

LIVENT CORPORATION

Green Bond Framework



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1. Introduction to Livent

1.1 Company Overview

Livent is a fully-integrated global producer of lithium compounds with manufacturing facilities in five countries. The Company has a broad product portfolio that includes battery-grade Lithium Hydroxide, Lithium Carbonate, Butyllithium, and High Purity Lithium Metal. Its lithium products are used for applications in modern mobility such as electric vehicles (EVs), energy storage applications and green materials, as well as in many other essential industries, including aerospace, pharmaceuticals, polymers, agrochemicals, electronics, water treatment, lubricating greases, air treatment and dehumidification, medical devices, construction, metallurgy and defense.

Livent extracts lithium from brine from the Salar del Hombre Muerto, Argentina, one of the highest purity sources of lithium in the world. Livent has been operating at the Salar del Hombre Muerto for more than 20 years, and has been producing lithium compounds for almost 80 years. Its operational history provides Livent with a deep understanding of the process to extract lithium compounds from brine safely and sustainably.

Livent's growth strategy is focused on supplying high performance Lithium Hydroxide and Lithium Carbonate to the fast growing electric vehicle battery market, while continuing to maintain its position as a leading supplier to the energy storage and global lubricating grease markets, and as a leading global producer of Butyllithium and High Purity Lithium Metal. As a vertically integrated producer, the Company benefits from one of the lowest cost lithium mineral deposits in the world, and with extensive global capabilities, technical expertise, and deep, longstanding customer relationships, Livent remains well positioned to capitalize on the accelerating trend of vehicle electrification.

1.2 Sustainability Strategy

Livent's purpose is to harness lithium technology to power people's lives for a cleaner, healthier, and more sustainable world. As an enabler of the shift to cleaner energy and the fight against climate change, sustainability is central to Livent's mission and reflected in its core values.

Livent has integrated sustainability across its operations and is committed to being a responsible corporate citizen in all aspects of its business, worldwide. That commitment underpins the Company's efforts to have a positive impact on the environment as well as in the communities in which it operates with its workforce, in the markets it serves, and in its supply chain. Livent adheres to a Code of Business Conduct and Ethics as well as sustainability/ESG policies, safety and health policies and human right policies that are consistent with global standards, industry and local regulations, leading management systems, and the general principles of responsible mining and production. In addition, through its Supplier Code of Conduct and Responsible Supply Chain initiatives, the Company is committed to sourcing components and materials from companies that share its values regarding respect for human rights, integrity and environmental responsibility.

Livent continually looks for ways to improve the efficiency of its systems to best conserve natural resources and minimize its environmental impact. In alignment with the Global Reporting Initiative's (GRI) reporting framework, the Company carefully tracks and reports total volumes and per product tonne-produced intensities for GHG emissions, energy, water and waste across our manufacturing facilities. All of Livent's extraction and production sites have an Environmental Management System in place which is ISO 14001 certified, with the exception of our Bessemer City site which is transitioning from the ACC Responsible Care management system to certification on the ISO 14001 and ISO 45001 management systems by November of 2020. These management systems are

integrated with ISO 9001 Quality and ISO 45001 Occupational Health and Safety management systems. They are also risk-based, founded on hazard/impact/risk assessment, and ensure that Livent maintains a focus on regulatory compliance, risk reduction and continual improvement.

Each site undergoes a formal EHS regulatory compliance audit every three years, in addition to periodic self-auditing, to ensure the site is compliant with local and Livent requirements. Livent Legal Counsel provides oversight to ensure compliance. This includes compliance verification to local Environmental regulations/requirements.

Part of Livent's capital deployment process is to ensure that the Company has the necessary environmental permits and assessments within a region to plan capital work. Livent uses outside consultants for their expertise in specific areas, which is considered as part of planning for capital timelines and expenditures. Typically, the government/regulatory experts in their field, Livent's engineers and outside consultants work together to ensure that any environmental impact is understood and mitigated.

Going forward, as part of its commitment to continuous improvement, Livent is focused on actively identifying and managing its material risks and opportunities. Since it became an independent public company in 2018, Livent has worked to develop a new sustainability strategy tailored to its profile as a pure play, fully integrated producer of lithium products. In 2019, the Company conducted a Materiality Assessment with a third-party sustainability adviser to help guide the development of its long-term Sustainability Strategy, including the establishment of new goals, KPIs and strategic initiatives to further improve its carbon footprint and overall sustainability/ESG profile. Some of these future initiatives may include:

- Advancing work being done to explore and implement new green energy solutions, water recycling/re-use technologies and lithium extraction process technologies;
- Improving already comprehensive salar hydrology models;
- Applying sustainability goals and considerations into business strategy decisions on potential new sources of lithium and where the company decides to build or expand manufacturing plants;
- Securing third-party sustainability assurance;
- Expanding the use and implementation of various environmental and social management systems; and,
- Providing more comprehensive and transparent reporting.

In addition, as Livent continues to build out its Sustainability Program, the Company will continue to partner with its customers, including some of the most innovative companies in the world, to determine best practice approaches to advance sustainability, such as alignment with the United Nations Sustainable Development Goals. Most recently in 2020, the Company became a standalone participant in the United Nations Global Compact (UNGC), demonstrating its continued support for the Ten Principles of the UNGC on human rights, labor, environment and anti-corruption.

Livent's Lithium Extraction Process

To extract lithium from brine, Livent uses a proprietary Direct Lithium Extraction (DLE) process technology, known as Selective Adsorption (SA) to separate lithium from brine. Livent is the only lithium producer in the world with a successful, multi-decade track record of using a DLE process technology on a commercial scale. Most of the energy used to power Livent's SA technology processes comes from a dedicated natural gas pipeline that the Company built to transition away from reliance on diesel-fired electricity at the Salar del Hombre Muerto, reducing the carbon footprint of the operation. The transition to natural gas was only a first step in the Company's aspirations to transition to greener and more renewable energy sources.

SA technology speeds up the concentration process and reduces the need for large pre-concentration evaporation ponds commonly used by conventional brine-based lithium producers. Conventional pond strings for minerals extraction require a large land footprint and may increase the evaporative loss of water from the local ecosystem. Livent's physical footprint is significantly lower than that of conventional brine-based lithium producers. The Company is currently in the process of further reducing its overall land use by decommissioning its relatively small number of remaining evaporation ponds.

Livent's current production in Argentina utilizes water from the Trapiche aquifer. The Company utilizes a comprehensive approach to manage and record parameters such as water flows, chemical transport and salinity to ensure water resources are used sustainably. In addition to its in-house expertise, Livent has a long-term professional relationship with a leading geology firm to conduct extensive modeling of both the freshwater aquifer and the Salar. The modeling ensures Livent draws brine and water at sustainable rates that do not interfere with the natural equilibrium of the Salar.

Livent's processes return a significant portion of the brine it uses back to the Salar, free from any contaminants or solvents, and without altering the pH of the brine. These processes also do not add to the natural rate of evaporation in the Salar basin, minimizing Livent's overall impact on the local ecosystem.

Product Lifecycle Impact

Livent's lithium products, technologies and their applications enable customers to improve their product lines and markets, helping them to curb the impacts of climate change and provide solutions for the transition to a low-carbon economy. Livent's products can help increase efficiency and longevity while reducing environmental impacts of the end product. Common applications of this include:

- Lithium Hydroxide and Lithium Carbonate, which are critical to the production of energy-dense and long-lasting batteries increasingly used in EVs and energy storage applications.
- High Purity Lithium Metal, which is expected to power the next generation of EV batteries and advanced energy storage applications. High Purity Lithium Metal is widely used in non-rechargeable batteries for defense, household, and medical applications. Lithium metal is also used in the manufacture of alloys for light weighting and increasing fuel efficiency of numerous aerospace programs.
- Butyllithium is used in the manufacture of styrene butadiene rubber, which based on its low-rolling resistance, low noise, and good wet traction characteristics is increasingly used for high-performance tires, ultra high-performance tires, as well as tires for mainstream passenger car models for improving fuel economy.

In late 2019, to better understand the environmental impact of Livent's Lithium Hydroxide product, Livent began undertaking a "cradle to gate" Life Cycle Assessment (LCA) working alongside an independent third party to conduct the assessment aligned with the ISO standards for LCA. This marks an important step in Livent's journey to understand the full impact of its products from extraction to end use. Having this understanding will allow Livent to pinpoint areas in the value chain where the Company can further reduce its environmental impact and continue to deliver the best value for its customers.

Livent's ESG Initiatives and Operational Impacts

Responsible stewardship of the environment is essential to Livent's work. The company continues to look for ways to improve the efficiencies of its systems to best conserve natural resources. The Company also carefully monitors its emissions and waste to protect surrounding communities and the environment.

The Company's sustainability policies which can be found on its [website](#) set a company-wide standard for managing the environmental impacts of its operations.

Livent's 2025 environmental targets aim to reduce GHG emissions intensity, energy intensity, water intensity, and waste intensity by 20% compared to a 2013 baseline. Livent has already exceeded or nearly achieved its 20 percent reduction targets for GHG emissions, energy, water and waste intensities, five years ahead of schedule. It remains focused on making progress on the following relevant specific ESG initiatives and topics.

<i>Initiative¹</i>	<i>Standards and Policy</i>	<i>Livent's Actions</i>
Corporate Governance	Maintain a system of rules, practices and policies by which a company is directed and controlled, and to promote ethical and sustainable corporate governance practices for the benefit of all stakeholders	<ul style="list-style-type: none"> Livent maintains a diverse and skilled Board of Directors, made up of nine Directors and five committees including Audit, Compensation, Nominating and Corporate Governance, Executive, and Sustainability Livent's Sustainability Committee was created in 2018 and oversees all aspects of Livent's sustainability efforts, including environmental performance, safety performance, and corporate social responsibility activities
Care for Employees		
Ethics & Compliance	Drive a culture of integrity that promotes ethical behavior through training, policies and compliance with our code of conduct, as well as relevant laws and regulations	<ul style="list-style-type: none"> Livent's Code of Ethics and Business Conduct establishes company-wide standards which guide daily activities and business decisions Established a Supplier Code of Conduct that Livent's suppliers must also abide by Created an Ethics Response Line for employees to report violations of the Code of Conduct
Diversity & Inclusion	Cultivate a company-wide culture of diversity, inclusion and non-discrimination in all people-related decisions	<ul style="list-style-type: none"> Livent maintains a diverse and skilled Board of Directors and Management Team, including 2 women board members and 3 women executives In 2017, Livent launched a Diversity and Inclusion leadership program In 2019, Livent established a baseline for diversity data, which will be used to help make people-related decisions Livent continues to hire local talent; and in 2019 increased the number of employees from the Catamarca region of Argentina by 47% versus prior year
Occupational Health & Safety	Provide safe working conditions and resources for workers' well-being, as well as enforce expectations of safe working conditions and resources within the supply chain	<ul style="list-style-type: none"> As of March 2020, Livent exceeded 365 days with zero recordable injuries Management continues to regularly review its Environmental Health & Safety Policy All 7 manufacturing and sourcing sites are ISO certified (see section 1.2 Sustainability Strategy for more detail)
Care for Customers		
Product Lifestyle Impact	Adjust the design of products to reduce environmental impacts throughout their lifecycle	<ul style="list-style-type: none"> Livent's products are used in the production of EV batteries and energy storage applications, which are helping to change the energy landscape and addressing climate change Livent's products can help increase efficiency and longevity while reducing environmental impacts of the end product
Business Continuity	Understand business risks (e.g., in the supply chain) and monitor geopolitical events in order to develop potential responses to allow for the continued production and sale of products	<ul style="list-style-type: none"> Livent has a Corporate Business Continuity Plan as well as site-specific continuity plans that are frequently reviewed and updated Successfully activated business continuity plan in stages, starting in February 2020, in response to COVID-19 spread
Care for Communities		
Indigenous Peoples & Community Impact	<p>Maintain respectful relationships and actively communicate with Indigenous peoples near company operations</p> <p>Help Indigenous peoples participate in Livent's success</p>	<ul style="list-style-type: none"> Livent regularly sends teams to visit the very small number of Indigenous peoples who live near the Salar del Hombre Muerto, often bringing them food, other essential supplies and medical personnel. The company tries to understand the unique perspective and needs of the nearby Indigenous peoples, and incorporate their feedback into its operational approach

¹ Source: Livent 2019 Sustainability Report

		<ul style="list-style-type: none"> • In October 2015, established The Water Trust, and has since donated more than \$6 million to fund local infrastructure projects to benefit the community of Catamarca • Livent continues to employ local people as well as offer job training and scholarships to local residents
Human Rights	Protect human rights across our supply chain, communities and operations	<ul style="list-style-type: none"> • Livent has begun the process of implementing the ISO 26000 guidelines on social management, consistent with its Human Rights Policy • Conducts a formal Supplier Selection and Approval Process to screen suppliers to ensure they adhere to the same quality, safety, and human rights standards and sustainability as Livent • Complies with Section 1502 of Dodd-Frank Act, aimed at preventing use of 3TG materials that directly or indirectly finance or benefit armed groups in the DRC or adjoining countries
Care for the Environment		
Water use	Responsibly manage water withdrawals and releases, and monitor impacts on water sources, biodiversity, ecosystems and local communities.	<ul style="list-style-type: none"> • Livent has seen a 19.8% reduction in Water Intensity from 2013 baseline • Livent's physical footprint is significantly lower than that of conventional brine-based lithium producers, and the Company is currently in the process of further reducing its overall land use by decommissioning the relatively small number of remaining evaporation ponds • Livent comprehensively manages and records parameters such as water flows, chemical transport and salinity to ensure Livent uses water resources sustainably • Livent has a long-term professional relationship with a leading geology firm to conduct extensive modelling of both the freshwater aquifer and the Salar, which ensures the Company draws brine and water at sustainable rates that do not interfere with the natural equilibrium of the Salar
Energy, Emissions, & Climate	Decrease direct and indirect energy usage in operations, improve energy efficiency and source renewable energy	<ul style="list-style-type: none"> • Livent has seen a 19% reduction in energy usage from 2013 baseline • Livent has seen a 23% reduction in GHG emissions from 2013 baseline
Effluents & Waste	Reduce the amount of waste to landfill generated by operations, as well as managing the discharge of toxic and hazardous waste, through recycling, responsible waste disposal and other initiatives	<ul style="list-style-type: none"> • Livent has seen a 40% reduction in waste intensity from 2013 baseline

2. Green Bond Framework

The objective of issuing Green Bonds is to assist in financing Livent’s initiatives to integrate sustainability in its corporate strategy, highlight the contributions made by Livent to the global effort to transition to a low-carbon economy and to engage those investors who are committed to allocating capital in support of this effort.

Alignment with the Green Bond Principles²

This Framework is designed to ensure any Green Bonds issued by Livent are aligned with the provisions of the ICMA Green Bond Principles 2018, as updated from time to time, and includes the following sections:

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

The framework also describes the approach to External Review, also as recommended by the Green Bond Principles.

The Framework will apply to any Green bonds issued by Livent and will be applied as long as any such instrument is outstanding.

This Framework may be updated from time to time to ensure continued alignment with voluntary market practices, emerging standards and classification systems.

2.1 Use of Proceeds

The net proceeds (or an amount equal to such proceeds) of Livent’s Green bonds shall be exclusively used to finance or re-finance, in part or in full, new and/or existing Eligible Green Projects that meet the Eligibility Criteria defined below:

Each project considered for financing or refinancing by Livent’s Green bonds must not be eliminated by the Exclusion criteria, and must meet the Eligibility criteria.

a) Eligible Green Projects:

Eligible Green Project Categories	Green Bond Eligibility Criteria
Facilitating the Growth of Electrification with a focus on the Transport Sector	Proceeds will be allocated towards investments in the development, operation and maintenance of Livent’s assets dedicated to the future extraction of lithium and production of the following products, <ul style="list-style-type: none">• Lithium Hydroxide• Lithium Carbonate Eligibility of these products will be limited to the volumes produced primarily to promote electrification through the manufacture of batteries for Electric Vehicles, Energy Storage solutions and other applications that promote the low carbon energy transition in the transport sector.

² Green Bond Principles 2018 (International Capital Market Association acting as secretariat to the Principles). <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

In the case of refinancing existing Eligible Green Projects, investments and expenditures which have been made within the 24-month period preceding the date of issuance of the Green Bond shall be considered for inclusion as Eligible Green Projects.

b) Exclusions

Proceeds from Livent's Green bond issuances will not be allocated to finance the following product applications or industry sectors and practices:

Product Applications:

- Air and water treatment
- Ceramics, coatings, glass, glazes, enamels
- Construction
- Dyes, pigments
- Greases
- Pharmaceuticals

Industry Sectors and Practices:

- Child labor;
- Conflict Minerals
- Fossil fuel;
- Large-scale hydro-power projects;
- Military;
- Nuclear;

2.2 Project Evaluation and Selection Process

Livent has established a Green Team with responsibility for governing selection and monitoring of the Eligible Green Projects.

The Green Team will be chaired by the Head of the Sustainability and consists of senior members of the following teams: Finance/ Treasury, Corporate Sustainability, Operations, Audit, Tax, Sales & Marketing, Regulatory, Communications/Public Affairs and Legal.

The Green Team will actively solicit recommendations and ideas for Eligible Green Projects.

Before Eligible Projects are approved, the Green Team will screen and assess that the Eligible Green Projects meet the eligibility and exclusion criteria laid out in section 2.1 of this Green bond framework, as well as Livent's Sustainability Policies and Procedures, as presented in the Sustainability section of Livent's company website. In addition, all Eligible Green Projects will undergo an Environmental Impact Assessment and will be required to implement an Environmental Management System as described in Section 1.2 of this Framework.

Once screened and approved by the Green Team, the Finance/Treasury Department will track actual spend on the Eligible Green Projects using internal systems.

The Green Team will annually review the list of Eligible Green Projects against the eligibility and exclusionary criteria. If a project no longer meets the eligibility criteria set forth in this framework the project will be removed from the register and replaced as soon as substitute has been identified.

2.3 Management of Proceeds

The net proceeds of each Livent Green Bond issuance will be deposited in Livent's Treasury Portfolio. An amount equivalent to the net proceeds shall be allocated for the financing and / or refinancing of existing or new Eligible Green Projects. Livent's Treasury team will track the allocation of the proceeds to Eligible Green Projects by establishing and maintaining a Register.

The Register will contain relevant information including;

1. Details of the Bond(s): ISIN, amount outstanding, pricing date, maturity etc.
2. Per Green bond issued, details of Eligible Use of Proceeds, including:
 - o Allocations made to Eligible Green Projects and Project Categories
 - o Estimate of impact of the Eligible Use of Proceeds

Complete allocation of the proceeds from a Green bond issuance is expected within 24 months from the date of issuance of the Instrument. Pending the allocation, proceeds may be invested in accordance with Livent's Treasury management liquidity policy, used to repay certain of its indebtedness, or both. In the unlikely event where the proceeds are not fully allocated within 24 months of issuance, the balance of unallocated proceeds will continue to be held in Livent's Treasury Portfolio, or used to repay certain of its indebtedness, as previously described.

2.4 Reporting

For each Green Bond, Livent commits to publish an allocation and impact report annually, and until full allocation of the proceeds, and in the event of any material changes until the relevant maturity date. Both the allocation and impact reports will be made available on Livent's website.

Allocation

Livent will provide information on the allocation of the net proceeds of its Green Bonds, and the information will contain at least the following details:

- a) Amount allocated to Eligible Green Project Categories as defined in the Use of Proceeds section of this Framework.
- b) Subject to confidentiality considerations a list of the Eligible Green Projects financed through Livent's Green Bond, including a description of the projects, allocated amounts.
- c) The proportional allocation of proceeds between existing projects (refinancing) and new projects.
- d) The remaining balance of unallocated proceeds, if any.

Impact Reporting

Livent will provide impact reporting which will include the following Impact Reporting Metrics:

- Annual revenue from volume of eligible product sales to battery producers for electric vehicles and energy storage
- Annual sustainability performance across all material ESG (Environmental, Social and Governance) focus areas, with an emphasis on the impact of Livent's extraction of lithium and production of Lithium Carbonate and Lithium Hydroxide.

2.5 External Reviews

Livent's Green bond issuance is supported by the following external reviews:

a) Second Party Opinion ('SPO')

Livent has retained ERM to review Livent's Green Bond Framework and provide a Second Party Opinion on its alignment with the four components of the ICMA Green Bond Principles 2018. The Second Party Opinion will be made available on Livent's website.

b) Post Issuance External Verification

Annual reporting will be accompanied by an assertion by management detailing how much of the net proceeds of Green Bonds issued under this framework were allocated to Eligible Green Projects and that proceeds were not allocated for projects in the excluded product applications or industry sectors and practices. An independent registered public accounting firm will be appointed by Livent to provide a report in respect of its examination of management's assertion conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants.

The external verification will be published together with the Allocation Report & the Impact Report on Livent's website annually, until the full proceeds have been allocated.



Livent