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Second Party Opinion

LyondellBasell Industries N.V.'s Green Financing Framework

May 8, 2023

LyondellBasell Industries N.V. (LyondellBasell) is a global manufacturer of chemicals, plastics, and gasoline blending components and a developer and licensor of polymer production technologies. The company is a producer of polyethylene (PE), polypropylene (PP), propylene oxide (PO), and PP compounds globally and is a leading licensor of polyolefin technologies. Its products can be found in many different industries, including construction, automotive, packaging, and electronics. LyondellBasell trades on the NYSE and is incorporated in the Netherlands. The company has executive offices in London, Rotterdam, Houston, and Hong Kong. It operates 33 manufacturing facilities globally, spanning the U.S., Europe, and China.

In our view, LyondellBasell's Green Financing Framework, published on May 8, 2023, is aligned with:

- ✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✓ Green Loan Principles, LMA/LSTA/APLMA, 2023

Issuer's Sustainability Objectives

LyondellBasell's approach to sustainability is to support progress on three identified global challenges--ending plastic waste, taking climate action, and supporting a thriving society -- across its business operations and value chain.

The company's efforts to produce and market over two million metric tons of recycled and renewable-based polymers by 2030, an amount equivalent to 20% of its global sales of PE and PP in 2022, addresses its first goal of ending plastic waste. LyondellBasell's climate actions include its concerted efforts to achieve net zero emissions by mid-century (with ambitious Scope 1, 2, and 3 emissions targets either verified by the Science Based Targets Initiative (SBTi) or currently undergoing the validation process). Additionally, by 2030, the company aims to procure at least half its total electricity from renewable sources (benchmarked to 2020 levels). Under its vision for a thriving society, LyondellBasell aims to rapidly increase its sustainability assessments of its key suppliers to 70% by 2025.

LyondellBasell developed its Green Financing Framework to further align its funding strategy with its sustainability commitments, under which it will finance or refinance new or existing projects that provide environmental benefits related to its strategy. The framework details which project types are eligible to receive financing or refinancing with the various types of instruments the company elects to use, including bonds, notes, loans, and commercial paper.

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Second Party Opinion Summary


Use of proceeds

Alignment  LyondellBasell's Green Financing Framework is aligned with this component of the GBP and GLP.

Score Not aligned Aligned **Strong** Advanced

LyondellBasell will allocate the net proceeds from the financing instruments issued under the framework to finance or refinance expenditures related to the development, acquisition, operation, maintenance, or investment in eligible projects in categories spanning circular economy adapted products, production technologies and processes, renewable energy, pollution prevention and control, and energy efficiency. The framework outlines the relevant green eligibility criteria and benefits associated with the eligible projects.


Process for project evaluation and selection

Alignment  LyondellBasell's Green Financing Framework is aligned with this component of the GBP and GLP.

Score Not aligned **Aligned** Strong Advanced

LyondellBasell has established a green financing committee comprising cross-functional internal teams that will identify and select projects aligned with the framework's stated eligibility criteria. The committee will assess and manage material environmental and social risks associated with the projects through the company's due diligence process outlined in its sustainability and corporate governance policies.

Management of proceeds

Alignment  LyondellBasell's Green Financing Framework is aligned with this component of the GBP and GLP.

LyondellBasell's green financing committee will continually track and manage its allocation of the proceeds from all outstanding instruments through an internal register. The company will manage any temporarily unallocated proceeds in accordance with its normal liquidity practices, including to fund the repayment of its debt.

Reporting

Alignment  LyondellBasell's Green Financing Framework is aligned with this component of the GBP and GLP.


Score Not aligned **Aligned** Strong Advanced

LyondellBasell commits to publicly disclose its allocation of the instrument proceeds at the eligible category level on an annual basis until full allocation. The company's impact reports will incorporate qualitative and quantitative calculation methodologies in line with recommendations in the Handbook for Harmonized Framework for Impact Reporting. LyondellBasell will make its annual reports publicly available on its website.

Framework Assessment

Use of proceeds

The Principles make optional recommendations for stronger structuring practices, which inform our alignment opinion as aligned, strong, or advanced. For use of proceeds, we consider the commitments and clarity on how the proceeds are used.

 LyondellBasell's Green Financing Framework is aligned with this component of the GBP and GLP.

Commitments score

Not aligned

Aligned

Strong

Advanced

We consider LyondellBasell's overall use of proceeds commitments to be strong.

LyondellBasell commits to allocate an amount equivalent to the net proceeds of the instruments issued under the framework to exclusively finance or refinance eligible green projects. In our view, the projects fall within the GBP- and GLP-aligned eligible categories, including circular economy adapted products, production technologies and processes, renewable energy, pollution prevention and control, and energy efficiency. The framework describes how the projects in each eligible category are expected to support LyondellBasell's implementation of its sustainability strategy and illustrates their alignment with its overarching environmental objectives, including climate change mitigation, pollution prevention and control, and the transition to a circular economy.

The company's proposed investments in circular economy adapted products, technologies, and processes support its goal of producing and marketing at least two million metric tons of recycled and renewable-based polymers annually by 2030. This figure represents roughly one-fifth of the company's global sales of PE and PP in 2022. We view this target, and the requisite investments in advanced recycling technologies and the transition to renewable feedstocks, as ambitious over the short- to medium-term and central to the company's goal of achieving a 30% reduction in its absolute Scope 3 emissions by 2030 (compared with 2020 levels).

The proposed investments in the framework's pollution prevention and control and energy efficiency categories support LyondellBasell's transition to lower carbon-intensive energy generation from fossil fuels, the electrification of its operations through renewable power generation, and its investment in carbon capture and storage technology to reuse emissions from its plants, among other sector-decarbonizing infrastructure. Additionally, through its renewable energy-related expenditure, we expect the company to procure on- and off-site renewable energy generation through long-term project-specific power purchase agreements (PPAs) or virtual PPAs based in North America and Europe, which are its prioritized avenue for decarbonizing its electricity supply, including the related renewable energy certificates for wind and solar projects. In our view, the purchase of energy certificates may not result in the development of new renewable energy resources. Overall, we expect these investments to be a significant factor in the company's achievement of its relevant 2030 targets, which include a 42% reduction in its absolute Scope 1 and 2 emissions and its procurement of half its total electricity from renewable sources (both relative to 2020 baselines).

The company will also use the proceeds from its green financing instruments to fund its acquisitions of entities that are explicitly tied to the eligible project criteria (entities that derive at least 90% of their revenue from activities involved in any of the eligible categories). It will also allocate funds for equity investments and loans that meet its eligible green project criteria, such as supporting joint ventures to build plastic waste sorting and chemical recycling facilities. LyondellBasell commits to use a pro rata accounting approach for the latter, financing the equity investments in line with the proportionate level of their share of the operations, which will be tied to the framework's eligible project criteria. The company commits to review the investments over the duration of the allocation period to ensure they maintain alignment with the eligibility criteria without duplication. It is LyondellBasell's responsibility to provide transparency on such investments.

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Finally, LyondellBasell specifies a 24-month lookback period for refinanced projects, which we view as in line with best market practices. It also commits to provide an estimate of the share of financing and refinancing for all existing and new projects in its published allocation reports.

Process for project evaluation and selection

The Principles make optional recommendations for stronger structuring practices, which inform our alignment opinion as aligned, strong, or advanced. For our process for project selection and evaluation, we consider the commitments and clarity on the process used to evaluate and select eligible projects to fund with the proceeds of the sustainable finance instrument.

✓ LyondellBasell's Green Financing Framework is aligned with this component of the GBP and GLP.

Commitments score

Not aligned

Aligned

Strong

Advanced

We consider LyondellBasell's overall process for project evaluation and selection commitments to be aligned.

The framework outlines LyondellBasell's process to identify and approve eligible green projects, which will be led by an internal green financing committee comprising members of its sustainability, decarbonization, circular and low-carbon solutions, legal, treasury, accounting, and capital planning teams. The green financing committee will govern the evaluation and selection of the eligible green projects based on the criteria included in the framework, with the company's board and executive committee (led by its CEO) acting as the ultimate line of oversight.

All eligible projects must comply with LyondellBasell's overarching due diligence process noted throughout its sustainability policies, corporate governance, and product safety and stewardship policies, which it makes available for all stakeholders on its website. Collectively, these policies require continual assessments to identify potential social and environmental risks associated with the projects, as well as follow-on actions to minimize these risks. The committee will also take measures to ensure that the eligible projects comply with all federal, state, and local laws and regulations regarding occupational safety standards, including the proper manufacturing, distribution, and disposal of chemicals.

While the framework does not identify market-based taxonomies, benchmarks, or certifications by which it will evaluate the eligible project categories, which constrains our view, we acknowledge LyondellBasell's intention to align all of its project categories and their overarching climate mitigation goals with the latest SBTi guidance, where feasible. The company also serves as an expert advisory group member for the Science Based Target Network (SBTN), through which it collaborates with other subject-matter experts throughout, and tangential to, the chemicals industry to develop sector-specific guidance and SBT-setting tools for the sector's value chain emission reduction pathway, which we expect will be released in 2023.

Management of proceeds

The Principles require disclosure of the issuer's management of proceeds from sustainable finance over the life of the funding. The alignment opinion focuses on how clear in the documentation is the issuer's commitment to ensure that the funds raised will remain dedicated to eligible sustainability projects throughout the life of the sustainable finance funding.

✓ LyondellBasell's Green Financing Framework is aligned with this component of the GBP and GLP.


LyondellBasell commits to track the allocation of the net proceeds from the relevant instruments to the framework's eligible projects through its internal green financing register. The company will manage any outstanding net proceeds from the green financings issued under the framework through this internal register and will match them to eligible activities on an ongoing basis

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through its green financing committee. If LyondellBasell finds that a project no longer meets the framework's eligibility criteria, the green financing committee will make all reasonable efforts to reallocate the proceeds to other appropriate substitutes. The company will manage any temporarily unallocated funds from the outstanding green financing instruments in accordance with its normal liquidity management practices, including to fund the repayment of its debt. While acceptable, we do not view using temporarily unallocated proceeds for debt repayment as a market best practice.

Reporting

The Principles make optional recommendations for stronger disclosure practices, which inform our disclosure opinion as aligned, strong, or advanced. We consider plans for updates on the sustainability performance of the issuer for general purpose funding, or the sustainability performance of the financed projects over the lifetime of any dedicated funding, including any commitments to post-issuance reporting.

 LyondellBasell's Green Financing Framework is aligned with this component of the GBP and GLP.

Disclosure score

Not aligned

Aligned

Strong

Advanced

We consider LyondellBasell's overall reporting practices to be aligned.

LyondellBasell commits to disclose the allocation and impact of its investments at the eligible category level through annual allocation and impact reports it will make available on its website until the full allocation of the proceeds. In its allocation reports, the company will report the net proceeds from the outstanding green financing instruments, the amount of net proceeds allocated to the eligible project categories, and the remaining balance of any unallocated funds. It will also provide an estimate of the share of financing and refinancing for all existing or new eligible green projects post issuance, and each allocation report will be reviewed by a third-party auditor.

LyondellBasell will also disclose the expected impacts of its eligible projects through annual reports that it either showcases in a separate section of its annual sustainability disclosures or releases as a stand-alone report. In this report, the company will outline the estimated quantitative and qualitative environmental impacts and benefits of the eligible projects using metrics and underlying methodologies suggested by the 2022 ICMA Handbook for Harmonized Impact Reporting. Therefore, we expect LyondellBasell will report on the impacts of its green eligible projects on a project-by-project or portfolio basis.




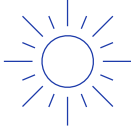



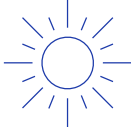

Examples of the performance metrics LyondellBasell intends to report include metric tons of plastic waste mechanically recycled; metric tons of advanced recycled and renewable-based feedstocks produced; metric tons of Circulen brand polymers sold; greenhouse gas emissions avoided/reduced (in metric tons of carbon dioxide equivalent (CO₂e), and renewable electricity consumed or generated and energy savings of electricity (in megawatt hours), among others, which we view as supporting a high level of transparency for stakeholders. However, the framework does not explicitly commit to communicate both the expected environmental impacts of projects in addition to their resulting lifetime impacts, nor does it indicate the company's reliance on an independent third party to verify its impact reporting, both of which we believe are stronger market practices.

Mapping To The U.N.'s Sustainable Development Goals

The Sustainable Development Goals (SDGs), which the United Nations (U.N.) set up in 2015, form an agenda for achieving sustainable development by 2030.

We use the International Capital Market Association's (ICMA's) SDG mapping for this part of the report. We acknowledge that ICMA's mapping does not provide an exhaustive list of SDGs and that ICMA recommends each project category be reviewed individually to map it to the relevant SDGs.

LyondellBasell's Green Financing Framework intends to contribute to the following SDGs:

Use of proceeds	SDGs		
Circular Economy Adapted Products, Production Technologies and Processes			
	8. Decent work and economic growth*	12. Responsible consumption and production*	13. Climate action
Renewable Energy			
	7. Affordable and clean energy*	9. Industry, innovation and infrastructure*	13. Climate action
Pollution Prevention and Control			
	13. Climate action		
Energy Efficiency			
	7. Affordable and clean energy*	13. Climate action	

*The eligible project categories link to these SDGs in the ICMA mapping

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