Second-Party Opinion

CEMEX Green Financing Framework

SUSTAINALYTICS
a Morningstar company
SECOND-PARTY OPINION

Evaluation Summary

Evaluation Date	February 28, 2023[1]
Issuer Location	Monterrey, Mexico

Use of Proceeds Instruments

Green Bond Principles 2021 and Green Loan Principles 2021

Sustainalytics is of the opinion that the CEMEX Green Financing Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021 and Green Loan Principles 2021. The project categories for the use of proceeds – Pollution Prevention and Control, Renewable Energy, Energy Efficiency, Eco-efficient and Circular Economy-adapted Products, Production Technologies and Processes, Clean Transportation and Sustainable Water and Wastewater Management – are aligned with those recognized by the Green Bond Principles 2021 and Green Loan Principles 2021. Sustainalytics considers that investments in the project categories will lead to positive environmental impacts and the activities under the use of proceeds project categories to be credible from a transition perspective.

The Use of Proceeds contribute to the following SDGs:

Climate Transition Finance Handbook

Sustainalytics has evaluated CEMEX's transition governance, strategy, decarbonization targets and intentions to report on its transition progress and finds CEMEX to be aligned with the recommendations of the Climate Transition Finance Handbook 2020. As a cement producer, CEMEX is involved in an energy-intensive sector and has established CO_2 emissions intensity reduction targets for 2030 and 2050 that are validated by the Science Based Targets initiative to be in line with the 1.5°C scenario. CEMEX has outlined an implementation plan and capital investment plans for its Future in Action programme designed to reduce its carbon emissions.

[1] This document is an update to the Second-Party Opinion originally provided in June 2022.

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Scope of Work and Limitations

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent[2] opinion on the alignment of the CEMEX Green Financing Framework with current market standards. As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework's alignment with the Green Bond Principles 2021[3] and Green Loan Principles 2021[4] (the "Principles");
- The credibility and anticipated positive impacts of the use of proceeds;
- The issuer's sustainability strategy, performance and sustainability risk management; and
- The alignment with the recommendations of the Climate Transition Finance (CTF) Handbook 2020.[5]

As part of this engagement, Sustainalytics held conversations with various members of CEMEX's management team to understand the sustainability impact of CEMEX's business processes and the core components of the Framework. CEMEX representatives have confirmed that:

(1) They understand it is the sole responsibility of CEMEX to ensure that the information provided is complete, accurate or up to date;

(2) They have provided Sustainalytics with all relevant information; and

(3) Any provided material information has been duly disclosed in a timely manner.

Sustainalytics also reviewed relevant public documents and non-public information. This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework. Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and CEMEX.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Upon twenty-four (24) months following the evaluation date set stated herein, CEMEX is encouraged to update the associated sections within the Framework, if necessary, and seek an update to the Second-Party Opinion to ensure ongoing alignment of the Framework with market standards and expectations.

For use of proceeds instruments, Sustainalytics relied on its internal taxonomy, version 1.12, which is informed by market practice and Sustainalytics' expertise as an ESG research provider. The Second-Party Opinion:

- Addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner.
- Opines on the potential allocation of proceeds but does not guarantee the realized allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that CEMEX has made available to Sustainalytics for the purpose of this Second-Party Opinion.

[2] When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.
[3] The bond-related principles, guidelines and handbooks are administered by the International Capital Market Association and are available at: https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/
[4] The loan-related principles and guidelines are administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications and Trading Association and are available at: https://www.lsta.org/content/?_industry_sector=guidelines-memos-primary-market
[5] The Climate Transition Finance Handbook is administered by the International Capital Market Association and is available at: https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Climate-Transition-Finance-Handbook-December-2020-091220.pdf

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Introduction

CEMEX, S.A.B. de C.V. ("CEMEX" or the "Company") is a construction materials company headquartered in Monterrey, Mexico. The Company produces, distributes and markets cement, ready-mix concrete, aggregates, related building materials and urbanization solutions. It maintains business relationships in more than 50 countries in the Americas, Europe, Africa, the Middle East and Asia.

CEMEX has developed the CEMEX Green Financing Framework dated February 2023 (the "Framework"), under which it intends to issue green public bonds, private placements,[6] working capital loans and other debt-like instruments[7] (the "Green Financing Instruments"). CEMEX engaged Sustainalytics to review the Framework and provide a Second-Party Opinion on the Framework's alignment with the Green Bond Principles 2021 and Green Loan Principles 2021 (the "Principles") and the recommendations of the Climate Transition Finance (CTF) Handbook 2020. The Framework has been published in a separate document.[8]

The net proceeds from the Green Financing Instruments will finance or refinance, in whole or in part, existing or future projects. The Framework defines eligibility criteria in six areas:

1. Pollution Prevention and Control
2. Renewable Energy
3. Energy Efficiency
4. Eco-efficient and Circular Economy-adapted Products, Production Technologies and Processes
5. Clean Transportation
6. Sustainable Water and Wastewater Management

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Alignment of the Framework with Relevant Market Standards

Alignment with Use of Proceeds Principles

Sustainalytics is of the opinion that the CEMEX Green Financing Framework is credible, impactful and aligns with the Green Bond Principles 2021 and Green Loan Principles 2021. For detailed information, please refer to Appendix 1: Green Bond Programme External Review Form. Sustainalytics highlights the following elements of the Framework:

Use of Proceeds

Overall Assessment of Use of Proceeds

Use of Proceeds	Activity	Description and Sustainalytics' Assessment
Pollution Prevention and Control	Monitoring and control of emissions	- Financing components related to reducing air emissions, including by installing emission control and monitoring systems, waste heat recovery and waste-to-energy conversion. - Sustainalytics considers the monitoring and mitigation of pollutants, such as NOx, SOx and dust emissions, to be a baseline expectation and encourages CEMEX to report on how its expenditures in this area will go beyond business-as-usual activities. - Regarding waste heat recovery, Sustainalytics notes that such expenditures are expected to increase the efficiency of the thermal processes and will be limited to facilities that are expected to result in a carbon intensity below 0.547 tonneCO_2e/tonne (0.547 tCO_2e/t) of

[6] CEMEX has confirmed to Sustainalytics that private placements are limited to established debt instruments.
[7] Sustainalytics has reviewed just those debt instruments that have been specified in the Framework.
[8] The CEMEX Green Financing Framework is available on CEMEX's website at: https://www.cemex.com/investors/debt-information/sustainable-finance#navigate

		cementitious product.[9] In this context, Sustainalytics considers this to be a credible transition expenditure. - CEMEX has confirmed to Sustainalytics that waste-to-energy projects will be limited to those with municipal solid waste (MSW) as feedstock. Sustainalytics recognizes that energy from waste could take out of circulation potentially recyclable materials and undermine two of the main objectives of a zero-waste circular economy (waste prevention and recycling). Additionally, for such projects to have low emission intensities, the composition of residual waste, particularly fossil carbon content, is a crucial consideration. However, Sustainalytics also notes that, due to constraints on recycling in many parts of the world, energy from waste can offer a better residual waste management option than landfills in many cases. Nonetheless, Sustainalytics notes that CEMEX promotes the removal of recyclables, especially plastics, and monitors the thermal efficiency of the financed facilities.
	Switching to alternative fuels	- Investments aimed at increasing the share of alternative fuels in CEMEX's fuel mix. Intended examples include the construction of facilities for the dosing of alternative fuels such as biomass fuels (crop residues, nut hulls, wood waste), refuse-derived fuel (shredded or pelletized MSW), tire-derived fuel (tire waste, processed tire chips) and alternative liquids (waste oils) to the kilns and multichannel burners. Sustainalytics notes that refuse-derived fuel (RDF) and tire-derived fuel offer a relatively low emission reduction potential compared to hydrogen and biofuels. CEMEX has stated that it intends to prioritize alternative fuels with high-biomass content. - Sustainalytics notes that investments under this category will be limited to facilities that are expected to result in a carbon intensity below 0.547 tCO_2e/t of cementitious product.[10] - Sustainalytics acknowledges that the current fuel mix of cement facilities primarily comprises fossil fuels, and therefore the financing of activities aimed to increase the use of alternative fuels is expected to lead to emission reductions and is considered a credible transition activity.
	Hydrogen Production	- Investment in hydrogen production through electrolysis powered by a mix of renewable and grid electricity for use in CEMEX's kilns, as per all of the following eligibility thresholds: i) direct CO_2 emissions from manufacturing of hydrogen are 0.95 tCO_2e/t of hydrogen or below; ii) electricity use for hydrogen produced by electrolysis is at or below 50 MWh/tonne of hydrogen; iii) the average carbon intensity of the electricity produced that is used for hydrogen manufacturing is at or below 100 gCO_2e/kWh. - The expenditures are aimed at optimizing the combustion process to enable the Company to further increase the use of alternative fuels. - Sustainalytics views positively the use of the 100 gCO_2e/kWh threshold for the sourcing of electricity for hydrogen production through electrolysis. - Sustainalytics notes that investments under this category will be limited to facilities that are expected to result in a carbon intensity below 0.547 tCO_2e/t of cementitious product.[11]
	Waste facilities	- Investments aimed at reducing and diverting waste from landfills, including by operating and expanding CEMEX's recycling and waste management programmes. CEMEX has clarified to Sustainalytics that investments under this category may include the acquisition of waste management companies dedicated to the separation, recovery and treatment of mixed residual waste and the acquisition of construction and demolition waste recycling yards. - This is aligned with market practice.
	Reducing clinker-to-cement ratio	- Investments in the substitution of clinker with other cementitious materials, including waste-derived additions, such as slag and fly ash, pozzolans and calcined clays. Intended examples include the

[9] 0.547 tCO_2e/t of cementitious product is the Transition Pathway Initiatives' 2029 below 2°C scenario benchmark value for the cement sector.
[10] Ibid.
[11] Ibid.

		installation of hoppers and silos to: i) dose cementitious materials, or ii) dose admixtures to increase the product strengths. - Sustainalytics notes that investments under this category will be limited to facilities that are expected to result in a carbon intensity below 0.547 tCO_2e/t of cementitious product.[12] - Sustainalytics recognizes that lowering the clinker-to-cement ratio is one of the most important decarbonization levers for the cement sector as CO_2 emissions are directly proportionate to the amount of clinker used in cement production. Therefore, Sustainalytics considers the activities under this category to be credible transition activities that are expected to support the decarbonization of CEMEX's assets.
	Improving thermal efficiency	- Investments to improve the thermal efficiency of kilns through: i) hopper and silo installations for the dosage of new materials to raw mill, and ii) kiln technology updates. - Sustainalytics notes that investments under this category will be limited to facilities that are expected to result in a carbon intensity below 0.547 tCO_2e/t of cementitious product.[13] - As kilns are responsible for a significant portion of total energy consumption, efficiency measures for the improvement of the thermal process under this category are considered credible transition activities.
	Reusing cement kiln dust	- Investments aimed at increasing the recycling rate and reuse of cement kiln dust and bypass dust in CEMEX's production cycle to avoid disposal in landfills. CEMEX has communicated to Sustainalytics that intended examples may include the acquisition of equipment to support the recycling of cement kiln dust and bypass product. - Sustainalytics notes that investments under this category will be limited to facilities that are expected to result in a carbon intensity below 0.547 tCO_2e/t of cementitious product. - Sustainalytics further notes that activities under this category are expected to decrease raw material usage and considers them to be credible transition activities.
	Carbon capture, use and storage	- Investments, acquisitions or financing aimed at reducing air emissions and controlling GHG emissions through i) carbon capture utilization and storage (CCUS), CO_2 transportation, e-fuels, hydrogen-based synthetic fuels, mineralization, and addition of biochar to soils; and ii) R&D on direct air capture, and bioenergy with carbon capture and storage (BECCS) solutions. - For CCUS and other carbon capture projects, CEMEX has communicated to Sustainalytics that it will prioritize the permanent storage of captured CO_2 and might utilize the CO_2 for activities noted above. The Company has further communicated that it will not use the CO_2 for enhanced oil recovery (EOR). - For the acquisition of companies, the Framework limits investments in pure play companies, considering just the net asset value of the credible assets of the acquired companies under the Framework.[14] - CEMEX has confirmed to Sustainalytics that the CO_2 transportation projects will be limited to financing of pipelines for storing CO_2 underground and that it has appropriate leak detection systems will be in place. - CEMEX has communicated to Sustainalytics that the production of e-fuel based on CO_2 captured from CEMEX's own operations and renewable energy that aligns with the criteria defined in the Framework. CEMEX has further communicated that the production of synthetic will use hydrogen produced by electrolysis powered by renewables (green hydrogen). - For mineralization, CEMEX has confirmed to Sustainalytics that the financing will be limited to projects that store the CO_2 captured from

[12] Ibid.
[13] Ibid.
[14] Pure play organizations are defined by the Framework as companies that derive 90% or more of their revenue from activities aligned with the criteria outlined in the Framework.

		its own facilities into CEMEX's operational waste materials, to be aggregated in a ready-mix concrete for end use. - Sustainalytics notes that investments under this category will be limited to facilities that are expected to result in a carbon intensity below 0.547 tCO_2e/t of cementitious product.[15]
Renewable Energy	Solar	- Investment in solar photovoltaic and concentrated solar power plants (CSP). For CSP plants, at least 85% of electricity generated from the facility will be derived from solar energy resources.
	Wind	- Investment in onshore and offshore wind energy generation projects. - Sustainalytics notes that the deployment of renewable energy addresses primarily scope 2 emissions, and therefore, has a relatively low mitigation potential for cement production as it does not address the emissions inherent to the production process.
	Hydropower	- Investment in hydropower projects with a capacity below 25 MW. - The Framework specifies that projects will have a power density above 5 W/m^2 or life cycle emissions below 100 gCO_2e/kWh if operational prior to 2020. Projects operational after 2020 will have a power density above 10 W/m^2 or life cycle emissions below 50 gCO_2e/kWh. In addition, CEMEX has confirmed to Sustainalytics that all hydropower projects will be required to undertake assessments of environmental and social risks with no controversies identified.
	Renewable Energy Procurement	- Investment in the procurement of renewable energy[16] through long-term power purchase agreements (PPAs) limited to those with a minimum tenor of five years. Sustainalytics considers the long-term nature of the PPAs as providing greater assurance of positive impacts. - CEMEX has communicated to Sustainalytics that it utilizes solar energy from inhouse CSP as a replacement for fossil fuel at one of its clinker facilities, a process that has the potential to reduce scope 1 emissions.[17] Sustainalytics nonetheless notes that the deployment of (inhouse) generated or procured renewable energy typically addresses primarily scope 2 emissions, and therefore, has a relatively low mitigation potential for cement production as it does not address the emissions inherent to the production process. - Sustainalytics notes that expenditures in the entire Renewable Energy category involve assets that support multiple production units, and that they will be made in the context of a broader set of initiatives to reduce emissions from the Company's cement production activities in line with the well-below 2°C targets. Nonetheless, in Sustainalytics' opinion, expenditures that support any given production unit, whether directly or indirectly, should be considered suitable for transition finance only if there is a transition plan in place that includes that production unit and addresses its most carbon-intensive aspects. Sustainalytics encourages CEMEX to ensure that its transition plan addresses all production units that will be supported by expenditures in this category.
Energy Efficiency	Energy Efficiency	- Financing of technologies and operational improvements that result in an energy efficiency improvement of at least 30% compared to the baseline. Intended technologies include the installation of energy management systems; control systems; energy-efficient lighting and heating, ventilation and air conditioning (HVAC); electric-powered machinery and equipment; high-efficiency material separators; variable speed drives; vertical roller mills; energy storage systems; and smart grids.[18]

[15] 0.547 tCO_2e/t of cementitious product is the Transition Pathway Initiatives' 2029 below 2°C scenario benchmark value for the cement sector.
[16] The Framework limits financing to those PPAs that are based on wind, solar, and/ or hydroelectric energy projects. A hydropower facility in operation before 2020 is considered eligible if it has either i) a power density greater than $5W/m^2$ or ii) GHG emissions intensity less than 100 gCO_2e/kWh. A hydropower facility commencing operation in 2020 or after is eligible if it has either i) a power density greater than $10W/m^2$ or ii) GHG emissions intensity less than 50 gCO_2e/kWh. Electricity from CSP projects is expected to be generated by at least 85% solar sources.
[17] CEMEX, "CEMEX and Synhelion achieve breakthrough in cement production with solar energy", at: https://www.cemex.com/-/cemex-and-synhelion-achieve-breakthrough-in-cement-production-with-solar-energy
[18] Despite the variety of definitions and applications of smart grid technology, Sustainalytics views positively investments that are designed to improve grid efficiency and encourages CEMEX to select projects that are clearly anticipated to deliver tangible efficiency improvements.

		- Sustainalytics notes that fossil fuel-powered HVAC, refrigeration and other equipment powered by fossil fuels will be excluded from financing. - Sustainalytics views positively the inclusion of a defined energy-efficiency threshold for the installation of energy-efficient systems, equipment and technologies. - Sustainalytics notes that expenditures in this category related to industrial buildings will be limited to facilities that are expected to result in a carbon intensity below 0.547 tCO_2e/t of cementitious product.[19]
Eco-efficient and Circular Economy-adapted Products, Production Technologies and Processes	Sorting, recycling and processing of waste	- Financing the production of Vertua Concrete, Vertua Cement and other Vertua products with sustainable attributes,[20] such as improved thermal efficiency, water conservation by reducing use during construction and allowing filtering back to soil, materials reuse by incorporating by-products, recycled and reuse of materials in their composition, and efficiency in design and construction. - Financing or acquisition of (i) facilities that sort and recycle municipal and industrial waste, and demolition and excavation waste from construction and (ii) the procurement and production of RDF. - For the acquisition of companies, the Framework limits investments in pure play companies, considering just the net asset value of the credible assets of the acquired companies under the Framework.[21] - Sustainalytics notes that expenditures in this category related to industrial buildings will be limited to facilities that are expected to result in a carbon intensity be 0.547 tCO_2e/t of cementitious product.[22]
Clean Transportation	Land Transport and infrastructure	- Passenger and freight vehicles which are electric, use biofuels or are hybrid. In the case of hybrid, the threshold for passenger transport will be $50gCO_2$/pkm and $25gCO_2$/tkm for freight transport until 2025 and not eligible under the Framework thereafter. - Investment in electromobility solutions for mobile construction equipment, trucks and activities aimed at increasing the use of biofuel in CEMEX's fleet. - Development of infrastructure for zero direct emission transport, such as electric charging points. - This is in line with market practice.
Sustainable Water and Waste Management	Water optimization	- Investments to increase water efficiency and reduce freshwater use in CEMEX's cement, concrete and aggregate operations. - Investments in wastewater treatment and management, including the installation of technologies and systems to improve the quality of treated water and effluents. - Sustainalytics notes that expenditures in this category involve assets that support multiple production units, and that they will be made in the context of a broader set of initiatives for increasing sustainable water use. Nonetheless, in Sustainalytics' opinion, expenditures that support any given production unit, whether directly or indirectly, should be suitable for transition finance only if there is a transition plan in place that includes that production unit and addresses its most carbon-intensive aspects. Sustainalytics encourages CEMEX to ensure that its transition plan addresses all production units that will be supported by expenditures in this category.

Additional considerations and commentary on use of proceeds

- Sustainalytics recognizes that the cement sector is well suited for transition finance, as it is carbon-intensive, important for the economy and human needs and faces technological barriers to decarbonization.
- Sustainalytics notes that expenditures directly tied to cement production will be limited to facilities that are expected to result in a carbon intensity below 0.547 tCO_2e/t of cementitious product, which is the Transition Pathway Initiatives' 2029 below 2°C scenario benchmark value for the cement sector. By limiting the use of

[19] 0.547 tCO_2e/t of cementitious product is the Transition Pathway Initiatives' 2029 below 2°C scenario benchmark value for the cement sector.
[20] CEMEX, "Vertua", at: https://www.cemex.com/sustainability/future-in-action/sustainable-products-and-solutions
[21] Pureplay organizations are defined by the Framework as companies that derive 90% or more of their revenue from activities aligned with the criteria outlined in the Framework.
[22] 0.547 tCO_2e/t of cementitious product is the Transition Pathway Initiatives' 2029 below 2°C scenario benchmark value for the cement sector.

proceeds to these assets, the financing is expected to contribute to substantial climate change mitigation and is likely to avoid a lock-in of carbon-intensive assets. It is recognized that, while CEMEX restricts financing of activities tied to cement production to assets aligned with credible decarbonization pathways, eligible projects under the Renewable Energy and Sustainable Water and Wastewater Management categories are likely to also support CEMEX's overall decarbonization targets in line with the 1.5°C scenario of the SBTi. Nonetheless, in Sustainalytics' opinion, expenditures that support any given production unit, whether directly or indirectly, should be considered suitable for transition finance only if there is a transition plan in place that includes that production unit and addresses its most carbon-intensive aspects. Therefore, Sustainalytics encourages CEMEX to ensure that its transition plan addresses all production units that will be supported by expenditures under these categories.

Project Evaluation and Selection

- CEMEX has established a process under which the Corporate Operations and Technology, Sustainability and Planning departments will be collectively responsible for the evaluation and proposal of fund allocations to all the eligible green projects under the Framework. The proposed allocation of funds for the eligible green projects would then be reviewed and approved by the CEO. These departments will jointly review the approved projects against the eligibility criteria on an annual basis to ensure that the projects are aligned with the eligibility criteria.
- CEMEX's board-level Sustainability, Climate Action, Social Impact and Diversity Committee, assisted by other areas of CEMEX, will identify potential sustainability risks and opportunities and ensure that they are integrated in the Company's Sustainability Risk & Opportunity Agenda, a process that is applicable to all allocation decisions made under the Framework. Sustainalytics considers these environmental and social risk management systems to be adequate and aligned with market expectations. For additional detail, see Section 2.
- Based on the defined roles, responsibilities and the risk management system, Sustainalytics considers this process to be in line with market practice.

Management of Proceeds

- CEMEX's CAPEX Committee will be responsible for tracking the net proceeds of Green Financing Instruments and their allocation to eligible projects. Pending full allocation, unallocated net proceeds will be used for payment of outstanding debts, capital management activities or will be held in cash, cash equivalents or other liquid instruments. Sustainalytics considers this to be in line with market practice.
- CEMEX intends to fully allocate the proceeds within 72 months of the last annual reporting reference date of a Green Financing Instrument. Sustainalytics considers allocation within 36 months to be the market expectation, and notes that CEMEX may allocate until the Green Financing Instrument's maturity.[23] Sustainalytics notes that CEMEX has indicated that it intends to temporarily allocate proceeds to repurchasing debt and considers market expectation to exclude the refinancing of debt associated with carbon-intensive assets or activities. This is particularly noteworthy given that CEMEX is involved in carbon-intensive activities. Sustainalytics notes that all financing operations carried out by CEMEX are subject to the Company's overall SBTi-validated decarbonization commitment. While such temporary allocation is not prohibited under ICMA's Green Bond Principles, Sustainalytics considers this to be a deviation from market expectations.

[23] CEMEX has communicated that the allocation period has been extended in the updated Framework to accommodate the expected time period required for the development of some large-scale infrastructure projects.

Reporting

- CEMEX intends to report on the allocation and impact of the Green Financing Instruments on an annual basis in a stand-alone report (the Green Financing Instrument Report) available on its website, until full allocation of net proceeds has been achieved.
- Allocation reporting will start within 12 months of the first Green Financing Instrument issuance. It will include: i) the amount of net proceeds assigned to each eligible green project individually or by category, subject to confidentiality considerations; ii) the share of financing compared to refinancing; iii) impact metrics, where feasible; iv) brief project descriptions; and v) the balance of unallocated net proceeds.
- Additionally, CEMEX is committed to reporting on relevant impact metrics, such as the amount of annual GHG emissions reduced or avoided, annual energy savings (in MWh) and reduction in water consumption.
- Based on the commitment to allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

Alignment against the Climate Transition Finance Handbook 2020

Sustainalytics has assessed CEMEX's alignment with the recommendations of the Climate Transition Finance (CTF) Handbook and considers the Company's transition strategy to be adequate overall. Sustainalytics highlights the following key elements of the assessment:

Key Elements	ICMA Recommendation	Sustainalytics' Assessment	
Issuer's climate transition strategy and governance	- Transition strategy to address climate-related risks and contribute to alignment with the goals of the Paris Agreement - Relevant interim targets on the trajectory towards long-term goal - Governance of transition strategy	- CEMEX's climate change strategy is overseen by the Sustainability, Climate Action, Social Impact and Diversity Committee which was created in 2014 and is comprised of members of the Board of Directors.[24,25] The members of the committee are elected at CEMEX's general ordinary shareholders' meeting and are responsible for defining, endorsing, and evaluating the emissions reduction targets and sustainability priorities. CEMEX's Executive Vice President of Sustainability, Commercial, and Operations Development, are responsible for executing the sustainability strategy.[26] Additionally, the Vice President of Sustainability and the Corporate Sustainability Group are responsible for ensuring consistency in sustainability operations and progress.[27] - CEMEX has developed the Future in Action programme which outlines a roadmap for CO_2 reduction. This involves deploying technological innovations and operational decisions which will support its decarbonization objectives.[28] CEMEX expects to invest approximately USD 150 million annually to support its transition programme and meet its 2030 target.[29] - See detailed assessment of decarbonization pathway and implementation plan in Section 2.	Aligned
Business model environmental materiality	- Transition trajectory should be relevant to the environmentally-	- CEMEX's transition strategy directly addresses the environmental impact of the core part of its business.	Aligned

[24] CEMEX Green Financing Framework (2023)
[25] CEMEX, "CEMEX announces further corporate governance enhancements," (2023), at: https://www.cemex.com/-/cemex-announces-further-corporate-governance-enhancements
[26] CEMEX, "Governance, Joining forces for a more sustainable present and future", at: https://www.cemex.com/sustainability/sustainability-at-cemex/governance
[27] Ibid.
[28] CEMEX, "Integrated Report", (2021), at: https://www.cemex.com/documents/20143/57102208/IntegratedReport2021.pdf/ca7f90b7-d742-314c-de70-7de4bf8f5431?t=1648173083550?download=true
[29] CEMEX, "Growth Strategy", at: https://www.cemex.com/documents/20143/62655257/2022-cemex-day-growth-strategy.pdf/fcdd57a0-99c1-cb24-ecf9-68681ad3a424?t=1668581480061

	material parts of the issuer's business model		
Climate transition strategy to be 'science-based' including targets and pathways	- Transition strategy should reference science-based targets and transition pathways	- CEMEX has established medium-term (2030) emissions intensity targets aligned with the SBTI's 1.5°C pathway and aims to achieve net-zero by 2050 from a 2020 base year across its value chain.[30] - See detailed assessment of emissions targets in Section 2.	Aligned
Implementation transparency	- Disclosure of capex and opex plans - Climate-related outcomes and impacts those expenditures are intended to result in	- CEMEX intends to report on the progress of decarbonization and overall transition strategy, including disclosure of capex and opex, through its annual Integrated Report and sustainability website.[31] - In addition, until full allocation of net proceeds has been achieved, CEMEX intends to publish as a stand-alone Green Financing Instrument Report on its website to report on all climate-related expenditures financed under the Framework. The report will include to reflect: (i) the amount of proceeds assigned to each Eligible Green Project individually or by category, subject to confidentiality considerations, (ii) proportion of capex and opex (iii) impact metrics, where feasible. - The Company additionally adheres to the reporting guidelines of the following carbon disclosure platforms: (i) CDP (Climate Change Response submission), (ii) Transition Pathway Initiative (TPI), and (iii) Task Force on Climate-Related Financial Disclosures (TCFD). Details and additional information of the Company's annual CDP Climate Change Response submissions are accessible on CDP's website.	Aligned

[30] CEMEX, "CEMEX 2050 net-zero roadmap validated by SBTi", (2022), at: https://www.cemex.com/-/cemex-2050-net-zero-roadmap-validated-by-sbti

[31] Additionally, CEMEX reports details on its indebtedness in its annual report filed on form 20-F Report. All loans under CEMEX's main credit agreement entered into on October 29, 2021 bear interest at an interest rate subject to positive or negative adjustments in an aggregate amount up to 5 basis points based on certain sustainability-linked performance metrics from the prior annual period, for additional details, please see: CEMEX, "20-F Report 2021" (2021), at: https://www.cemex.com/documents/20143/57102208/2021-20F-EN.pdf/3acbadfb-7481-5690-b4e0-a5eaa9ea9432?t=1651268726792

Section 2: Assessment of CEMEX's Sustainability Strategy

Credibility of Climate Transition Strategy

Emission Reduction Targets

In 2021, CEMEX launched Future in Action, a programme that aims to make the Company net zero by 2050. In 2022, CEMEX made its medium-term goals more ambitious, updating its 2030 emissions reduction target from more than 40% to 47% per tonne of cementitious product (scope 1 and 2 emissions from cement operations) compared to 1990 levels. CEMEX's updated decarbonization targets for 2030 and 2050 are validated by the SBTi to be in line with the 1.5°C scenario.[32]

Decarbonization Pathway and Implementation Plan

CEMEX's Future in Action programme focuses on six pillars to achieve its net-zero target for 2050:[33]

1. Sustainable products and solutions
2. Decarbonizing operations
3. Circular economy
4. Water and biodiversity
5. Innovation and partnerships
6. Promoting a green economy

The initiatives incapsulated under these six pillars address the Company's targets in the medium and long term. To decarbonize its operations, CEMEX is currently focusing on increasing the proportion of its low-carbon Vertua cement and concrete products in its overall portfolio, expanding the ratio of clean electricity, and the consumption of alternative fuels with high biomass content and reducing the clinker factor in its facilities. In 2022, CEMEX launched Regenera, a dedicated business unit to increase CEMEX's capacity for incorporating waste products into its production and operations, thereby addressing its products' lifecycle emissions by reducing the need for virgin materials and fossil fuels. With these initiatives, CEMEX states that it is well positioned to meet its 2030 emission reduction target. To achieve net zero emissions by 2050, CEMEX aims to develop and scale new CO_2 reduction and mitigation technologies across its value chain. To this end, the Company has begun piloting industrial scale CCUS projects, experimenting with solar-powered clinker production and exploring alternative aggregates, binders and admixtures to incorporate into its products. CEMEX's long-term agenda also involves advocating for the adoption of policies that promote clean electricity, lower-carbon products, carbon pricing mechanisms and more thorough waste management directives among its various stakeholders. The Company is also actively involved in national, regional and global industry associations that promote the transition to a green economy, including the Global Cement and Concrete Association, Cembureau, Federación Interamericana del Cemento, the Portland Cement Association and Mexico's National Cement Chamber.[34]

Sustainalytics recognizes that CEMEX has prioritized the development of credible options for decarbonization and has reported on steps taken to begin implementing its policy commitments. Sustainalytics encourages CEMEX to continue to refine its plan in the face of ongoing technological innovation and to continue to report on the timelines to deploy the best-available technologies.

CEMEX's Environmental and Social Risk Management

Sustainalytics recognizes that the use of proceeds from the Framework will be directed towards eligible projects that are expected to have positive environmental impacts. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental outcomes. Some key environmental risks possibly associated with the eligible projects, include issues related to occupational health and safety; community relations; emissions, effluents and waste generated during operations; supply chain; water consumption; and land use and biodiversity.

Sustainalytics is of the opinion that CEMEX is able to manage or mitigate potential risks through the implementation of the following:

- Regarding occupational health and safety risks, CEMEX has developed a Health and Safety Management System to implement, document, maintain and improve safety measures across its operations.[35] The Company's commitment

[32] CEMEX, "Integrated Report", (2021), at: https://www.cemex.com/documents/20143/57102208/IntegratedReport2021.pdf/ca7f90b7-d742-314c-de70-7de4bf8f5431?t=1648173083550?download=true
[33] CEMEX Green Financing Framework (2023)
[34] Ibid.
[35] CEMEX, "Integrity in Action: Our code", (2018), at: https://www.cemex.com/documents/20143/160061/Code-of-ethics.pdf/78d61821-09fd-9622-e13d-465b6268f7bd?t=1557247414359

to ensuring health and safety across its operations is outlined in its code of ethics, which applies to all employees, suppliers and contractors. CEMEX also requires its suppliers to abide by its Code of Ethics and the Supplier's Code of Conduct.[36] The Company also has in place a Contractor Health and Safety Verification Program, which certifies CEMEX's contractors' compliance with health and safety standards, proper training and accreditations.[37]

- CEMEX uses Community Engagement Plans (CEPs) to ensure collaborative dialogue with the local communities around their cement plants. These CEPs are developed locally through a participatory process that aims to address community concerns, understand needs, share expert opinions, and provide opportunity for follow-ups.[38]
- CEMEX has implemented a GHG reduction programme and a robust environmental policy, as well as drafted a CO_2 reduction roadmap in line with scientific benchmarks.[39] Furthermore, the Company has a detailed programme to improve the environmental performance of its logistics and fleet management, with a target to have a zero-emission fleet.[40]
- The Company has achieved ISO 14001 certification for 82% of its cement sites, while 38% of its ready-mix sites and 48% of its aggregate sites are certified to the standard.[41] In terms of performance, its carbon emissions by sales are above the industry median,[42] and clean electricity represented approximately 30% of the total energy consumed in 2021.[43] CEMEX established an ambitious target to reduce the carbon intensity of its production by 47% by 2030.[44]
- To manage risks associated with waste, CEMEX leverages its business unit, Regenera, designed to expand its waste collection and reuse to three additional waste streams: municipal and industrial waste; construction, demolition, and excavation waste, and other waste and industry by-products.[45] In 2021, the Company was able to reuse, recycle, or recover 95% of its waste.
- CEMEX has local initiatives to conduct environmental assessments on its suppliers in each country. Upon the identification of potential negative environmental impacts, CEMEX expects the supplier to carry out a remediation plan.[46]
- To manage risks associated with water use and supply, CEMEX provides complete reporting on water indicators, in line with the GCCA Guidelines. The Company reported a total water withdrawal of 57.2 million m^3 in 2021, which is in line with the industry median and has remained roughly stable compared to the previous three-year average.[47] As of FY2021, 82% of the Company's sites were equipped with water recycling systems.[48] Using World Resources Institute Aqueduct tools, CEMEX conducted a water stress study in 2019 to identify the sites located in water-stressed zones and guide its water action plan. The Company has implemented water action plans for 100% of the sites located in extremely high water-stressed zones and completed the first pilot for a site located in high water-stressed zones in 2021, in line with its target to have water action plans for all high-risk sites by 2030.
- CEMEX has implemented a biodiversity policy to enhance the biodiversity in and around its quarries by implementing rehabilitation plans, conservation initiatives and local biodiversity action plans. As a part of this policy, CEMEX aims to help nature recover by 2030 and help it flourish by 2050.[49]

Based on these policies, standards and assessments, Sustainalytics is of the opinion that CEMEX has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

[36] CEMEX, "Code of Conduct: When doing business with us", at: https://www.cemex.com/documents/20143/160133/supplier-code-of-conduct.pdf
[37] CEMEX, "Integrated Report", (2021), at: https://www.cemex.com/documents/20143/57102208/IntegratedReport2021.pdf
[38] Ibid.
[39] CEMEX Green Financing Framework (2023)
[40] CEMEX, "CEMEX aims to create first zero-emissions fleet", (2021), at: https://www.cemex.com/-/cemex-aims-to-create-first-zero-emissions-fleet
[41] CEMEX, "Integrated Report", (2021), at: https://www.cemex.com/documents/20143/57102208/IntegratedReport2021.pdf
[42] Sustainalytics, "ESG Risk Rating: CEMEX SAB de CV"
[43] CEMEX, "Integrated Report", (2021), at: https://www.cemex.com/documents/20143/57102208/IntegratedReport2021.pdf
[44] Ibid.
[45] CEMEX Green Financing Framework (2023)
[46] CEMEX, "Integrated Report", (2021), at: https://www.cemex.com/documents/20143/57102208/IntegratedReport2021.pdf
[47] Ibid.
[48] Ibid.
[49] CEMEX Green Financing Framework (2023)

Section 3: Impact of the Selected Use of Proceeds

The use of proceeds categories are aligned with those recognized by the GBP and GLP. Sustainalytics has focused on where the impact is specifically relevant in the local context.

Importance of contributing to the decarbonization of the cement industry through alternative fuels

The global cement sector accounted for at least 8% of CO_2 emissions in 2018.[50] Demand for concrete has tripled in the past 40 years, and global cement production is expected to increase by 12-23% from 2018 levels by 2050 if current trends continue.[51] Cement production is a carbon-intensive process, and fossil fuels continue to provide the majority of the cement sector's energy. Alternative fuels, such as bioenergy and biomass-derived waste, are an effective means of reducing the fossil fuel share in the chemical and thermal combustion processes in the cement industry, yet they accounted for only 3% of thermal energy use in 2020.[52] The direct CO_2 intensity of cement production increased by 1.8% annually between 2015 and 2020.[53] However, in order to align with the IEA's Net Zero Emissions by 2050 Scenario, emissions from the sector would need to decrease by 3% per year until 2030. Based on the scenario, the share of bioenergy and renewable waste in the cement production process must increase from 3% to 15% by 2030 to achieve the Paris Agreement goal.[54]

Given that CEMEX has a sizeable market share in the cement industry,[55] Sustainalytics is of the opinion that the projects financed under the Framework have the potential to significantly contribute to driving the decarbonization of the industry.

Importance of improving energy efficiency and electrification in the cement industry

The cement manufacturing process is estimated to represent about 7% of the industry's energy consumption in 2014.[56] Although at a fairly early stage of development, the electrification of cement production is expected to help reduce emissions by increasing the use of low-emission electricity and facilitating the capture of process CO_2 emissions, such as emissions from limestone decomposition during clinker production.[57] It is also estimated that energy-efficient management of raw materials, waste streams and recycling could reduce the cost of decarbonization by about 40% in heavy industry, including the cement industry.[58] The Global Cement and Concrete Association (GCCA), which represents about 40% of global cement production, announced in September 2020 a commitment to achieve carbon-neutral concrete production by 2050 and published its 2050 Net Zero Roadmap outlining the plan in October 2021.[59] The roadmap targets a 20% reduction in CO_2 emissions per tonne of cement over the next decade from the 2020 baseline, with key priorities including reducing fossil fuel use, increasing alternative fuel use, improving concrete production efficiency and concrete project design efficiency, and investing in technological innovations.[60]

Sustainalytics considers that the energy efficiency and electrification projects financed under the Framework are expected to support CEMEX's SBTi-verified targets for 2030 and 2050.

[50] Lehne, J. et al. (2018), "Making Concrete Change: Innovation in Low-carbon Cement and Concrete", Chatham House, at: https://www.chathamhouse.org/sites/default/files/publications/2018-06-13-making-concrete-change-cement-lehne-preston-final.pdf
[51] IEA, "Cement technology roadmap plots path to cutting CO_2 emissions 24% by 2050", (2018), at: https://www.iea.org/news/cement-technology-roadmap-plots-path-to-cutting-co2-emissions-24-by-2050
[52] Nature, "Concrete needs to lose its colossal carbon footprint", (2021), at: https://www.nature.com/articles/d41586-021-02612-5
[53] IEA, "Cement", (2022), at: https://www.iea.org/reports/cement
[54] Ibid.
[55] IBIS World, "Cemex Sab De Cv – Company Profile," (2023), at: https://www.ibisworld.com/us/company/cemex-sab-de-cv/349397/#:~:text=Cemex%20Sab%20De%20Cv%20%2D%20Overview&text=Their%20largest%20market%20share%20is,15.8%25%20of%20total%20industry%20revenue
[56] Kermeli, K. et al. (2019), "The scope for better industry representation in long-term energy models: Modeling the cement industry", Applied Energy, at: https://www.sciencedirect.com/science/article/abs/pii/S030626191930279X
[57] IEA, "Cement", (2021), at: https://www.iea.org/reports/cement
[58] Rightor, E. et al. (2020), "Beneficial Electrification in Industry", Industrial Electrification ACEEE, at: https://www.aceee.org/sites/default/files/pdfs/ie2002.pdf
[59] GCCA, "Concrete Future: The GCCA 2050 Cement and Concrete Industry Roadmap for Net Zero Concrete", (2021), at: https://gccassociation.org/concretefuture/wp-content/uploads/2021/10/GCCA-Concrete-Future-Roadmap-Overview.pdf
[60] Ibid.

Contribution to SDGs

The Sustainable Development Goals were adopted in September 2015 by the United Nations General Assembly and form part of an agenda for achieving sustainable development by 2030. The instruments issued under the CEMEX Green Financing Framework are expected to help advance the following SDGs and targets:

Use of Proceeds Category	SDG	SDG Target
Pollution Prevention and Control	12. Responsible Consumption and Production	12.4 By 2030, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Energy Efficiency	7. Affordable and Clean Energy 9. Industry, Innovation and Infrastructure	7.3 By 2030, double the global rate of improvement in energy efficiency 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
Eco-efficient and Circular Economy-adapted Products, Production Technologies and Processes	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Clean Transportation	11. Sustainable Cities and Communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
Sustainable Water and Wastewater Management	6. Clean Water and Sanitation	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

Conclusion

CEMEX has developed the CEMEX Green Financing Framework, under which it may issue Green Financing Instruments and use the net proceeds to finance or refinance, in whole or in part, existing or future green eligible projects. The projects are expected to support the decarbonization of CEMEX's operations, in line with its climate transition roadmap. Sustainalytics considers that the green eligible projects funded by the net proceeds from the Green Financing Instruments are expected to provide positive environmental impacts.

The Framework outlines a process for tracking, allocating and managing proceeds of the Green Financing Instruments, and makes commitments for CEMEX to report on their allocation and impact. Furthermore, Sustainalytics believes that the Framework is aligned with the overall sustainability strategy of the Company and is expected to contribute to the advancement of the UN Sustainable Development Goals 6, 7, 9, 11 and 12. Additionally, Sustainalytics is of the opinion that CEMEX has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with its operations.

Based on the above, Sustainalytics is of the opinion that the Framework aligns with the Principles. Sustainalytics has also assessed CEMEX's alignment with the recommendations of the Climate Transition Finance Handbook and considers the Company's transition strategy to be aligned.

Appendix 1 Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	CEMEX, S.A.B. de C.V.
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	CEMEX Green Financing Framework
Review provider's name:	Sustainalytics
Completion date of this form:	February 28, 2023

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarize the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP:

☒	Use of Proceeds	☒	Process for Project Evaluation and Selection
☒	Management of Proceeds	☒	Reporting

ROLE(S) OF REVIEW PROVIDER

☒	Consultancy (incl. 2nd opinion)	☐	Certification
☐	Verification	☐	Rating
☐	Other *(please specify)*:		

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section *(if applicable)*:

Sustainalytics is of the opinion that the CEMEX Green Financing Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021 and the Green Loan Principles 2021. The project categories for the use of proceeds – Pollution Prevention & Control, Renewable Energy, Energy Efficiency, Clean Transportation, and Sustainable Water and Wastewater Management – are aligned with those recognized by the Green Bond Principles 2021 and the Green Loan Principles 2021. Sustainalytics considers that investments in the project categories will lead to positive environmental impacts and considers the activities under the use of proceeds project categories to be credible from a transition perspective.

Use of proceeds categories as per GBP:

☒	Renewable energy	☒	Energy efficiency
☒	Pollution prevention and control	☒	Environmentally sustainable management of living natural resources and land use
☐	Terrestrial and aquatic biodiversity conservation	☒	Clean transportation
☒	Sustainable water and wastewater management	☐	Climate change adaptation
☒	Eco-efficient and circular economy-adapted products, production technologies and processes	☐	Green buildings
☐	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP	☐	Other *(please specify)*:

If applicable please specify the environmental taxonomy, if other than GBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

- Overall comment on section (if applicable): CEMEX has established a process under which the Corporate Operations and Technology, Sustainability and Planning departments will be collectively responsible for the evaluation and proposal of fund allocations to all the eligible green projects under the Framework. The proposed allocation of funds for the eligible green projects would then be reviewed and approved by the CEO. These departments will jointly review the approved projects against the eligibility criteria on an annual basis to ensure that the projects are aligned with the eligibility criteria.
- CEMEX's board-level Sustainability, Climate Action, Social Impact and Diversity Committee, assisted by other areas of CEMEX, will identify potential sustainability risks and opportunities and ensure that they are integrated in the Company's Sustainability Risk & Opportunity Agenda, a process that is applicable to all allocation decisions made under the Framework. Sustainalytics considers these environmental and social risk management systems to be adequate and aligned with market expectations. For additional detail, see Section 2.

- Based on the defined roles, responsibilities and the risk management system, Sustainalytics considers this process to be in line with market practice.

Evaluation and selection

☒ Credentials on the issuer's environmental sustainability objectives

☒ Documented process to determine that projects fit within defined categories

☐ Defined and transparent criteria for projects eligible for Green Bond proceeds

☐ Documented process to identify and manage potential ESG risks associated with the project

☐ Summary criteria for project evaluation and selection publicly available

☐ Other *(please specify):*

Information on Responsibilities and Accountability

☒ Evaluation / Selection criteria subject to external advice or verification

☐ In-house assessment

☐ Other (please specify):

3. MANAGEMENT OF PROCEEDS

Overall comment on section *(if applicable)*:

- CEMEX's CAPEX Committee will be responsible for tracking the net proceeds of Green Financing Instruments and their allocation to eligible projects. Pending full allocation, unallocated net proceeds will be used for payment of outstanding debts, capital management activities or will be held in cash, cash equivalents or other liquid instruments. Sustainalytics considers this to be in line with market practice.
- CEMEX intends to fully allocate the proceeds within 72 months of the last annual reporting reference date of a Green Financing Instrument. Sustainalytics considers allocation within 36 months to be the market expectation, and notes that CEMEX may allocate until the Green Financing Instrument's maturity.[61] Sustainalytics notes that CEMEX has indicated that it intends to temporarily allocate proceeds to repurchasing debt and considers market expectation to exclude the refinancing of debt associated with carbon-intensive assets or activities. This is particularly noteworthy given that CEMEX is involved in carbon-intensive activities. Sustainalytics notes that all financing operations carried out by CEMEX are subject to the Company's overall SBTi-validated decarbonization commitment. While such temporary allocation is not prohibited under ICMA's Green Bond Principles, Sustainalytics considers this to be a deviation from market expectations.

Tracking of proceeds:

☒ Green Bond proceeds segregated or tracked by the issuer in an appropriate manner

☐ Disclosure of intended types of temporary investment instruments for unallocated proceeds

[61] CEMEX has communicated that the allocation period has been extended in the updated Framework to accommodate the expected time period required for the development of some large-scale infrastructure projects.

☐ Other *(please specify)*:

Additional disclosure:

☐ Allocations to future investments only

☒ Allocations to both existing and future investments

☐ Allocation to individual disbursements

☐ Allocation to a portfolio of disbursements

☐ Disclosure of portfolio balance of unallocated proceeds

☐ Other *(please specify)*:

4. REPORTING

- Overall comment on section (if applicable): CEMEX intends to report on the allocation and impact of the Green Financing Instruments on an annual basis in a stand-alone report (the Green Financing Instrument Report) available on its website, until full allocation of net proceeds has been achieved.
- Allocation reporting will start within 12 months of the first Green Financing Instrument issuance. It will include: i) the amount of net proceeds assigned to each eligible green project individually or by category, subject to confidentiality considerations; ii) the share of financing compared to refinancing; iii) impact metrics, where feasible; iv) brief project descriptions; and v) the balance of unallocated net proceeds.
- Additionally, CEMEX is committed to reporting on relevant impact metrics, such as the amount of annual GHG emissions reduced or avoided, annual energy savings (in MWh) and reduction in water consumption.
- Based on the commitment to allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

Use of proceeds reporting:

☐ Project-by-project

☒ On a project portfolio basis

☐ Linkage to individual bond(s)

☐ Other *(please specify):*

Information reported:

☒ Allocated amounts

☐ Green Bond financed share of total investment

☐ Other *(please specify):*

Frequency*:*

☒ Annual

☐ Semi-annual

☐ Other (please specify):

Impact reporting:

☐ Project-by-project ☒ On a project portfolio basis

☐ Linkage to individual bond(s) ☐ Other (please specify):

Information reported (expected or ex-post):

☒ GHG Emissions / Savings ☒ Energy Savings

☒ Decrease in water use ☐ Other ESG indicators (please specify):

Green Project Category	Example Impact Metrics

Pollution Prevention & Control	• Reduction in CO_2 emissions (reduction in net CO_2 emissions per ton of cementitious vs. 1990 baseline)
	  ○ Alternative Fuel consumption (% of total fuel consumption)
	  ○ Clinker factor in cements (%)
	  ○ Specific Heat Consumption
	• Avoided CO_2 emissions
	• Percentage of clean energy in our cement operations
	• Reduction of dust, NOx, and SOx emissions per ton of clinker vs. 2005 (%)
	• Total waste-derived sources managed (million tons)
	• Amount of waste managed by de company vs. waste sent to landfill
	• Emissions (including metric tons of CO_2e) captured / reduced
	• Progress in project (%)

Renewable Energy	• Annual GHG emissions reduced/avoided in tonnes of CO_2 equivalent • Annual renewable energy generation in MWh (electricity) and GJ (other energy) • Capacity of renewable energy plant(s) to be served by transmission systems (MW)
Energy Efficiency	• Annual energy savings in MWh/GWh (electricity) and GJ/TJ (other energy savings) • Annual GHG emissions reduced/avoided in tonnes of CO_2 equivalent
Ecoefficiency & Circularity	• Annual tonnes of waste processed • % recycled content (pre- and post-consumer sources) • Estimated annual recycling rate • Annual sales of Vertua® cement and concrete products as a percentage of net sales • Annual sales of products with outstanding sustainable attributes
Clean Transportation	• Annual GHG emissions reduced/avoided in tCO_2–e p.a. • Number of clean vehicles deployed (e.g. electric) • Estimated reduction in fuel consumption
Sustainable Water and Wastewater Management	• Reduction in water consumption of economic activities (e.g. industrial processes, agricultural activities including irrigation, buildings, etc.) • Water reuse and water use avoided by waterless solutions and equipment, (e.g. for sanitation, cooling systems, industrial processes, etc.) • Reduction in specific freshwater withdrawal in cement, aggregates and ready-mix operations • Implementation of Water Action Plans in sites located in water-stressed areas (%) • Sites with water recycling systems (%)

Frequency

☒ Annual ☐ Semi-annual

☐ Other (please specify):

Means of Disclosure

☐ Information published in financial report ☐ Information published in sustainability report

☒ Information published in ad hoc documents ☐ Other (please specify):

☐ Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

☐ Consultancy (incl. 2nd opinion) ☐ Certification

☐ Verification / Audit ☐ Rating

☐ Other *(please specify):*

Review provider(s): **Date of publication:**

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

i. Second-Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.

ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.

iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.

iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies,

according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2°C climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

Disclaimer

About Sustainalytics, a Morningstar Company

Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For more than 25 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Sustainalytics works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. Sustainalytics also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices and capital projects. With 17 offices globally, Sustainalytics has more than 800 staff members, including more than 300 analysts with varied multidisciplinary expertise across more than 40 industry groups.

For more information, visit www.sustainalytics.com

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