybrids: Zero tailpipe emissions when in all-electric mode, but can produce evaporative emissions. When using the ICE, Plug-in Hybrids also produce tailpipe emissions, but typically lower than those of gasoline vehicles
- Electric Vehicles: Zero direct emissions

#### Annual CO<sub>2</sub> Emissions per Vehicle (Well-to-Wheel Emissions)

(Pound of  $CO_2$ )



Source: U.S. Department of Energy – Alternative Fuels Data Center.

#### **Disclosure and Reporting**

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